

THE EDUCATIONAL REVIEW.

FOR THE ATLANTIC PROVINCES OF CANADA.

Vol. II.

SAINT JOHN, N. B., JULY, 1888.

No. 2.

J. & A. McMILLAN,

THE SCHOOLS OF HANDY REFERENCE
GREATER BRITAIN. ATLAS OF THE WOLRD

SKETCHES OF THE

WITH COMPLETE

Educational Systems of the Colonies
and India.

Index and Geographical Statistics.

BY JOHN BARTHOLOMEW, F. R. G. S.

BY JOHN RUSSELL, F. E. I. S., &c.

*Every Teacher in the Provinces should
have a copy of this Book.*

In the present Work, the special aim has been to provide the public with an Atlas which for all general purposes is practically complete and reliable, while at the same time in such a convenient and handy form that it may be kept on a writing table or desk for ready consultation.

Prince Wm. Street, St. John, N. B.

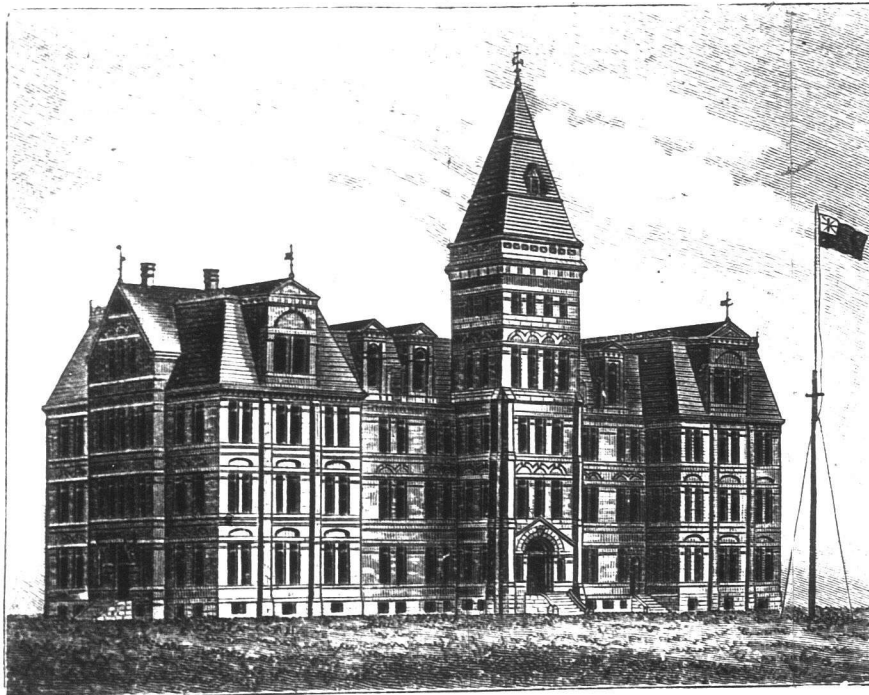
DALHOUSIE COLLEGE, HALIFAX, N. S.

FACULTY OF ARTS
AND
FACULTY OF LAW.

Session begins
early in September,
1888.

FACULTY
OF
MEDICINE.

Session begins
end of October,
1888.



EXHIBITIONS
AND
BURSARIES.

The following Exhibitions and Bursaries will be offered in September, 1888 and 1889:

SENIOR.

5 Exhibits of \$200
10 Bursaries of \$150

JUNIOR.

5 Exhibits of \$150
10 Bursaries of \$100

The Calendar containing full particulars of the courses of instruction, examinations, regulations, exhibitions, bursaries, medals and other prizes may be obtained by applying to the President. The President will be glad to correspond with any student wishing information.

J. & J. D. HOWE,

MANUFACTURERS OF
Household and Office Furniture,
Market Building, German St.

Entrance, S. Market St., up stairs, St. John.
Factory, East end of Union Street, St. John.

**NUTTALL'S
PRONOUNCING DICTIONARY,**

With Appendix of foreign and classical words
and phrases, etc. Cheapest and best in the
world. Prices 75 cts., \$1.00, \$1.50.

D. McARTHUR, Bookseller,
80 King Street, St. John.

T. O'BRIEN & CO.

Publishers, Booksellers,
Stationers and Newsdealers.

53 King Street, - - - ST JOHN, N. B.

All the Principal CATHOLIC PUBLICA-
TIONS kept constantly on hand.

SCHOOL BOOKS. SLATES, PENS, Pencils, Ink, Mu-
sicage, Writing Paper, Envelopes, Drawing
Paper, Blotting Paper, Fancy Goods, Toys,
Dolls, Balls, Musical Instruments, etc., etc.

Watson & Co.'s, Cor. Charlotte & Union Sts.

ORDERS SOLICITED. PRICES LOW.

CLIFTON HOUSE,

7, Princess & 17, German Sts.,
SAINT JOHN, - - - N. B.

A. N. PETERS, Proprietor.

Telephone Communication. Heated by
steam throughout.

CLARKE, KERR & THORNE,

— DEALERS IN —

High Grade Cutlery.

Fancy Goods, Electro-Plate Ware, Silver-
ware, Etc., Etc.

62 Prince Wm. Street, Saint John, N. B.

SCHOOL FURNITURE.

We are now able to furnish a nice
Double Desk with Seat Attached, all Hardwood,
AT \$3.25 EACH.

A. J. LORDLY & SON, 93 German Street,
SAINT JOHN, N. B.

WESTERN ASSURANCE CO. Y.

FIRE INSURANCE

Solicited on all Kinds
of Property.

R. W. W. FRINK,

General Agent, - - - Saint John.

HOME STUDY, LATIN & GREEK
at SIGHT, use the "INTERLIN-
EAR-CLASSICS." Sample page and Cata-
logue of School-Books, Free. C. DeSILVER
& SONS, No. (P) 112 Walnut Street,
PHILADELPHIA PA.

JUST RECEIVED:

Sponges, Toilet Soaps,
Brushes, Perfumery,
Tooth Preparations,
Toilet Articles,
Patent Medicines, etc., etc.

WILLIAM B. McVEY,
Dispensing Chemist,
5, PRINCE ST., ST. JOHN, N. B.

WALL MAPS. Just received a
Large Assortment of Wall Maps
SUITABLE FOR TEACHERS.
We also have constantly on hand a
Large supply of School Books, Sta-
tionery and all school requisites at
lowest prices. Write for terms.
E. H. HALL, St. John, N. B.

FREDERICTON,

opposite Normal School.

Headquarters for all EDUCATIONAL BOOKS.

Orders by mail solicited and promptly
answered.

M. S. HALL.

GEO. ROBERTSON & CO.,

IMPORTERS OF

GENERAL PROVISIONS.

Special Branches: Mediterranean Fruit and
West India Produce. Public patronage re-
spectfully solicited.

50 KING STREET, ST. JOHN, N. B.

DENTISTRY.

DRS. C. M. & F. A. GOISSE,

66 SYDNEY STREET, PRINCESS.

SAINT JOHN, - - - N. B.

Lowest Possible Prices.

S. R. FOSTER & SON,

MANUFACTURERS OF

Cut Nails and Cut Spikes, Tacks, Brads,
Finishing Nails, Shoe and Hun-
garian Nails, Etc.

Office, Warehouse and Manufactory.

GEORGES STREET, - - - ST. JOHN, N. B.

N. S. SUMMER SCHOOL OF SCIENCE.

REDUCED FARES.

Reduced fares may be secured by all persons
travelling by the following Lines of Railways
and Steamers to the Summer School of Science
which meets at Pictou, N. S., July 23rd, 1888.

Intercolonial Railway and Pictou Branch.
Spring Hill and Parrsboro.
Windsor and Annapolis.
Western Counties Railway.

—AND BY—

The Steamer "City of Saint John"

Which runs from Halifax to Yarmouth,
calling at intermediate ports.

Also on all Railways and Steamers, includ-
ing the Steamers on the Lakes, Cape Breton.
Those who wish to obtain reduced fare must
get a certificate of attendance, signed by the
President and Secretary.

J. B. HALL,
Secretary.

2157

YEAR.

ST. JOHN BUSINESS COLLEGE.

The unrivalled summer climate of St. John,
and the elevated position and perfect ventila-
tion facilities of the St. John Business College,
render study within its walls during the
warmest season just as agreeable and profit-
able as at any other time of year.

This combination of favorable circum-
stances is enjoyed by no similar institution.
Our course of study is full and thorough
just what is required for practical business life.
Students, lady or gentleman, can enter at
any time. Circulars mailed to any address.

No Vacations.

S. KERR, PRINCIPAL.

For a good Time-keeper

ENQUIRE OF A. & J. HAY,

DEALERS IN —

Gold and Silver Watches, Clocks, Time-
pieces Striking and Alarm, also Gold
and Plated Jewelry, Silverware,
Specacles, Fancy Goods, Etc.

76 KING ST., ST. JOHN, N. B.

G. S. WETMORE,

COMMISSION MERCHANT.

And dealer in all kinds of Country Produce

Butter, Eggs, Cheese, Potatoes, Oats,
Buckwheat, Meal, Pork, Lard,
Poultry, Game, &c., &c.

City Market, - - - St. John, N. B.



BUCKEYE BELL FOUNDRY.

Bells of all sizes for Churches,
Schools, Fire Alarms, Factories, etc. FULLY
WARRANTED. Catalogue sent Free.

VANDUZEN & TIFT, Cincinnati, O.

TO TEACHERS AND SCHOLARS.



Every teacher and scholar in the schools
of New Brunswick should be provided with
Waterproof Garments, as there is not any
more fruitful source of sickness than sitting
in wet or damp clothing.
We make a specialty of Waterproof
clothing for men, women and children, we
can supply the most desirable kinds.

Price Lists mailed, if requested. Wholesale
and Retail.

ESTEY, ALLWOOD & Co.,

68 Prince Wm. Street, Saint John.



The simplest, most durable and most rapid
Typewriter made.

ARTHUR P. TIPPET & CO., Agents,
3 and 4 North Wharf, St. John.

SEND FOR PRICE LIST. AGENTS WANTED.

The Educational Review.

Devoted to Advanced Methods of Education and General Culture.

PUBLISHED MONTHLY.

ST. JOHN, N. B., JULY, 1888.

VOL. II. No. 2

A. H. MacKAY, B. A., B. Sc.,
Editor for Nova Scotia.

ALEX. ANDERSON, LL.D.,
Editor for P. E. Island.

G. U. HAY, Ph. B.,
Editor for New Brunswick.

SUBSCRIPTION PRICE:
Twelve Numbers, \$1.00
Single Copies, 10 cents

Subscriptions payable in advance. Send money by money order, or by bank bill in a registered letter. All remittances acknowledged by postal card. Address all business communications and send subscriptions to EDUCATIONAL REVIEW, St. John, N. B.

The REVIEW is issued from the office of Barnes & Co., St. John, to whom subscriptions may be paid if convenient.

CONTENTS:

EDITORIAL NOTES -	21-22
EDITORIAL -	22-26
Dr. J. G. Fitch - Canadian Tea - Canadian Trepan - Canadian Edible Fungi - Public Examinations - Uni- versity of N. B.	
NATURAL SCIENCE SERIES -	27-28
Ferndale School, No. 14 - Practical Botany, No. 5.	
CONTRIBUTED ARTICLES -	29-32
Latin Syllabication - To Latin Scientists - A Japane- se School.	
SKETCH OF DR. J. G. SCHURMAN, with portrait,	33-34
Colleges - School and College - Personal Notes -	34-35
QUESTION DEPARTMENT -	36-37
Literary Notes - Book Reviews - Exchanges -	37-38
Notice to Visitors Interprovincial Convention -	3
PROGRAMME INTERPROVINCIAL CONVENTION -	39
NEW ADVERTISEMENTS -	
D. C. Heath & Co., (p. 40) - D. Appleton & Co., (p. 40) - D. Lothrop Company, (p. iv.) - Allen & Ferguson, (p. iv.) - Teacher Wanted, (p. iv.)	

EDITORIAL NOTES.

AS THE time draws near for the first united gathering of the teachers of the provinces of Nova Scotia, New Brunswick and Prince Edward Island, the interest in the event is greatly quickened, and the prospect is that the attendance will be very large—not less than 700 or 800 visitors.

Such distinguished men as Sir William Dawson, Dr. Fitch, Colonel and Mrs. Parker, Prof. Huling, Dr. Schurman, in addition to the best educational talent that the Atlantic Provinces afford, is an inducement to be present that cannot be overlooked, and the inspiration gained by listening to such men will be full recompense for any sacrifice that may be made.

But there should be a great deal of pleasure in looking forward to a meeting which marks the bringing together for the first time, for social and professional intercourse, of the educational workers of these Provinces. Such intercourse with one another, and with some of the leading spirits of other countries, cannot but have a stimulating effect on our educa-

tional thought and action that will endure for years to come.

The cool atmosphere, and the many natural attractions about St. John, will make it an invigorating holiday trip. A list of hotels and boarding houses is published elsewhere, and we would recommend intending visitors to secure accommodations beforehand, as the influx of visitors to St. John during the hot season usually taxes the hotel accommodations to the utmost.

Arrangements have been made to secure reduced fares on all lines of railway and steamers to St. John, to those who attend the convention and register as members.

It will be noticed that there are a few changes in the programme of the Interprovincial Convention, which is republished in this issue. In addition to these, it may be stated that Principal Creighton, of the North Sydney Academy, will read a paper on "English in the High School," should Principal Cameron be unavoidably absent, as the result of recent illness.

THE N. B. Natural History Society will tender a reception to Sir William Dawson during his visit to St. John next week. His Honor, Lieut.-Governor Tilley, as patron of the Society, will preside. The reception will take place on Thursday afternoon.

THERE is a prospect of King's College, Nova Scotia, uniting with Dalhousie; in which case the prestige, wealth and alumni of each would henceforth hold the same relation to the united university.

MR. W. F. GANONG, A.M., of Cambridge, has conferred a great service on Canadian zoologists by the publication of his work on the Echinoderms of New Brunswick in this year's bulletin of the N. B. Natural History Society. It contains a carefully prepared list of the forms known to occur here, with notes on their occurrence and means of their identification.

ONE who has Webster in his library has a dictionary, gazetteer and biographical dictionary in one volume. It is difficult to conceive how any working teacher can get along without it.

"FERNDALE NOTES," and a number of editorial and other articles are unavoidably crowded out of this number.

The young ladies of the Victoria High School, St. John, mentioned in the last number of the REVIEW as competing for the degree of Associate in Arts in McGill University, passed a very successful examination and were awarded diplomas at the closing exercises of the school, June 28th. Rev. W. O. Raymond, as deputy examiner, presented the diplomas, and His Worship the Mayor presented other material prizes to the young ladies. The selection of His Worship the Mayor to bestow the prizes marks the city's appreciation of what Mrs. Carr is doing for the higher education in St. John, as well as the advanced position taken by McGill University in furthering the education of women. Dr. Harrison, of the N. B. University, in well-chosen words, congratulated the nine young ladies who passed the matriculation examination to the N. B. University, and presented certificates to each.

LET our readers before visiting St. John take a glance at the advertising pages of the REVIEW, which, though condensed, are suggestive. The glance will be instructive in many ways. Bright and inviting book stores tempt literary people, and one has only to consult our pages to know what places may be visited to advantage. The name of the firm of J. & A. McMillan, which has steadily met the eye of every reader of the REVIEW since the commencement of its vigorous growth, is a synonym for business integrity and enterprise. No one can visit their splendid establishment on Prince William Street without being agreeably impressed with its extent, and the admirable system that prevails there. The establishment of Manchester, Robertson & Allison has, perhaps, no superior in Canada. A visit to it, so as to gain an intelligent idea of its business volume and arrangements, is an education in itself. The London House, one of the oldest and most honorable business houses in these Provinces, has recently transferred its retail establishment to the corner of Union and Charlotte streets. But we have no space to particularize further.

MESSRS. D. C. HEATH & Co., Boston, offer for the attention of students a number of excellent scientific works. This firm is becoming well known for its enterprise in the publication of recent and valuable books for teachers and students. Mr. M. Chamberlain, so well known in business, social and scientific circles in St. John, has accepted the responsible position of head book-keeper for this firm.

It is expected that seventy-five students will attend the Nova Scotia Summer School of Science, which opens at Pictou on the 23rd inst.

The Berlitz Schools of Languages that have been established in St. John and Fredericton continue to gain steadily in popular favor, and no wonder, for the methods are simple and natural, and the Professors—Monsieur Ingres and Herr Bober, are enthusiastic and painstaking. Many members of their classes have made rapid progress in the French and German languages. New classes, in no case to exceed eight members, can be formed at any time.

Monsieur Vitrain, of Philadelphia, the President of the Berlitz School, will attend the Interprovincial Convention in St. John, and give an address on the aims and methods of the system. We bespeak for him a cordial reception.

The closing exercises of the Institution for the Deaf and Dumb, Halifax, took place on the 30th ult., and reflected clearly the good that is being accomplished by that beneficent institution, under its accomplished principal, Mr. J. Scott Hutton, and his staff of assistants. The following is the attendance for this session: Boys, 39; girls, 25; total, 64. From Nova Scotia, 45; New Brunswick, 5; Prince Edward Island, 6; Newfoundland, 8.

INSPECTOR T. R. PATILLO, in his annual report to the Nova Scotia Superintendent of Education, says:

"The number of miscellaneous schools that did first-class work was larger than on any previous inspections. Some of those that a few terms ago I almost despaired of working up even to a moderate standard of excellence have become highly successful. The last term they did extremely well, showing thereby what may be accomplished in all the schools with the right person in the right place. With scarcely an exception the teachers that have attended the Normal School lately, have returned to us greatly benefitted by the training there obtained, and are now working successfully."

JOSHUA G. FITCH, LL. D.

The distinguished educationist, Dr. J. G. Fitch, of London, Eng., whose book, "Lectures on Teaching," is so well known here, will be in St. John on the 17th inst., and address the Interprovincial Convention. His subject will be "Hand-work and Head-work in the Schools," and, from his experience in almost every phase of educational work, especially in training teachers, and inspecting schools, much pleasure may be anticipated in listening to him. Dr. Fitch has been addressing audiences in New York and other places since his arrival in America, and takes part in the proceedings of the Convention of the American Institute of Instruction, which meets at Newport,

July 9th. The committee of our Interprovincial Convention have been fortunate in securing such an eminent educationist, whose long and honorable connection with the schools of Great Britain so well qualifies him to speak on the subject he has chosen.

The following brief sketch of Dr. Fitch may serve to show how long and important has been his connection with educational work: Born in 1824, he gained his higher education at University College, London, receiving his degree of M. A. from the University of London. From 1851 to 1856 he was Vice-Principal, and from 1856 to 1863, Principal, of the Normal College of the British and Foreign School Society. While in this position, in conjunction with Dr. Cornwell, his colleague, he was the author of "The Science of Arithmetic," a book designed to aid teachers in explaining the *rationale* of arithmetical processes. In 1863, on the recommendation of Earl Granville, he was appointed one of Her Majesty's Inspectors of Schools, with charge of the Yorkshire district, but has since been repeatedly detached from that office on special and temporary service of a highly important nature. This service has for the most part consisted in making inquiries into the state of primary and secondary education in England, and reporting thereon. He was for ten years examiner in the University of London, in English language, literature, and history, and for twenty years was one of the special examiners for the civil service. He is now the senior Inspector of Her Majesty's schools.

He is the author of numerous articles on literary and educational topics, and his "Lectures on Teaching" has been largely circulated in Great Britain, the colonies, and especially in the United States, where it has been reprinted and is regarded as, perhaps, the best single book for teachers in elementary schools.

As to the field of higher education he is a member of the governing bodies of St. Paul's School, Girton College, Cambridge, and Cheltenham Ladies' College. In 1885, the University of St. Andrew's conferred upon him the honorary degree of LL.D.

CANADIAN TEA.

Our scientific editor has been at a five o'clock Labrador tea. The beverage was a success—rated by some as superior to China teas. It was prepared simply as follows: Leaves of the present season. Boiling water poured on, and kept covered for about twenty minutes; kept nearly to boiling point—but not allowed to boil. Sweetened with refined sugar. Cream or milk added. The dried leaf of *Ledum latifolium* could be put on the market, allowing the widest margin, at ten cents per pound.

CANADIAN TREPANG.

In the waters surrounding the Atlantic Provinces, a holothurian, *Pentacta frondosa*, Jaeger, very similar to the trepang of the Malay and Chinese coasts, is found in great abundance. It is called by our fishermen the "Sea-cucumber" or "Sea-pumpkin." A few experiments have been made on it as an article of food, and it has been pronounced good, with the flavor of lobster-meat. Trepang, in the East, is prepared by dipping the live "Sea-cucumber" for two minutes in boiling water, then cutting open, then throwing into a second cauldron of boiling water and mimosa bark. It is finally dried in the sun, and pressed for stowage. The market value has been quoted at from five to six dollars per hundred pounds; and the fisheries are considered of industrial importance. Will not some of our ingenious fishermen, or fish dealers, make a thorough test of our own "Sea-cucumber," and settle the question whether there is to be any Canadian trepang or not.

CANADIAN EDIBLE FUNGI.

Thousands of dollars' worth of edible fungi, nutritious and delicious when properly cooked, are spontaneously produced by nature, and constantly going to waste in these Provinces, from a lack of knowledge. The common mushroom, *Agaricus campestris*, is only one of a great number of species, on which the poor farmer might occasionally dine as a lord, did he know the possibilities under his hand. Some species are poisonous, others are offensive or inedible. But little training would be required to distinguish one from the other, and to discover a method of cooking which would develop all their deliciousness.

At some future time—not the present year—we expect to give some plain account of the more common edible fungi, with figures, to enable our teachers to introduce a more complete knowledge of this interesting class of vegetation into all districts of the country. In the meantime the teacher should be always a close observer of nature on every hand. Never should he neglect careful examination of anything coming under his attention, because he thinks he may not be able to name it or classify it. Such a teacher may well be said to be a blind leader of the blind.

ON account of the absence in Europe of Dr. Th. H. Rand, Sir Wm. Dawson will, if he reach St. John in time, open the Convention, on the topic, "Reminiscences and Prospects of Education in Canada," a theme which, in the hands of this distinguished educationist, will prove of the greatest interest.

PUBLIC EXAMINATIONS.

We wish it to be distinctly understood that we are not the foes of inspection and properly conducted examinations. Where the people are called upon to support a system of public instruction, it is their duty, as it is their interest, to see that the money they contribute is expended so as most to promote the public advantage. They are bound to keep a vigilant outlook upon the proceedings of the public officers who discharge the duties pertaining to this department. Through their superintendents and instructors they reach every school and are kept informed of educational success or failure throughout their province. They can determine whether the education of the province is in a state of efficiency, as far as can be learned from statistics, and decide respecting the value of the suggestions which are offered to secure more gratifying results. The means taken by the officials of the educational departments to obtain this information may not always be above criticism, and may not be the best adapted to provide them with the most accurate data upon which to base their estimate of a school, but we are willing to accept their results and do not desire to quarrel with the method by which they are reached. These officers have a definite object in view, and they avail themselves of whatever instruments they think best for their purpose; they are men who ought to have been selected for the discharge of this duty because of their special fitness, from their experience, accomplishments, high character, judgment and prudence, and, therefore, men who enjoy the confidence of the community and the teachers.

But what shall we say of these public examinations which are still held in almost every public school and generally at this season of the year? It cannot be doubted that previous to the age of government inspection there was some reason for the custom, for it was the only occasion upon which the teacher and the public came into official contact, the only day during the year when the school-room was thrown open to the parents and friends of the pupils, and the educational methods of the school were exposed to the inspection and criticism of the visitors. Under these circumstances, an examination, partial and unsatisfactory though it was, was of some benefit. It served as a stimulus both to teachers and pupils, and, in some degree at any rate, evoked a certain interest in the work of the teacher and supplied a means by which the character of the school might be tested. But now when the machinery by which this is accomplished is elaborated to such a degree, what good end can be served by the continuance of the custom?

When, as is the practice in the larger towns, the pupils have not only to submit to the ordeal of an examination by the government inspector but to that of a grading officer besides, why should the old and now entirely useless habit of a public examination be so tenaciously clung to? Is it not the fact that, sometimes, on these occasions, when gentlemen are called upon to express their opinion of the school, from what they have seen, they rashly do so, and unwittingly put themselves in antagonism to those who have better means of judging, and are better fitted to form an opinion of the work of the school? The speaking on such occasions is for the most part meaningless laudation, and where it becomes critical and suggestive it does so from imperfect knowledge and a partial view of the circumstances, and is but little calculated to encourage, stimulate or instruct either teachers or pupils.

Such an examination partakes more of the nature of an exhibition, than an occasion for testing the acquirements of the pupils. Teachers are sometimes engaged in preparation for weeks, and we have known cases in which the special lessons of the examination day were repeated at intervals for months, that the display might be a success. Now, to good teachers such work is very distasteful, and is performed by them, not from choice, but necessity. They know, that to the superficial observer, readiness in answering is the first and indispensable requisite in a pupil, and they have to govern themselves accordingly. By this standard, then, scholars are compared with those of other teachers, and not by their ability to grapple with and overcome difficulties, their tenacity of purpose, and their power of understanding. They are, therefore, compelled to resort to methods in which the memory plays the most important part, that their examination may be successful.

Now, this is an injustice both to the teacher and the scholar. Examinations, as conducted by the inspectors, are, or ought to be, quite sufficient to determine the qualifications of the pupils. And if it still be necessary to have a public occasion on which the parents and friends of the children may meet them in school and signalize the end of the school year, and the commencement of the holidays, let it be a real exhibition, and not a mixing up of things which ought to be kept separate. Let us have, by all means, as fine a display as can possibly be prepared. Reading is one of the first of accomplishments, and if the prospect of readings and recitations at the end of the year will stimulate to greater effort, and enable scholars to attain greater excellence in elocution, the observance of such a closing day will not be without utility. And, we doubt not, that a like favorable re-

sult would attend upon an exhibition of specimens of penmanship, needlework, and drawing. Compositions written during the year might also be read, and, doubtless, this all-important branch of education would thereby demand and secure a much greater share than heretofore of the teachers' time and attention. Whilst music, calisthenic and gymnastic exercises and drill would not only lend charm and variety to the occupations of the day, but equip the participants with an accomplishment which shall be an unfailing source of pleasure, and a physique so developed and invigorated that it can respond without injury to all the demands of after life.

The vast majority of those who take an interest in school examinations can understand and appreciate such a display as this. All the elements of its composition are admirably suited to the occasion. The exuberant spirits of the scholars, the discontinuance of regular work, the general relaxation after the strain and high-pressure of class exercises and home preparation, and the prevalent gaiety expressed on the countenance of every friend and acquaintance whom they meet, are the best conditions for such a celebration as we have delineated above. They are scarcely, however, the circumstances under which pupils can, with hope of success, be made to submit to all sorts of questions, relevant and irrelevant (generally the latter), put by persons who know not how to form a question, nor what ought to be the limits of the pupils' knowledge, and who only succeed in bewildering and perplexing them. Nor is this all the mischief that attends upon such an examination. Many an examiner has undertaken to question boys and girls, who had been well taught in the best and highest sense of the word, and, from their inability to competently discharge the duty they had undertaken, they have impressed the spectators with the idea that the teacher is in fault. And how often do we observe that schools and departments are, on such occasions, most unfairly brought into comparison with each other, and thus give rise to heart-burnings, jealousies, and recriminations! Have we not seen clever teachers so conduct the business of the examination day, by only presenting to the visitors what was most attractive, most easily understood, and displayed to best advantage the graces of their pupils, that the more thorough and intellectual work of an abler man, being less easily discerned, was passed over with slight praise, whilst they were overwhelmed with panegyric?

Is it not better, therefore, that show-lessons and teaching generally be dispensed with on these occasions, and that the exhibition proper take their place. It would be more in harmony with the time and the

spirits of the scholars and their friends, and be a great relief to the better class of teachers. There would not be the same risk of creating ill-feeling, not the same danger of injustice, whilst a most laudable object would be advanced. And, may we not say that teachers would thus be relieved from the exposure to the temptation to perform their duties with a view to public display, and be enabled to promote the best interests of those committed to their charge, and that without anything approaching hypocrisy or sham?

THE UNIVERSITY OF NEW BRUNSWICK.

The encania of the University of New Brunswick, on the evening of Thursday, June 21st, was perhaps the most satisfactory that has been held during the sixty years since the university conferred its first degree. As usual, on the celebration of this collegiate festival, the library was crowded to its fullest capacity, and it was observable that in the audience was a fair proportion of visitors from St. John, Westmorland, and other parts of the Province.

But the daily papers have been full of accounts of the evening; of the prizes and prizemen; the orators of the faculty and the alumni; the young graduates, donning for the first time their wide-sleeved gowns and ermine; the old graduates, coming back to renew their memories of their happy life on the hill; interested parents, admiring sisters, learned doctors of the law and the gospel, senators, alumni, and hard-working professors glad of their well earned holiday. This annual scene has made itself familiar to many throughout the Province. It is not necessary here to repeat these details, or place another elaborate story of the university's festival on record. There are one or two points of interest, however, which may be referred to with advantage to the university and to its supporters. We refer chiefly to the inner life of the college, and one finds no mention of it in the current periodicals.

The University of New Brunswick has been passing through a critical period of its life. It has lately been remodelled, to a slight degree, in its outward form, by the change of the curriculum from a three years to a four years' course. Inwardly there has been a greater change at work, and there is an infusion of new life in the college to-day that makes it strong enough to claim renewed attention from the people of New Brunswick.

The senate of the university was certainly fortunate, as well as wise, when it appointed to the professorships of Philosophy and Modern Languages the young men who now occupy those chairs. The substantial compliment paid by Dr. Macrae, one of

the degree examiners, to the proficiency of the graduating class in mental science, is the surest evidence of the excellence of the instruction in this department.

The work in English literature and French needs hardly more than its prescribed courses, which appear in the calendar, to speak for it. It is safe to say that no college in America, of the same size, offers better facilities in the English department. In giving the prominence it does to the study of the mother tongue, our college follows the lead of Harvard and the best American universities; and it is to be noted here that neither Oxford nor Cambridge can compare with Harvard in the facilities they offer for the study of English literature, though in the scientific study of the language the mother country still holds the lead.

It is, perhaps, not in the most delicate taste to praise loudly or openly, but we cannot help congratulating the college on having on its staff a teacher of such wide knowledge and thorough refinement, as the gentleman who was secured through President Harrison's friendship with Edward Dowden, the distinguished head of Dublin University. But however excellent his routine work may be, we venture to think, (if we *may* venture to think in public on matters of private concern, though of public importance) that it is in other, friendly and semi-social, semi-scholastic relations, that Professor Stockley is doing most to help the young men under his tuition, and increase the usefulness of the university. He has introduced the custom, common in the universities of the old world, of intimate and friendly meetings between professor and students, at which topics connected with the work of the class are freely discussed with delightful informality, and where the men learn to know their instructor as a fellow-worker with themselves, as a stimulating enthusiast and leader in one or more branches of reading, rather than as a tyrant, crowned with awe, enforced by authority, exercising the powers of an old-time domine, and vending loads of dead knowledge. An invitation often, too, throws these gatherings open to gentlemen of the city who may be interested in the pursuits of the evening.

The success of Dr. Dyde's lectures on Shakspeare, in Fredericton and in this city, forestalls the necessity of criticism on his work. He has proved his title to a teachership of the people's sons before audiences of the people themselves.

These, to the average reader, may seem small things, but to the thinking man they are strong and important influences. They mark the difference between life and death. They foretell an increased intimacy and a more perfect understanding between

scholars and teacher. They confirm the good hopes which were held when the university came under its new management a year or two ago.

Anyone who knows anything of the requirements of modern science and its teaching, and who at the same time has had the good fortune to sit for a year or two in Dr. Bailey's lecture-room, knows that if that gentleman should resign his chair it would be simply impossible to secure a man to fill his place. The range of subjects is so great, and the efficiency with which they are here taught is so painstaking and so well abreast of the times, as to be a source of genuine surprise to a student coming here from the great centres of education. But no one man in so broad a field, including so many specialized branches, can really do justice to them all, or obtain the best results.

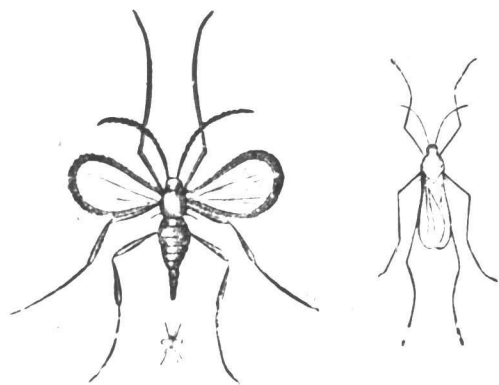
The natural science department is sadly in need. That is an old cry, and, we fear, a vain one. But certainly nothing can be gained if we stop crying, in the political world at least. One could almost wish that the society of the alumni would band themselves into a salvation army and beat about the ears of the government and people of the Province, with roaring importunity, if only to proclaim, "Great is Diana of the Ephesians." The din might wake a sleeper here and there.

But the alumni have shown that they rightly appreciate merit. By a unanimous vote at the encennial meeting, the society of the associated alumni requested the senate to confer the well deserved distinction of an honorary degree of Doctor of Philosophy on Prof. Bridges. The enthusiastic applause with which the students greeted Dr. Bridges when the degree was conferred, showed how well his manly character and sterling qualities as a teacher are appreciated.

In view of the late somewhat unpleasant and unsatisfactory state of affairs in the university, which threatened at one time its best development, we have thought it important to dwell upon the personal element in the present staff of professors, and to enforce strongly upon the educated and educating portion of the community the recognition of the exceptional advantages our Provincial college possesses at the present time. Never before has it been so thoroughly well equipped with men who are gentlemen, scholarly, painstaking, and successful. Never before has it been so deserving of the increased pecuniary aid whose need it has long so sorely felt. Let us take courage, and aim to give New Brunswick youth an education at home as solid and good as that they may obtain abroad. We cannot hope for a thoroughly appointed university. Let us try to have a really creditable college of arts.

FERNDALE SCHOOL.

NO. XIV. THE WHEAT MIDGE AND HESSIAN FLY.
(*Cecidomyia* [Diplosis] *tritici*, Kirby;
and *C. destructor*, Say.)



WHEAT MIDGE, magnified, (real size shown under the one with expanded wings.)

TEACHER. Come up one by one and look at this wheat midge under the microscope. Notice its orange color, its yellowish feet, its transparent wings.

JACK. That is what they call the "weevil."

T. The "weevils" are beetles with long beaks — and there are several different species of them. The local name of "weevil," for the "midge," is incorrect, and therefore misleading.

S. This small fly must have come from a very small cocoon.

T. Yes. About as small as a mustard seed. And now, when the wheat is in blossom, the female on calm evenings can be seen placing clusters of from two to a dozen or more eggs between the chaff envelopes of the opening flowers. In a little over a week these eggs hatch out as minute, transparent grubs, which draw nourishment from the growing wheat germ, and by the first of August are full grown, nearly an eighth part of an inch in length, and orange. They moult their skins in the ear, but sometimes in the earth, to which they finally descend, then weave their tiny cocoons an inch, perhaps, below its surface.

S. Sometimes these tiny orange specks are very abundant in the dust with the chaff after threshing.

T. Correct. Myriads of moulted skins and of the mature larvæ are taken into the barns in the ears, when harvesting. What should be done with such chaff?

S. It wouldn't do to let it be thrown out on the ground, as the larvæ then could all pupate, and come out as midges next June. Burn the chaff, at least the dusty portion containing the orange grubs.

T. Very good. This midge causes the loss of millions of bushels of wheat each year in America. It is important, then, to know how to treat it.

JACK. If every one in Nova Scotia stopped sowing wheat for one year, what would become of the midges when they would come out of their cocoons and find no flowering ears of wheat?

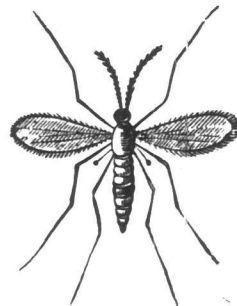
T. They would take to "couch-grass," or "kill-all," which is a species of wheat, and if they did not find enough food, as is very probable, there would be a tremendous midge famine, and very few cocoons for next year. To what order of insects does the midge belong?

CHORUS. To the diptera.

T. Yes. And to a group called the Cecidomyidæ, or gall-flies. Have you ever noticed a large cone-shaped cluster of leaves on the end of a willow twig, or large, curious swellings on the young twigs of various plants, or on leaves?

CHORUS. We have.

T. Well, very many of these were caused, probably, by some flies of this group, which pierced minute holes through the tender skin of the bud, twig or leaf, with its sting-like ovipositor, and placed eggs in them. This irritation caused the curious growth. And in the midst of the growth, when quite fresh and cut open we can find the young hatched larvæ feeding.



THE HESSIAN FLY (magnified).

Here is another of them, which is very destructive to wheat. Hence the name *Cecidomyia destructor*. It was brought over to America in straw by the Hessian troops under Sir William Howe, during the war of independence, 1776. It was first found on Staten Island, near New York, where these soldiers landed, and seemed to proceed inland at the rate of nearly twenty miles a year, destroying millions of dollars worth of wheat.

S. Is it like the wheat midge?

T. Very much; only it is more or less black; the wings also being dark and less transparent.

S. How does it hurt the wheat?

T. The egg is deposited in the angle of the leaf. The larva moves down finally to the joint, where it assumes the form of a flax seed in the pupa state. The supply of nourishment to the ear of wheat is checked, and the straw often breaks at the joints, under the influence of the wind.

S. We do not hear very much about the Hessian fly now, do we?

T. Four or five very minute species of flies are parasitic upon it. They pierce the egg, or the larva, or the pupa, and deposit one of their own eggs in the body. These, in due time, are hatched, and the young larvæ of the parasites feed upon the body of their host, and destroy it. Under certain combination of circumstances these parasites increase with the abundance of their hosts so as even to exterminate the Hessian fly in some localities. There is no remedy so cheap and effective as nature's own.

PRACTICAL BOTANY.

No. V. THE ORCHIDS.

"What is an orchid?" said a teacher the other day: "do they grow here?" "How may they be recognized?"

The orchidaceæ is a large and interesting family of plants. They are found in these Provinces. Many of the species are abundant, while others are of rare occurrence. In New Brunswick and Nova Scotia up to the present time about thirty species have been discovered and tabulated. No family of our plants is more attractive or more worthy the attention of students. The different species have so many features in common that when one is made the subject of careful analysis and study, the others may be easily recognized. It may require prolonged and continuous effort to thoroughly master the details of structure of one, but the labor will be rewarded in a life-long enjoyment of the study and occurrence of these wonderfully beautiful members of our flora. Some are so rare that perhaps but few individuals of certain species will be met with in the course of a lifetime, and will have to be sought for in the seclusion of the deep forest. The writer well remembers the delight with which he gazed upon *Calypso borealis* for the first time—one of the most beautiful plants in these provinces, and one which it is safe to say not more than a dozen people here have seen and recognized. In general outline not unlike the plant pictured in this article, its flower is more inflated, like the lady's slipper, and showy, variegated with purple, pink and yellow. It has a single ovate thin leaf, slightly heart-shaped at the base, springing from the bulbous root. It is named after the goddess Calypso, and the name is singularly appropriate, as it means *to conceal*. A prolonged search for the plant last month (it flowers in June), for the purpose of illustrating this article, failed to reveal its whereabouts in haunts where it had been found in previous years (for, tempted by its beauty, it had been taken up

bodily and transported to the window-seat, delighting the eyes of friends, and causing the delicately nurtured house plants to grow green with envy while its delicious bloom lasted). Lest one may think we go in ecstasies over this child of the forest, hear what that genial lover of flowers and talented botanist, Prof. W. W. Bailey, says about it:

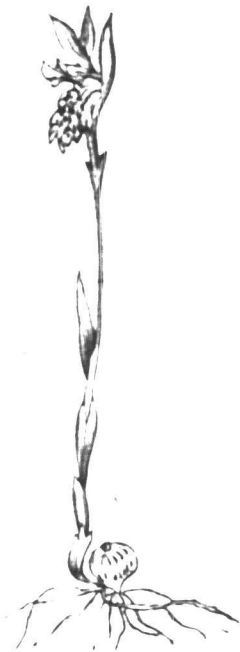
Calypso, goddess of an ancient time,
(I learn it not from any Grecian rhyme
And yet the story I can vouch is true)
Beneath a pine tree lost her dainty shoe.

The tints of purple and the texture fine,
The curves of beauty shown in every line,
With fringes exquisite of golden hue,
Perfect the wonders of the fairy shoe.

A writer on botany many years ago said: "This rare and beautiful plant is found in Vermont, Nova Scotia, Michigan, and west to Oregon." Has it been found in Nova Scotia recently? A well-known botanist there says he has never seen the plant.

Although the first of July is rather late to look for it, it may be found in deep, mossy woods.

But let us look at a few of the difficulties promised above. The plant selected to illustrate this article is one scarcely less beautiful than *Calypso*, but fortunately more common, and may be found in the cold bogs of New Brunswick and Nova Scotia in July and August. Its handsome rose-purple flowers makes it a conspicuous and beautiful object amid the brown earth and duller heath flowers of the barrens. It is from five to nine inches high, springing from a solid bulb. (Most plants of this family have either tuberous or fleshy roots.) The scape, or stem which bears the flower, has two or three little bracts which tightly envelop the stem. The single linear leaf protrudes from its sheath in the scape *after* the plant flowers. The scape of *Arethusa* terminates in one (rarely a pair is found) bright, rose-purple flower. (The flowers of this family are very irregular, borne either single, as in this case, or in racemes or spikes, as in the case of *Spiranthes*; always at the top of the stalk, and each flower subtended by a bract.) The perianth of *Arethusa* consists of six parts, five of these much alike, but the sixth quite different.



The sepals, or the three outer segments of the perianth, and two of the inner segments, or petals, resemble each other. The third petal, or "lip," is recurved at the top and bearded down the face, forming a very conspicuous part of the plant. Adhering to the lower part of this lip is the *column*, composed of a single stamen. (Nearly all orchids have but one stamen.) Enclosed within the perianth, at the base, is the one-celled ovary, which is likewise a characteristic of all our orchids.

The flowers of orchids, with their complicated structure, present admirable arrangements for fertilization by means of insects. It must be taken for granted, what is now generally known, that insects when they creep into flowers for honey, carry about with them from flower to flower the dust or pollen which makes the young seeds grow and become fruitful. The flower of *Arethusa* is admirably adapted for fertilization by insect agency. Dr. Asa Gray has described the process as follows:

"The bee or other insect of considerable size, can enter the blossom only in front; and the large, crested recurving petal offers a convenient landing place." (See cut.) "At the bottom of the narrowed cup of the flower a little nectar is produced, down to which the insect must reach its proboscis. In rising to escape, its head must strike the lower face of the overhanging shelf, which is stigma, and so sticky that any pollen it may chance to have brought would be left adhering there. As the head slips by, it must next hit the front edge or vizard of the helmet-shaped anther" (just observable in the cut, immediately over the lip), "raise it on its hinge, and so allow one or more of the four loose pellets of pollen to drop out, or be brushed out by the insect's head, to which some of the pollen would stick, and so be carried to the flower of another individual, there left upon its glutinous stigma by the same upward movement which immediately afterward raises the anther-lid and carries away its pollen, to be transferred to a third blossom, and so on."

The flowers of *Arethusa* emit a pleasant fragrance. It is named after one of Diana's nymphs, who was changed by that goddess into a spring. The name was applied by Linnæus, who appears to have been constantly on the watch for analogies, on account of this plant's occurrence in springy places.

[A list of orchids occurring in these Provinces, intended to accompany this article, is unavoidably crowded out.]

THE next eclipse of the moon will occur on the night of July 22. It will take place about midnight.

For the REVIEW.]

LATIN SYLLABICATION.

The following notice appeared not long since in a leading American newspaper, and ought to be reliable:

"Prof. W. Everett, of Harvard University, has resigned his situation because of the introduction of a new Latin grammar. He says he does not know the new Latin, and cannot teach it; and that its pronunciation is not only incorrect, but barbarous."

And in the *Princeton Review* of a somewhat recent date, we meet with the following, also on the subject of Latin pronunciation.

"To say *bo-nus* and *be-ne*, and to write verses on the principle that we should say *bon-us* and *ben-e*, is a method of pronunciation of which the wildest savage would see the absurdity. Even a parrot is exempted from repeating sounds which are in direct contradiction to the rules about sounds which in theory it acknowledges."

I do not know what "new Latin grammar" is referred to in the above; but I have seen enough samples of the article within the last dozen years to sympathize with Prof. Everett in the independent and manly protest with which he is credited. The potent considerations, which so often lead to the introduction of new books into schools, seem not to have availed with him; and rather than be unfaithful to the interests of the young men under his charge, he resigned his post. All honor to Prof. Everett.

The *Princeton Review* also deserves much credit for its outspoken condemnation of a grievous evil, which militates almost more than any other against the study of the Latin language, and its use by Latin scholars. But how the writer could be content merely to protest, without recommending or even suggesting a remedy, which must have been obvious to him, is very strange. Did he fear the charge of iconoclasm or singularity, and therefore stopped short in the crusade on which he seemed to have entered with commendable vigor? It is not enough to attack error; one should be prepared to show how it may be removed, and the mischief attending it be nullified.

I do not propose to discuss the subject of Latin pronunciation, and therefore shall say nothing of the two systems on which the vowels are sounded, and which obtain, respectively, in Oxford and the schools of England on the one hand, and of the continent on the other; but the point referred to by the *Princeton Review* may properly claim a brief consideration. The *vowel sounds* are of comparatively little importance, and it may not be possible to arrive at certainty as to how they were uttered by the ancient Romans; but there is no uncertainty with respect to the *quantity* of the syllables and the *accentuation* of the words; Latin verse establishes both the one and the other,

and renders ignorance of them inexcusable. It is to the former of these that the *Review* directs our attention.

One cannot but ask as to the nature of the difficulty complained of, and how it came to exist. It is, partly at least, to be traced to the rules of syllabication enacted by certain grammarians and accepted by learners as of unquestionable authority, but which are purely *arbitrary*, and have as little foundation in the structure of the language as they have in reason.

Let us examine this point for a moment from one or two familiar examples. In such a word, for instance, as *caput*, a leading rule would make the first two letters constitute a syllable, and the last three another. This, as we pronounce, would render the *a* of the first syllable *long*, whereas it is *short*. If we would observe the true pronunciation, we must disregard the rule of syllabication, and divide the word between its third and fourth letters. This would make the first syllable short, as it is in Latin verse, which is our only authority for quantity. A like remark would apply to hundreds of similar words, and among them to the two instanced by the *Review*. The grievance or difficulty complained of would seem to be not a very formidable one, for we have seen how easily it can be removed. The common and incorrect pronunciation is expressed by the syllabication *ba-nus, ba-ne*; the correct and extremely rare pronunciation, by *ban-us, ban-e*. It need not be mentioned that the quantity is ordinarily exhibited in another manner, that is, by certain signs placed over the vowels in question.

So there is a rule in some of the grammars which discriminates among the accidents of nouns, etc., assigning a different pronunciation to the corresponding syllables of the different cases. Thus, in *avis*, in which the first syllable is *long*, and is so pronounced in the other cases, in the dative and ablative plural we are instructed to give it the *short* sound. The same guides would have us pronounce the antepenult of *amabimus* and *amabitis* as if it was short; whilst in the corresponding syllable of the other forms of the tense they kindly allow us to observe the proper quantity.

From what has been said it will appear how unfounded is the statement so often met with in the grammars, when dealing with this subject, that the accenting of a syllable necessarily renders it long. To so assert argues a confusion of thought remarkable indeed, as the peculiar stress of voice, denominated accent, may fall on any syllable indifferently, whether long or short. The *a* in *dominus* is as much accented as is the *au* in *audis*; and yet in the first case the syllable is short, while in the last it is long. I hope

I shall be excused for having adduced such simple and homely illustrations, for the language does not furnish anything less simple and less homely.

The lesson taught by the above is sufficiently obvious. It is, to disregard all rules of grammars or other authorities, which, if followed, would falsify the quantity, or lead to an incorrect accentuation of the words; and for this reason, among others, that it may be so easily known what is the true quantity and accentuation of all Latin words with the few exceptions of those that are not found in the Latin poets, or whose pronunciation can not be determined by analogy. If this were done there would be no longer the inconvenience and discomfort that attend the babel of sounds with which our ears are tortured by the conflicting systems or usages of discordant schools.

W. G. S.

PHILOMATHES.

For the Review.

TO NATURAL SCIENTISTS.

Two years since, the writer was engaged in exploring timber lands on the Bonaventure river, which discharges its waters into the Bay of Chaleur. Early in March, when the snow was four feet deep, we had ascended the river many miles, as its snow-covered surface afforded free scope to our portagers, who were carrying food, bedding and cooking utensils on three toboggans. Everything went smoothly until we came within a mile or two of the Forks; then the ice, which had previously shown no symptoms of weakness, began to give evidence that it was not to be relied on, and finally, when we were, by estimation, from one and a half to two miles from the Forks, we found an open river, whose clear green waters were bounded on either side by white banks of snow. The river was rapid and its waters shoal. On either side there was a small strip of beach. On this we saw a robin or two (*Turdus Americanus*) hopping about and gathering up such food as the bright waters had cast on the shore. There were also a few ducks to be seen. Leaving the river we cut our way through the woods to the Forks, where we camped that night. The left branch we found all open and entirely free from ice. This we crossed the next morning by means of a long cedar which we felled, after which we ascended the right-hand branch, which was solid, a distance of sixteen miles, or so far as we dare, travelling becoming dangerous; indeed, in many cases we could hear the water roaring beneath the high up-raised shelly ice over which we were hauling our toboggans. But to return to the Forks, where I saw what interested me much: An article whose name I am ignorant of, and only know by the fire

test that it was of organic origin. At the Forks, just where the two branches meet, there was a broad, low sand bar. While walking on the shore of this, during the time that my men were carrying our tent and supplies over the fallen cedar, I saw in the stream, the water of which was remarkably clear, patches of a viscous substance attached to the small projecting points of a ledge whose surface was only a few inches below that of the water. From these little projections it was strung out in ropy masses which undulated and vibrated in the quick and rapid water of the stream. Some of it I gathered. It was of a consistence similar to that of calves' feet jelly, perhaps a little harder. It was colorless and transparent. Putting some of it in a handkerchief it became thoroughly dry, when it had a yellowish cast. I tried it with fire, when it proved itself to be of organic origin by the disagreeable fishy odor which it emitted under the action of heat. Can any of the readers of the EDUCATIONAL REVIEW tell me what this was?

EDWARD JACK.

Fresherickton, N. B.

For the REVIEW.]

A JAPANESE SCHOOL.

* * * * There is one command not needed here, and that is, "Pay attention." They would consider it very impolite to be inattentive while a teacher is talking, and besides they are so anxious to learn. When the girls become more advanced in their English, teaching them will become a perfect delight. It is a little hard just now, sometimes. Whipping a pupil is unknown here. No teacher would think of doing such a thing. It would be looked upon as a dreadful insult. There are normal schools, with model schools attached, all over Japan. Two of the teachers called upon me and invited me to visit the Shidzwoke normal school, which I did one morning. There are no free schools in Japan, and all normal school pupils are required to board in the building. The school is very large; there are seventeen teachers and 160 pupils, thirty of whom are girls. It has only been the last year that girls were admitted, and then there was a hard fight for it. In Tokio and Yokohama the normal school has been open to girls for some years, but not so in the country. Girls, however, have separate classes, and do not see the boys at all.

All schools have large reception rooms. I was shown to the reception room by one of the school servants just before the bell rang for recess. It was very interesting watching the pupils come out. There was a very large covered play-room, with a balcony running all around it. The pupils from the different

departments of the model school march out, each class being preceded by a teacher. It was a very pretty sight. The teacher of the very little ones walked backwards. The order was perfect till they reached the playground, and then there was quite as much noise as any Canadian boys and girls would make. After a little I was conducted to the teacher's room. It is a very large room, fitted up with bookshelves, desks, chairs, ink, paper in pads—everything that a teacher could possibly require. The first room I visited was the library. It was a very fine one, containing a large number of volumes—Chinese, Japanese, English, French, German, etc. The classes in the model school are taught altogether by the pupils, one pupil having charge of one class for a term. Each teacher teaches only one subject. The order was perfect. The scholars in the first room I entered were having a singing lesson. The teacher played on a small organ with his left hand and beat time with his right. The pupils were from eight to twelve years of age, and while in the room I noticed only two pairs of eyes turn from the teacher for an instant to gaze upon the foreigner. In the next room the pupils were having a lesson on morality. When we entered the teacher said a number and immediately all rose, a second number and they moved a little from their seats, a third they bowed, a fourth they moved back again, and a fifth sat down, and then they were no longer conscious that there was anyone in the room but themselves and their teacher. Through all the rooms the same order prevailed.

I would like to say just a few words about the natural history room. It was quite a large room, lined with cases filled with all kinds of stuffed animals, bottles with all sorts of fish, and birds of every kind. The walls of the room in which physiology was taught was completely covered with diagrams of the parts of the human body, and standing up by the platform and directly opposite the students was a skeleton of a human body. This was partly covered with a sheet. The geology room was fitted up with cases filled with specimens of stones from all parts of the world. I could have spent a whole day in the building, instead of only an hour. All the boys' schools are fitted up in the same way.

In the school in which Mr. Cassidy teaches there are four hundred pupils. What delighted me there was the room in which botany was taught. There were such beautifully pressed flowers and vines and leaves. The Japanese have sent men to visit the best schools in Europe and America, and they have been quick to adopt only the best methods of teaching.

The students of all the boys' schools wear foreign

dress—I believe they are required to wear it, and the girls, too, in the normal school are adopting it. I think the schools are on the plan of German military schools. The teachers have their coats and pants heavily braided. The boarding departments in all the schools are much alike. Upstairs are the sleeping rooms. Each room contains five rough, plain, narrow wooden beds, and on the walls are guns and swords. Sometimes the boys, having been accustomed to sleep on the floor, tumble out. Down stairs are the studying rooms, each one containing a plain wooden table and five chairs. The goal at which all Japanese students aim is the Imperial University in Tokio. A sister of one of the students attends our Azabor school in Tokio, and he offered me Saturday to take us through the building. We entered the grounds through a massive stone gate, walked through avenues of trees past the museum, which is a large building three storeys high. We were first shown into a reception room, where we were met by the young man who was to conduct us through the building. We first went to the laboratory, then to the designing-room. The ceiling was between two hundred and three hundred feet from the floor. There were hundreds of designs, mostly for engines. I did not know that so many kinds of engines could exist. The third room was filled with models of all kinds of ships—war-ships, steamers, etc., and the walls were completely covered with drawings. We next went into the examination hall. It was perfectly elegant. It consisted of an immense room four storeys high from floor to ceiling, with galleries running round it. It had the most elegant pillars with gold and green stripes. The balconies were sixteen feet wide. The walls consisted of book cases, and round the railings were writing tables and chairs. The railings were iron, but were pure white, covered with green and gold ornaments. The ceiling was beautifully carved, and pure white. There were electric tubes for lighting the lamps. Electric light is used altogether. The stair-ways leading to the balconies were outside, of iron—white, green and gold. The geology room would have pleased Miss Waddell. Of course there were cases and cases and cases filled with specimens, all labelled, in both Japanese and English, and the walls were covered with pictures of stone formations. There was one room containing specimens of woods—mahogany, and every kind imaginable. In one room there were models of all kinds of bridges—but I could not begin to tell all the wonders I saw in that building. I was told that there were no school buildings to equal it in size and beauty in Ontario. The Japanese have thrown off their old religion, and education is their god now. I never imagined anything

like the magnificence of their temples. We visited some in Tokio, built more than three hundred years ago, and it must have cost millions and millions of dollars to build them. They have the most elegant designs in bronze, marble, and pure gold. But while there is so much refinement and culture in Japan, there is also much, very much poverty and degradation. Fancy thousands of men doing the work of horses. Some of the people have come to the decision that Christianity is the best religion, that it is well to have a religion, and one of their greatest men in Tokio wrote an article for the papers in which he proposed that some hundreds of the nobility should join one of the Christian churches, and thus gain the respect of the Christian countries of the west. He tells the people that religion is only a garment which men and nations put on to suit their interests. He says if they could only have a religion which would teach the morality of the Bible, and leave out the divinity of Christ, and the miracles, they would be quite satisfied. Although, he says, they need not object to Christianity on that account, for the miracles and this belief in prayer is really needed for the women and the lower classes. Of course no intelligent, educated man would believe such nonsense.

The weather is delightful, birds singing, trees coming into leaf. But although so fine, it is most depressing weather. Everything is so new and so strange. While there are many things to make life pleasant here, there are many things which would make it unbearable, if it were not for the thought that one is really needed here, to show those conceited men that the girls and women are just as clever as they are if they have the chance.

My school is increasing in numbers. I have now forty-two pupils, ten of whom are boarders. The house is full, and the school almost so. I hear that a number are coming after Easter. They are going to build a new school, with accommodation for one hundred pupils, fifty of whom will be boarders. It is marvellous the way they run up the buildings. Mr. Cocking has a new house, two storeys high, and it was built in seven weeks. Of course they are not substantial like the home houses, but they look very pretty. When I speak of foreign dress, I mean the dress worn in America and England. I am a foreigner now, and am quite accustomed to hearing myself called one. Wouldn't I love to go to a church where I could understand what is said. It is pretty hard to have no church privileges at all.

* Shodzu-ka, Japan.

This is the time to commence experimentation with our own Labrador Tea, *Ledum latifolium*.



J. GOULD SCHURMAN, M. A., D. Sc.

(Professor of Christian Ethics and Philosophy, Cornell University.)

There are few men in these Provinces, or connected with them, who are better known than Dr. J. G. Schurman. In academic circles, especially, he is recognized as an accomplished teacher of philosophy and literature. His former students remember him with gratitude and esteem, both for the ability and enthusiasm with which he conducted his classes, and the sympathy and wisdom of his counsels. Educationists recall their regret at the departure to another country of so eminent a teacher, although it was to occupy a position of greater responsibility and wider usefulness, and express their satisfaction at the prospect of being able to listen to him again at the forthcoming Interprovincial Conference of Teachers. Perhaps no feature of the gathering will be so interesting and productive of good results, as the experience of Sir William Dawson, Dr. Rand, and Dr. Schurman, who are acquainted and have been associated with the education of the Lower Provinces, but who come to us now from Quebec, Ontario, and the United States.

Dr. Schurman was born at Freetown, P. E. I., 22nd May, 1854. In 1870 he gained one of the scholarships for Prince County, and entered upon his studies at Prince of Wales College. During the two years of his attendance he was remarkable for the untiring zeal with which he applied himself to his studies; while, to a clear head and great power of concentration, he added extraordinary accuracy and an excellent memory. He left this college to teach the

Grammar School, at Harrington. And never shall we forget the beautiful summer day, in 1873, when, at the joint request of the teachers and the trustees, we examined that school. Mr. Schurman had been but a year in charge of it, and yet we considered it then, and must pronounce it still, the best we ever had the fortune to visit. The order was perfect, the children were happy, and all, from the youngest to the oldest, were admirably taught. Here, as has been observed in the case of others who have become distinguished, we found evidence of the possession of the same powers and qualities which have in later years been recognized in Dr. Schurman—unusual tact, sound judgment, unbounded enthusiasm, clearness and accuracy in exposition, good temper, and an unflinching conscientiousness.

He afterwards proceeded to Acadia College. In 1875 he won the Gilchrist scholarship, and thereafter prosecuted his studies, for two years, with great distinction, at University College, London. Having, by this time, determined upon philosophy as his special study, he spent the following winter in Edinburgh, under Professors Fraser and Calderwood, and graduated D. Sc. at the end of the session, 1878, and soon afterwards stood at the head of the list of M. A. in the University of London.

About this time, also, he was elected to one of the Hibbert fellowships, which are tenable for two years. These years were passed in unremitting study in Germany, France, and Italy, under the most eminent professors of philosophy, and in 1880 Dr. Schurman published his "Hibbert Essay" on "Kantian Ethics and the Ethics of Evolution."

In the same year he was called to Acadia College, and occupied for two years the chair of logic, rhetoric, and political economy. Thence he moved to Dalhousie in 1882, being selected as the first occupant of the "George Munro" chair of philosophy and English literature, and there remained, till in 1886 he was appointed Sage Professor of Christian Ethics and Philosophy at Cornell University.

Cornell is now to reap the benefits which Dr. Schurman derived from his six years' residence in Nova Scotia. Constant study and reflection, the knowledge and mastery of his powers, and the experience which he had gained in university work, are now to produce their fruits. He had not long occupied the chair of philosophy till it was felt and acknowledged that speculative subjects were handled in a manner very different indeed from the traditional dull and repulsive mode of presenting them. His lectures were characterized by freshness and vigor, and attracted his more thoughtful students by their lucidity and force, both in thought and language,

while his enthusiasm in his theme overcame the distaste of even the most reluctant to undertake the study of philosophy. His classes increased in numbers and even some of his fellow professors became most attentive listeners. During the present term the interest and zeal in these studies in the university has reached such proportions that in response to a petition he delivers a special course on ethics every Tuesday, open to all members of the university. So hearty is the appreciation of this boon that 250 or 300 students crowd the philosophy class-room, many of them standing from lack of room.

During last autumn Dr. Schurman published his "Ethical Import of Darwinism." This work was well received and highly commended by those competent to judge of its merits, and the first edition was exhausted in eight weeks. It exhibits all the excellences which contribute to render Dr. Schurman a great teacher of philosophy, and at the same time is remarkable for the candor and respect with which the opinions of others are stated and criticised. Throughout, the volume is suggestive without obscurity, courageous without flippancy, and modest without servility. When such work has been accomplished by a man only thirty-four years of age, gifted with a magnificent constitution and unlimited powers of application, what may we not be justified in expecting from him in the future.

Though thus fully occupied with the duties pertaining to his classes, and preparations for the press, he has been always keenly alive to all that transpired in the world around him. All educational business, of a nature real and practical, and educators, honest and enlightened, have had his sympathy and encouragement. He is one of those who see and acknowledge that university work, to be truly effectual, must be in touch with human interests and the educational system of which the university is the apex. A man of such sympathies, and so appreciative of the labors of the teachers of the country, a man so capable of giving powerful expression to what he knows and feels, and favored with an experience so wide, and rich, and varied, cannot but have much to say to the Convention well fitted to encourage, cheer and instruct.

In future examinations for licenses in Nova Scotia, the superintendent of education will accept from applicants, instead of the standard spelling, the spelling as amended by the twenty-four rules of the American and English Philological Associations. — *Dalhousie Gazette, May, 1888.*

COLLEGES.

McGILL UNIVERSITY. We have received the "Annual Calendar" of this university for 1888-9, which gives very full information respecting its numerous faculties.

In Arts, arrangements have been made for matriculation examinations coincident with those for the Associate in Arts, which may be held at local centres anywhere in the Dominion. The Donalds special course for women will be erected into an independent college, in every way equal to the McGill College, with a large endowment and staff. In Applied Science, new class-rooms have to be provided in the east wing, and a new building erected for workshop and machinery. The Medical Faculty, with the highest reputation on the continent, has an additional member added. The Law Faculty is moving into more commodious rooms. The Normal School has also made new arrangements. This university appears to be expanding more rapidly than ever. Its influence, not only on Quebec, but on the Dominion, is great, and specially beneficial.

UNIVERSITY OF DALHOUSIE COLLEGE. We have received the calendar for 1888-9, with the examination papers. The work of the university, measured by this test, will bear favorable comparison with that of some of the leading universities of the continent. In fact a degree from Dalhousie College in Arts means, apparently, more work done than one from some of the famous universities of Great Britain. Although these examinations are hard on the poor student who must "go down," they will eventually secure a universally acknowledged prominence for the degrees from this university. Many and large money prizes are offered to the students who matriculate most successfully. But the success of its students in winning fellowships for special courses abroad, appear to have even a greater moral effect upon its drawing powers. For last year the attendance of students is summarized as follows:

Faculty of Arts.—Undergraduates in Arts, 86; Undergraduates in Letters, 2; General Students, 56. Students, Art Faculty, 144.

Faculty of Law.—Undergraduates, 38; General Students, 9. Students, Law Faculty, 47.

Faculty of Medicine.—Undergraduates, 14.

Students.—Arts, Law, and Medicine, 205; deduct, studying in more than one faculty, 1. Total, 204.

ACADIA COLLEGE. The closing exercises at Acadia College and Horton Seminary took place as the June number of the REVIEW was going to press. The exercises were of a most enjoyable and stimulating

character. The whole number of students attending college during the year was 115.

THE twenty-third annual commencement of St. Joseph's College, Memramcook, took place on the 22nd of June. More than usual interest was attached to the occasion, because, for the first time in the history of the college, degrees were conferred. The degree of M. A. was conferred upon Rev. James McDevitt of Silver Falls, Hon. Pierre A. Landry, M. P., of Dorchester, Geo. V. McInerney, barrister, of Richibucto, and Hon. Pascal Poirier, Senator, of Shediac; B. A. on Frank O'Neill, St. Andrews, and Edward L. O'Brien, of Fredericton; B. L. on Daniel E. Corbett, of Milltown. The exercises were of a highly interesting nature.

SCHOOL AND COLLEGE.

St. Francis Xavier College, Antigonish, is enlarging its accommodations this summer.

Acadia College is extending its already fine Convocation Hall, to accommodate the anticipated attendance at its forthcoming jubilee celebration.

King's College is having further changes made in the *personnel* of its teaching staff.

The Summer School of Science, Nova Scotia, will open in the Pictou Academy Convocation Hall, July 23rd. It is hoped that Sir Wm. Dawson may be present at the opening. Reduced fares are obtained on all railways and important lines of steamers from New Brunswick to Cape Breton.

Mount St. Vincent Academy held its fourteenth annual closing exercises on June 22nd. His Grace, Archbishop O'Brien, Dr. Allison, Supt. Education, the Attorney General, Stipendiary Motton, Supervisor McKay and other distinguished visitors were present, and spoke in words of high praise of the institution. It has been decided to add another brick and granite wing to the building—to cost about \$35,000.

The Convent of the Sacred Heart, Halifax, closed on June 28th. His Grace the Archbishop, Supervisor McKay and a number of other visitors were present. A very superior programme was gone through, a great number of prizes presented, and congratulatory addresses made by the visitors. In addressing the pupils, His Grace said: "Although living in relative seclusion, year by year, the grand work of training minds in literature and science, of developing character by high principles of conduct, of forming manners to refinement and elegance, and of moulding hearts

to a lofty ideal of Christian perfection had been going on here in quietness and almost obscurity."

The Convent of Stella Maris, Pictou, closed with a grand bazar for the benefit of the institution. It was held on the 2nd, 3rd and 4th of July, and was highly successful.

PERSONAL NOTES.

J. S. Trueman, B. A. of Dalhousie College, has been awarded a classical fellowship in the Johns Hopkins University. Mr. Trueman is a native of Carleton, St. John, and won the corporation gold medal for classics at the St. John Grammar School in 1875. Since that time he has been a constant student of the ancient classics.

Mr. James E. Creighton, a graduate of Pictou Academy and Dalhousie Colleges, and a native of West River, has won one of the eight fellowships awarded by competitive examination in Cornell University, New York. Mr. Creighton won the fellowship in philosophy out of a class of thirty candidates. This is worth \$400 a year, and good for one year at the least.—*E. Chron.*

Humphrey Mellish, Esq., B. A., mathematical master in the Pictou Academy, has tendered his resignation to take effect Oct. 31st. He is to complete his course at the Law School, Dalhousie College.

Inspector Lay, with indefatigable zeal, has made arrangements to hold a natural science institute in Amherst on Thursday and Friday before the teachers' examinations.

Under Professor Coldwell the scientific students of Acadia made their customary annual expedition in the Schooner *Ocean Bird*, visiting the wide famed mineralogical localities on the shores of the Basin of Minas.

Mr. John Montgomery, the efficient principal of the Albert School, Carleton, is at present on a visit to the north of Ireland. Mr. Montgomery has been connected with the schools of Carleton for over a quarter of a century, and in that time has witnessed great advance in educational methods, in which he has steadily kept pace.

Mr. D. H. Burbidge, principal of the Morris Street School, Halifax, has been for some time unable to attend to his duties through severe and protracted illness. We are glad to learn, however, that he is becoming convalescent.

QUESTION DEPARTMENT.

Questions and Answers.

A. C. M. L. — Please comment on the following passage:

"He had safe conduct for his band,
Beneath the royal seal and hand."

The passage is elliptical. The sense is: He was provided with a passport, given under the royal seal and hand, affording safe conduct to his band. "Beneath the royal seal and hand" is a participial phrase, joined to "safe conduct."

R. W. — Please find in this tin box which I send, cocoons of insects, which name and describe in EDUCATIONAL REVIEW.

Your box when opened contained a number of the chrysalids of *Pieris*, the cabbage butterfly. Left in a warm place for a few hours, and again opened, it contained, apparently, in addition, a large number of minute, four-winged flies. On examining the chrysalids every one was found nearly an empty shell with a small round hole bored through it, out of which came the parasitic hymenopterous flies. A species of ichneumon fly deposited its eggs on the caterpillar, or on the chrysalis, and the larvæ when hatched fed upon the vitals of their host, pupated, and finally emerged as the four-winged flies, eager to proceed to the extermination of any remaining cabbage caterpillars to be found.

J. M. — 1. Please give the name of tree from which enclosed leaves were taken, in next issue of REVIEW. 2. Is the other enclosed leaf *Ledum latifolium*?

1. *Populus Sp. Alba*, sometimes called the "Abele Tree," and "White Poplar." 2. It is.

M. McN. — 1. In case Queen Victoria outlives the Prince of Wales, who will next succeed to the English throne?
Prince Albert Victor of Wales.

2. The following stanza is taken from the Fifth Royal Reader:

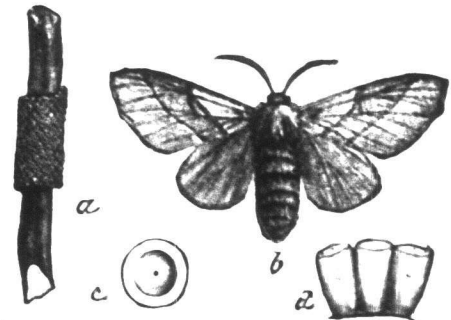
"And yet, fair bow, no fabled dreams —
But words of the Most High,
Have told why first thy robe of beams
Was woven in the sky."

Was the rainbow seen first after the flood, as the poet puts it, or was it seen before, as well? Would it be contrary to the account given in the Bible to suppose that it had been seen before the flood?

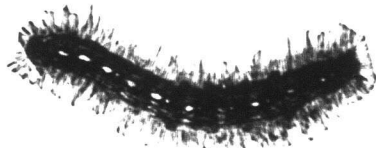
There is nothing in the Bible to show that sunbeams shining upon raindrops in antediluvian times would not produce the phenomenon of a rainbow to a person properly situated, as at present. The rainbow, however, was not pointed out as a pledge of no further universal deluge, according to Genesis, until after the flood. The appearance of the rainbow is always a positive, unfailling proof of a breach, somewhere in the canopy, of the storm clouds.

B. E. Z. What are the "bunch caterpillars" which, according to the papers, are stripping the leaves of the orchards in Annapolis County?

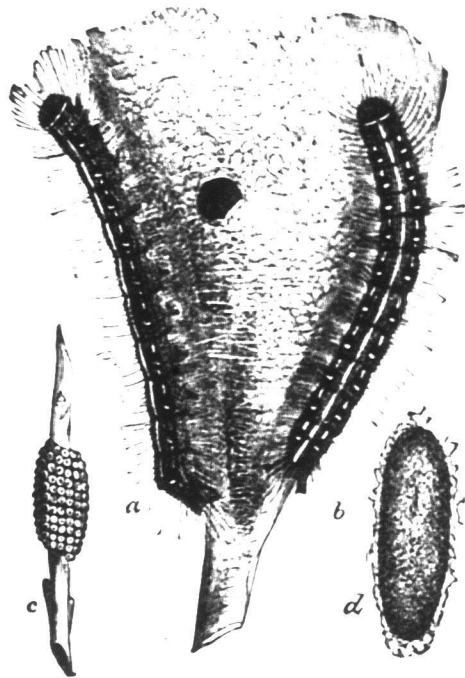
We have not seen a specimen yet; but from their described habit of bunching we presume they may be either the "American" or the "Forest Tent" caterpillars. We give their figures, so that those interested may be able to decide for themselves. A full account of them is given in "Ferndale School, No. 3," in the REVIEW of last August.



Eggs and Moth of *C. americana*, the Forest Tent Caterpillar.
a. The Moth. b. The Eggs, laid in a ring around the twig of the tree. c. The Egg, laid in a ring around the twig of the tree. d. Side view of the Egg.



Larva of Caterpillar, of the same.



C. americana, the American Tent Caterpillar.
a. Ring of Eggs. b. Larva on web woven over the back of a branch of the cocoon, which is much like that of *C. americana*.
c. Larva on web woven over the back of a branch of the cocoon, which is much like that of *C. americana*.
d. Larva on a branch of the cocoon, which is much like that of *C. americana*.

The moth of *C. americana* is also like the other, of a pale reddish brown color; only the bands across the fore-wings are whitish, instead of dark brown, as

in the first. Some of the caterpillars will now be wandering away to sheltered crevices to weave their cocoons; and in about two or three weeks thereafter, the moth will be on the wing. Our readers may perhaps be so kind as to report if either of these caterpillars is present in their district.

H. G. W.—What is the correct name of the enclosed specimen, which was brought to me by a scholar, who thought it might be the codling moth?

Papilio turnus—the "Swallow-tail" butterfly. For full description, with cut of the *imago* and *larva* of this butterfly, see EDUCATIONAL REVIEW, Vol I., No. 6 (November, 1887).

W. R. G.—D. F. McD. was cutting this stick yesterday, and noticed the living borer in it. He gave it to me in Port Mulgrave to bring to you. The stick came to Mulgrave from Calcutta. The "critter" has bored his way more than one-sixteenth of an inch down since yesterday noon.

The stick is of the size of a stout cane, with the bark on, of a wood suggesting our *Amelanchier* in appearance. Where the stick was sawn off for the head of the staff, two burrows of a borer were cut across, the smaller one, nearer the bark, packed solid with wood powder, the central one exposing a larval wood borer. It is smaller than the apple tree borer, *Saperda candida*, described in the October REVIEW. Nor is it our common flat headed borer, *buprestis*. Many boring larvæ remain two and three years boring in the heart of a tree before assuming the *imago* form—as the beetle. The most surprising point in this case is that the larvæ survived in an active condition within a dead, sapless piece of wood, which came around more than one-half of our globe.

N. A. B.—I send you a peculiar specimen, found in the leaf of a pitcher plant. Is it a chrysalis, or is this piled-lumber looking case its natural covering?

Your two specimens are the *larvæ* of a species of the family *Phryganidae*, one of the families of the Neuroptera. The larvæ are popularly known as the Caddis, or case-worm. They construct tubes of bits of sticks, sawdust, grains of sand, etc., and live under water, feeding on vegetable matter, water fleas, and smaller aquatic larvæ. Its six articulated feet show that it belongs to the insecta, and not to the tubicolous worms. It closes its case when about to pupate. The *imago* bears a closer resemblance to the moths than do the larger members of the order, the dragon flies.

J. M. S.—Your plants are: No. 1, *Amelanchier Canadensis*, var. *Botryopium* (?); No. 2, *Cassandra calyculata*; No. 3, *Nemopanthes Canadensis*.

LITERARY NOTES.

In the transactions of the Royal Society of Canada, recently published, is a valuable historical paper, accompanied by a map, illustrating Cartier's first voyage to Canada. The writer is Mr. W. F. Ganong, A. M., of Cambridge, who turns aside from his biological studies to give us a most important contribution to Canadian history. We shall publish a digest of the article in the August issue of the REVIEW.

Miss McCready, of Wellington Row, St. John, won the prize of \$10, offered by the *British American Citizen*, of Boston, for the best written description (not exceeding 300 words) of any watering-place in New Brunswick or Prince Edward Island. Her essay was on Dalhousie.

Attention is directed to the announcement made in another column, by the publishers of *Wide Awake*, Boston. A good opportunity will be furnished by teachers and students during the holidays to search out materials for such sketches.

Signor Crovato Giovanni, of Vicenza, Italy, a Professor of Volapuk, is making a collection of post-cards, written in the new language, from all parts of the world, to be exhibited at the International Exposition to be held at Vicenza. A correspondent of the REVIEW, who sent him a Volapuk card from Fredericton, has recently received his reply, in which he requests him to ask his friends who can do so, to send him post-cards written in the world-speech. A two cent card of the "Universal Postal Union" will go to Italy, or almost anywhere. Volapuk students in the Maritime Provinces are requested to write to Bcx 49, Fredericton, N. B.

The authors of arithmetics are very numerous, each giving the results of his own valuable experience; but when three hundred prominent teachers unite in compiling a book for the class-room, it should be especially practical in character and select in matter. Exactly such a book is "The New Arithmetic," just published by Messrs. D. C. Heath & Co. It is essentially a pupil's hand-book, compact, yet complete, and prepares for the computations of everyday life.

BOOK REVIEWS.

NOTES ON EDUCATION: A practical work on method and school management, by J. B. Calkin, A.M., Principal of the N. S. Normal School. D. H. Smith & Co., Publishers, Truro, N. S. This is a compact and neatly printed volume of 300 pages. The author states in the preface that it has been prepared more especially for the use of normal school students, but the experienced teacher cannot rise from a careful perusal of its pages without feeling that he has been greatly benefitted by it. All teachers know how important it is occasionally to pause and put themselves and their methods to a rigid examination; to discard what is merely formal and commonplace from their routine work, and to bring to it more freshness and originality by this self-examination and an inquiry into the nature of education. Mr. Calkin has admirably met this need, by publishing his "Notes," which are intended rather to be suggestive, than complete-expositions of educational methods. Although he

claims that he has not aspired to invent a "new education," every page in his book shows that he is thoroughly imbued with the spirit of the new education, if we mean by that the practice of those great principles of *nature's* education which profound minds in all ages have evolved. Every teacher is called upon to deal with brilliant and dull minds, and yet every one has not been fully impressed with this thought, which the author so forcibly places before his readers: "The knowledge acquired by a certain effort may be forgotten, and yet the power resulting from that effort may remain a permanent possession. Again, much knowledge may be gained through such outside help as to involve little mental effort on the part of the learner, and hence be accompanied with little mental growth. Mental exercise is the one essential condition of development." The admirable plan of the book, containing suggestions on almost every conceivable subject with which the teacher is called upon to deal, makes it a valuable adjunct to the teacher's library, and many will have cause to thank Mr. Calkin for publishing his "Notes," which suggest so much that his active, useful life has enabled him to verify. Messrs. D. H. Smith & Co. have well performed their part of the work, in producing a volume, neat, compact, and with clearly printed pages.

CHEMICAL PROBLEMS, by J. B. Grubfield, Ph.D., and P. S. Burns, B.Sc., Massachusetts Institute of Technology, Boston, Mass., U. S. A. Boston, D. C. Heath & Co., 1888. This is a capital little book of about ninety pages. For the student it is a superior course for laying a good mathematical foundation for his knowledge of the science. For the teacher, it will be an invaluable selection of class problems and examination questions. The following headings of sections will give an idea of its scope: 1, Volumetric Interpretation of Symbols; 2, Percentage Compositions; 3, Molecular Formulae from the percentage Composition; 4, Expansion of Gases; 5, Volume and Weight of Gases affected by Pressure; 6, Relation between Weight and Volume of Gases; 7, Quantitative Problems; 8, Atomic Determinations; 9, Method based on the Molecular Weight; 10, Method of Specific Heat; 11, Method of Isomorphism; 12, Molecular Weight Determinations; 13, Atomic Weight of the Elements; 14, Reaction; 15, Thermo-Chemistry; 16, Solution and Hydration; 17, Solution of Solids in Water; 18, Neutralization; 19, Heat of Formation and Solution of Compounds; 20, Annual Examination Papers; 21, Condition Examination Papers; 22, Semi-Annual Examination Papers; 23, Intermediate Examination Papers; 24, Metric System Tables.

The following books have been received and will be reviewed next month: "Civil Service Question Book," C. W. Bardeen, Syracuse, New York. "Army Examination Papers, 1882-7," London, MacMillan & Co., and New York,

EXCHANGES.

The Century for July has many admirable features appealing to the intelligent reader everywhere. It opens with an article, "Sinai and the Wilderness," profusely illustrated with scenes of Bible events. Mr. Kennan continues his wonderfully interesting article on Siberia, describing the steppes of the Irtysh. Those who suppose that Siberia is a land of ice and desolation will be surprised at his description of the flowery country through which the route of his ex-

pedition lay. The article on "Bacteria" is admirable for its illustrations and the clearness and comprehensiveness with which it is written. The editorial on a "New Branch of an Old Profession" shows the rewards now opening for the scientific teacher of manual training. (*St. Nicholas*, published also by the Century Co., New York,) is full of interesting and timely contributions for young people. *The Psychology Series* for July, (published by D. Appleton & Co., New York,) is a more than usually excellent number of an excellent series. Among the interesting articles are, Safety in House Drainage, The Teaching of Psychology, Lines of Progress in Agriculture, Botany as it may be Taught, Manual of Industrial Training, with instalments of articles on current literature, science, and art. *Educator*, published monthly, under the editorial management of W. A. Mowry, Boston, is an admirably conducted magazine, and is especially adapted to the wants of the primary teacher. *The Illustrated London News* for June 30, contains interesting articles and illustrations on M. DeLesseps and the Panama Canal. *Forest and Garden*, published by D. A. Munro, New York, grows more interesting with each number. *The Scientific American* has admirably illustrated articles each week on subjects of scientific and popular interest. The number for July 7th begins the 59th volume of this widely circulated and useful magazine.

INTERPROVINCIAL CONVENTION.

Notice to Visitors.

The following is a list of hotels and private boarding-houses in St. John. Intending visitors to the Convention will do well to correspond with the proprietors and secure accommodation before their arrival. Those who may fail to secure accommodation would do well to report to the LOCAL COMMITTEE, who will meet them in the directors' room of the Mechanics' Institute, at the close of the public meeting on Tuesday evening; or applications for rooms may be made to G. U. Hay, Secretary to Committee, on Monday or Tuesday before the Convention meets.

LIST OF HOTELS. Royal, \$2.50 to \$3.00; Dufferin, \$2.50 to \$3.00; Victoria, \$2.00 to \$2.50; New Victoria, \$1.50 to \$2.00; Park, \$1.50 to \$2.00; Clifton, \$1.50 per day. Elliot's, Bangor, Ottawa, Nova Scotia, Hawarden, Central, Queen, each, \$1.00 a day.

The following is a list of private boarding houses, with address. The number attached shows how many may be accommodated in each. Terms, \$1.00 a day. Miss Hastings, 49 Elliot Row, 4; Mrs. D. S. Curry, 49 Leinster street, 8; Mrs. Denmet, 49 Sydney street, 6; Mrs. Cowan, 78 Sydney street, 6; Ferguson House, 84 Princess street, 12; Rev. Mr. Shaw, 75 King street, 6; Mrs. D. Merritt, corner Germain and Union streets, 2; Mrs. Chapman, 136 Carmarthen street, 2; Miss Lyons, 138 Carmarthen street, 2; Mrs. Williams, 268 Germain street, 8; Miss Lizzie S. Read, 56 Carmarthen street; Mrs. McKiel, Adelaide Road, Portland, 4.

A CONVENTION

—OF THE—

TEACHERS OF THE MARITIME PROVINCES OF CANADA,

Will be held in St. John, commencing on Tuesday Evening, July 17th,
and continuing during Wednesday and Thursday.

On Friday there will be an EXCURSION TO FREDERICTON AND RETURN.

Arrangements are being made for reduced fares on all railroad and steamboat lines.

The general meetings of the Convention will be held in the Hall of the Mechanics' Institute, St. John.
Meetings of Sections will be held at places designated at the time of the Convention.

PROGRAMME:

Tuesday, July 17.

A meeting for organization will be held in the Hall of the Mechanics' Institute at 7.30 p.m., when the officers of the Convention will be elected.

A PUBLIC MEETING at 8 p.m. will be presided over by Mayor Thorne, of St. John, and addresses will be delivered by citizens of St. John and Portland.

Wednesday, July 18.

MORNING SESSION.

The Convention will assemble at 9 a.m., when the teachers of the different Provinces will enrol themselves with the assistant secretaries for the Provinces.

At 10 the Convention will be formally opened by an address from Sir Wm. Dawson, President of McGill University, Montreal, to be followed by addresses from J. G. Schurman, D. Sc., of Cornell University, and Prof. Ray Greene Huling, Secretary of the American Institute of Instruction, New Bedford, Mass.

AFTERNOON SESSION.

At 2.30 p.m. an address will be given by Dr. J. G. Fitch, the well known educational author and lecturer, of London, England, on "Hand-work and Head work in Schools," followed by Col. Francis W. Parker, of Cook County Normal School, Illinois—the subject to be hereafter announced. Addresses will also be delivered by Superintendent Crockett of New Brunswick, and Superintendent Montgomery of P. E. Island.

EVENING SESSION.

At 8 p.m. there will be a discussion on "The Influence of the College on Industrial and Social Life," by President Rev. Dr. Sawyer, of Acadia College, Dr. Harrison of New Brunswick Uni-

versity, Rev. Dr. Forrest of Dalhousie University, Dr. Inch of Mt. Allison University, Dr. Anderson of Prince of Wales College, and by Prof. Roberts of Kings College, and others.

Thursday, July 19.

The Convention meets in sections, at 9 a.m.

Section A.—Normal Schools. The following topics will be discussed: by Principal Anderson, of P. E. Island, "Scholarship as a Preparation for Teaching;" Principal Calkin, of Nova Scotia, "The Relation of the Normal School to the Subjects Taught in the Common School;" Principal Mullin, of New Brunswick, "The Relation of the Model School to the Normal School."

Section B.—Inspectors of Schools. Topics: "The Inspector a Necessary Factor in a Public School System;" to be discussed by Inspector Condon and Roscoe. "The Relation of the Inspector to the Teacher and the District;" by Inspectors Carter, Smith and Mercereau. Another subject will be discussed by Inspectors Arbuckle, Cain and McSwain.

Section C.—High School. Topics: "Science in the Curriculum," by Principal A. H. MacKay, of Pictou; followed by Principal Mackay, of New Glasgow, on Physics, and A. J. Denton, Halifax, on "Chemistry." "The Study of Plant Life," by Geo. U. Hay, St. John; followed by John Brittain, Principal of Pictou schools, on "Methods in Zoology;" "Literature," by Principal Cameron, Yarmouth, followed by W. Campbell, Truro, on the same subject.

Section D.—Common School. Topics: "Aims and Processes of Moral Culture," by A. W. Hickson, A.B., Portland, fol-

lowed by Geo. E. Robinson, P. E. Island. "Physical and Moral Culture in the Play Ground," by W. T. Kerr, Woodstock., "Moral Influence of School Ornamentation," by Geo. J. Oulton, Dorchester. "Moral Culture," by R. H. Campbell, P. E. Island, followed by L. A. McKenna, Halifax, and John A. Matheson, P. E. I. "Grammar in the Common School," by D. H. Burbidge, M. A., Halifax, followed by John D. McIntyre, P. E. I., and Geo. T. Miller, Hantsport, N. S.

Section E.—Primary School. Topics: "Kindergarten methods in the Primary Schools," by Miss Lewis, Truro. "Social Instincts as a Factor in Character Building," by Miss Sullivan, Halifax. "Character Building on its Moral Side," by Miss Murphy, Portland, St. John. "Faults of Temper, and How to Treat Them," by Miss H. Adams, St. John.

AFTERNOON SESSION.

Address on Agricultural Education by Prof. H. W. Smith, of the N. S. Normal School.

Address on the methods of the Berlitz Schools of Languages, by Monsieur Vitrain, of Philadelphia.

Address on the Delsartian School of Expression, by Mrs. F. W. Parker, of the Cook Co. Normal School, Illinois.

Address on Art Education by Miss Harriet C. Magee, of the Oshkosh, Wisconsin, State Normal School.

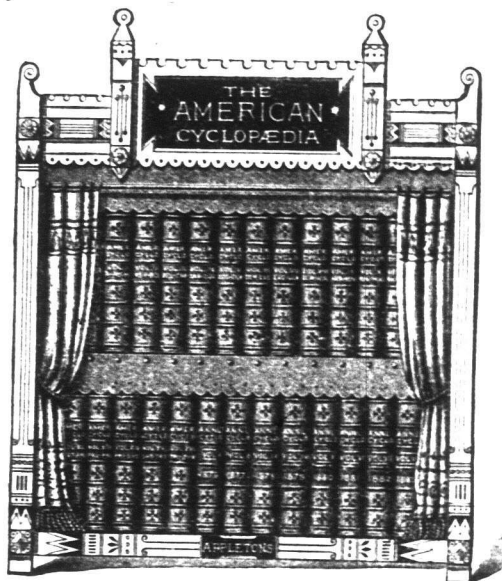
EVENING SESSION.

Public meeting at 8 o'clock, presided over by Sir Leonard Tilley, at which addresses will be given by Sir Wm. Dawson, Hon. Justice King, Chief Supt. Allison, Hon. W. S. Fielding, Premier of Nova Scotia, Hon. A. G. Blair, Premier of New Brunswick, Hon. Mr. Sullivan, Premier of P. E. Island, and L. H. Davies M. P., of Charlottetown. Any persons may become members of the Convention by enrolment and payment of the fee of one dollar.

SCIENCE. The following **New Text Books** are sure to be of interest to every **LIVE TEACHER.** We will send postpaid for the following introduction prices:

Shaler's First Book in Geology. For lowest class in high school or highest class in grammar school.	\$1.50	Colton's Practical Zoology. Aids the student in getting a clear idea of the animal kingdom as a whole. By the careful study of a few typical animals.	\$1.50
Shaler's Teacher's Edition of Geology. Adds 14 pages to the above, for teachers' use.	1.50	William's Modern Petrography. An account of the Application of the Microscope to the Study of Rocks.	50
Shaler's Illustrations of Geology. 25 photographs, 45x20 inches, and 25 colored plaster models.	100.00	Clarke's Astronomical Lantern. Intended to familiarize students with the constellations by comparing them with the same as they appear from Earth.	1.50
Shepard's Inorganic Chemistry. Descriptive and qualitative; experimental and inductive; leads the student to observe and think. For high schools and colleges.	1.25	Clarke's How to Find the Stars. Accompanies the above and aids the beginner in becoming acquainted with the constellations.	15
Shepard's Laboratory Note Book. Blanks for experiments, tables for the reactions of metallic salts and pages for miscellaneous matter. Can be used with any chemistry.	50	Guides for Science Teaching. For instructing classes in Natural History. Hyatt's About Pebbles, 10; Gosdale's How to Find Plants, 10; Hyatt's Commercial and Other Spiders, 20; Agassiz's First Lessons in Natural History, 20; Hyatt's Crustacea and Echinoderms, 20; Hyatt's Mollusca, 20; Hyatt's Worms and Protozoa, 25; Crosby's Common Minerals and Rocks, 40; H. H. H. and Richard's First Lessons in Minerals, 40.	
Chute's Practical Physics. Intended as an aid in high and preparatory schools in the study of physics experimentally.			
Remsen's Organic Chemistry. Aids in the study of the compounds of carbon. For all students of the pure sciences, or of its application to the arts, medicine, etc.			
Coit's Chemical Arithmetic. With a Short System of Elementary Qualitative Analysis. For high schools and colleges.			
Grabfield and Burn's Chemical Problems. For colleges, high and technical schools.			

D. C. HEATH & CO., Publishers, Boston, Mass.



APPLETONS' AMERICAN CYCLOPÆDIA

New Edition, Enlarged, and containing all information down to the present year.

A Library in itself. The Thoughts of five hundred of the Best Scholars in this and other countries Crystallized, Boded Down.

Is complete in twenty-nine large, octavo volumes with Index, each volume containing over 800 pages, fully illustrated with several thousand Wood Engravings, and with numerous Colored Lithographic Maps, the whole costing the publishers, before the manufacture began, a sum EXCEEDING FIVE HUNDRED THOUSAND DOLLARS.

TENS OF THOUSANDS OF SETS of this great Work are in daily use throughout Canada and the United States. Its sale was never larger than now. No Teacher can afford to be without it. The terms are within the reach of all.

Specimen pages will be forwarded on application.

Persons wishing to subscribe can receive the whole set at one time, on the instalment plan, without increased cost, free of carriage.

For terms, or other information, address

T. D. SOUTHWORTH, **D. APPLETON & CO., Publishers,**
101 N. 3rd Street, New York.

MANCHESTER, ROBERTSON & ALLISON.

LADIES' DEPARTMENT.

Mantle Department. Dolmans, Jackets, Ulsters, Jerseys. All styles of outside garments made to order.
Parasols and Sunshades In Light Colors, Dark Shades & Black.
Jersey Waists In all the leading Shades and Colors, Plain and Braided.
Silks, Satins, Flashes, Velvets, Velveteens, Cloths, Skirts, Underclothing, Corsets, Hats, Flowers, Feathers.

DRESS GOODS. DRESS GOODS.

Fancy Dress Goods, Plain Dress Goods, Mourning Dress Goods, Blends, Cheeks, Washing Dress Goods—in all the leading Fabrics and Colorings, Oriental Flourings, Alflowers and Lace, Chantilly and Spanish Flourings and Lace, Hosiery, Gloves, Ribbons, Laces, Hand Bags, Fancy Work, Sheetings, Towels, Napkins, Damasks, Ladies' and Misses' Water proofs, Embroidered Costumes.

GENTLEMEN'S DEPARTMENT.

We have a complete assortment of the best makes of
Tweed Waterproof Coats, Traveling Bags, Valises and Portmanteaus, Umbrellas,
Ladies' Wool, Merino and silk Underwear, and Socks
White Shirts, Regatta and Oxford Shirts, Flannel Shirts of our own make
Collars, Cuffs, Braies, Handkerchiefs, Gloves, Ties, Chamous Underwear
Trunks of all kinds
An immense stock of

BOYS' CLOTHING,

In Jersey Suits, Blouse Suits, Knickerbocker Suits, etc.

CARPETS, CURTAINS, RUGS,

POLES, CORNICES, COVERINGS, CHETONNES, OIL CLOTHS, LINOLEUM, &c.

27 & 29 KING STREET, - - SAINT JOHN, N. B.

MOUNT ALLISON EDUCATIONAL INSTITUTIONS, SACKVILLE, N. B.

University of Mount Allison College.

JAMES R. INCH, LL.D., PRESIDENT.

THE University of Mount Allison College offers to students, whether desiring to take a full under graduate course or a partial course limited to special studies, advantages unsurpassed in the Maritime Provinces. The brilliant record of Mount Allison men at some of the leading Universities of England, Scotland, Germany and United States, as well as the success of her under graduates in competitive examinations elsewhere, establish beyond question the thoroughness and comprehensiveness of the education received at this University.

A Gymnasium erected and furnished with all modern appliances for physical development, during the past year, has proved to be an important auxiliary to the educational work. Further efforts will be made during the present year to increase the efficiency of the Institution and to add to the comfort of students.

Special facilities will be afforded to ladies wishing to pursue the full under graduate course, and to teachers who may need to teach during the summer term.

Intending students are invited to correspond with the President.

Mount Allison Ladies' College.

REV. B. C. BORDEN, M. A., PRINCIPAL.

OVER 30 years of progressive Educational work have given this Institution an unrivalled position in the public confidence. Instruction is imparted on subjects ranging from the primary English branches through the whole College Curriculum. Young ladies studying for the purpose of qualifying themselves as teachers may here combine the accomplishments with the thorough drill necessary to their profession.

The Departments of Music and Fine Arts are maintained in a high state of efficiency. Prof. Mack's long training under Prof. Speidel, of the Stuttgart Conservatory, places him in the front rank of musical educationists.

Solo-Violin, Ensemble playing, History of Music, and other new features are added under his direction.

Painting on china, plush, wood, brass, terraline, etc., are among the novelties which illustrate the progressive character of the instruction imparted in department of Fine Arts.

Apply to Principal for catalogue.

Mount Allison Wesleyan Academy.

T. T. DAVIS, B. A., HEAD MASTER.

NO Institution of learning in the country has had a more successful history and none is more worthy of patronage for the future. Many of the most prominent men now in professional, commercial and political life in Canada, and in other lands, had their training at Mount Allison Academy. The arrangements for the future are such as will guarantee a continuation and extension of the efficiency of the Institution. A thorough English and Commercial Education is imparted, and students are prepared for College Matriculation and for Civil Service examinations. If desirable, students can take, in addition to their work in the Academy, one or more classes and lectures in College. Every care is given to the private interests of the boys, so as to ensure their comfort and happiness.

The building is commodious, well heated throughout by the hot water system, and comfortably furnished.

Expenses very moderate.

For particulars apply to the Head Master or to the President of the University.

UNIVERSITY OF NEW BRUNSWICK.

MICHAELMAS * TERM, * 1888.

The Entrance Examination, the Examinations for County Scholarships, and the Senior Matriculation Examination, will begin on the first day of October, 1888.

The Scholarships in the Undermentioned Counties will be open to competition: Restigouche, Gloucester, Northumberland, Westmorland, Albert, Charlotte, Kings, Sunbury, Carleton, Victoria.

Copies of the new Calendar for the Academic year 1888-89, may be had from the Registrar of the University.

J. D. HAZEN, B. A., Fredericton, N. B.



THOROUGH Instruction. Practical training in actual business work, correspondence, etc. Situations procured pupils when competent. INSTRUCTION IN SHORTHAND BY MAIL with certain success.

Send for circulars. J. H. PEPPER, BERRYMAN'S BLDG., ST. JOHN, N. B. Secretary.

FRANCIS & VAUGHAN,
WHOLESALE & RETAIL

Boot & Shoe Manufacturers,
19 King Street, North Side,
SAINT JOHN, N. B.

FINE BOOTS & SHOES A SPECIALTY.

PIANOS and ORGANS.

Special School Organs only \$40.00; Cabinet Organs, with two full sets of Reeds, \$60.00.

Teachers and others who are about to choose an instrument are invited to call and see these celebrated Bell Organs at

WILLIAM CRAWFORD'S,

66 King Street, - - - St. John, N. B.

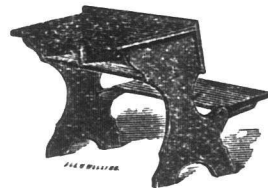
SCHOOL FURNITURE!

SCHOOL DESKS AND SEATS

(Hurlwood, Double)

\$3.25 each.

The best School Desk in the market for the money.



TEACHERS' DESKS FROM \$6

UPWARDS.

Write for prices and description.

Mention this paper.

C. E. BURNHAM & SONS, Saint John, N. B.

THE BERLITZ

SCHOOLS OF LANGUAGES

-SITUATED AT-

Boston, Brooklyn, New York, Philadelphia and Washington, U. S.,

Have established a Summer Course AT FREDERICTON AND ST. JOHN N. B.

The Berlitz Method is acknowledged by all first-class American and European authorities as the best of all natural methods.

Professors W. Ingres and L. Bober have classes daily, at King street, and in Fredericton.

New classes may be formed at any time.

JAMES S. MAY.

W. ROBERT MAY.

JAMES S. MAY & SON,

MERCHANT TAILORS

84 PRINCE WM. STREET,

P. O. Box 303, ST. JOHN, N. B.

NOW IS the time to subscribe for the EDUCATIONAL REVIEW. No progressive teacher can afford to be without it. Subscriptions may commence at any time. Address - EDUCATIONAL REVIEW, St. John, N. B.

PROGRESS AND POSITION OF THE
ONTARIO MUTUAL LIFE COMPANY.

Year	Income	Assets	Assets in House
1873	\$ 2,158.86	\$ 2,216.00	\$ 2,216.00
1874	17,994.29	17,216.00	17,216.00
1875	21,488.00	31,221.00	31,221.00
1876	38,704.80	81,170.00	81,170.00
1877	53,107.00	142,000.00	142,000.00
1878	82,428.25	277,000.00	277,000.00
1879	103,700.00	427,000.00	427,000.00
1880	219,800.00	750,000.00	750,000.00
1881	270,000.00	1,000,000.00	1,000,000.00
1882	358,200.00	1,300,000.00	1,300,000.00
1887	352,923.94	1,034,852.26	10,935,090.00

The "Ontario" policies are free from all restrictions as to travel, residence, or occupation, and are insurable after two years. Surrender value slips attached to each policy show the cash or surrender value of the policy, should payments be discontinued.

For rates and further information apply to

E. M. SIPPRELL,
ST. JOHN, N. B.

LOTHROP LITERATURE PRIZES.

\$2000.00. 94 prizes!

PARTICULARS IN WIDE AWAKE.

Mailed postpaid for 20 cents.

\$1.20 for new volume, June-November.

Both Scholars and Teachers may win the Prizes. Here are four subjects to write about, or you can choose your own any you like.

- The greatest American Man
- Woman
- Discoverer
- Inventor

The most acceptable story of his or her life is very sure of a prize—and the prizes run from \$500.00 to \$200.00. Address

D. LOTHROP COMPANY, Boston.

The time for sending M.S. is extended to Dec. 1st.

FOR ILLUSTRATIONS OF ANY SUBJECT

SEND PHOTOGRAPH OR DRAWING

To **C. H. FLEWELLING,**

ENGRAVER ON WOOD.

(WORKSHOP—ROTHESAY, I. C. RAILWAY)

ST. JOHN, N. B.

S. P. C. A. THE LADIES EDUCATIONAL AUXILIARY COMMITTEE of the NEW BRUNSWICK Society for the PREVENTION of CRUELTY to ANIMALS desire the attention of the teachers of the Public Schools, and superintendents and teachers of Sunday Schools, of all denominations, to the BAND of MERCY movement in connection with their work.

The object is to inculcate into the minds of the young the importance of kindness to the dumb and dependent creatures. A beautiful badge of members and sign for HER MAJESTY THE QUEEN, is issued to member on a cost price ten cents.

For the pleasure and good it must accomplish, organize a Band in your school. Reading matter and book of information, "How to Form a Band," sent post free on application to Miss H. L. Peters, Wright St., Portland, St. John, Secretary of Auxiliary Committee, St. John, N. B.

KID GLOVES. TANT-MIEUX 4 Button French Kid Glove.

WE have been appointed Agents for this Celebrated Glove. It is placed upon our point, middle and between profits are dropped, and we offer you the glove at First Hands on a Simple Commission Profit, hence the secret of their VALUE.

Although little known in this market, their extreme low price, softness and remark-able durability has gained for them an unparalleled hold, both in Europe and America. Our statement may be questioned, yet we can testify to the fact, they are on a par of actual wearing value equal to any Josephine Kid Glove ever made, whilst our price is only 64 cents a pair, every pair guaranteed, made in Tans, assorted in wns and Blacks, and are cut upon a size of measurement slightly smaller than Josephine. We will send them, postage paid, to any address. Write for a pair and try them upon the reputation we have at stake, and you will find them all we represent.

FAIRALL & SMITH, ST. JOHN, N. B.

W. WATSON ALLEN. CLARENCE H. PERRISON.

ALLEN & FERGUSON,

General Importers, Wellington, New Zealand.

Pugsley's Building, Rooms 14, 15 and 16, corner Prince Wm. and Princess Sts.

Saint John, N. B.

TEACHER WANTED.

A MALE Teacher is required for the A. V. General Department of the Richmond Graded School.

Apply with recommendations to

J. D. PHINNEY

Richmond, July 21, 1888.

CLIMO'S PHOTOGRAPHIC PORTRAITS.

Very fine work from various parts of the world is often exhibited in prominent windows in the city. But to surpasses the excellence of the work on easels in our receipt on terms. To those who have failed to obtain satisfactory results in Photography we especially appeal, as our efforts with such persons have been uniformly successful.

CABINET PICTURES, \$1.00 TO \$3.00 PER DOZEN

in large sizes are carefully made at small cost, and for true likeness. Photo enlargements surpass all others.

85 GERMAIN ST., A few doors South of K. Street. **ST. JOHN, N. B.**

NEW GOODS.

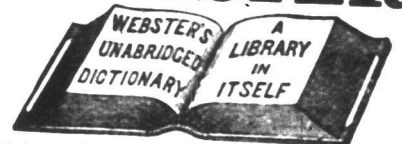
JUST TO HAND.

LADIES' and Misses' Lace Mitts, Black and Colored. Lisle and Taffeta Gloves, Merino Half Hose, Ladies' and Children's Cotton Hose, Gent's Club Bags and Travelling Satchels, Ladies' Belts, Ladies' Bustles, latest styles, Ladies' Gossamers, Men's Tweed Waterproof Coats, White and Regatta Shirts, Ladies' Silk Undervests, in Cream, Pink and Sky, Victoria Lawns, Swiss Checks, Swiss Spots, Lace Stripes and Checks, Fancy Dress Muslins, French Canvas, Cretonnes, Cream and Colored Seersuckers, Fancy Dress Goods, Black Cashmeres and Merinos, Grey, White and Fancy Shaker Flannels, Towellings, Table Damasks, Table Oil Cloths, Floor Oil Cloths, White Cotton Terry, Fancy Shirtings, Fine Scotch Suitings, West of England Trouserings, Worsted Coatings, a Full Line of Canadian Tweeds.

DANIEL & BOYD.

TEACHERS: Farmers want our 800 page Home, Farm and Business Cyclopaedia Illustrated. Spend a part of your vacation canvassing it. It sells itself. *Highly commended.* Write for outfit to **W. E. FARLE,** St. John, N. B., J. S. Robertson & Bros., Publishers.

WEBSTER



3000 more Words and nearly 2000 more Illustrations than any other American Dictionary.

WEBSTER IS THE STANDARD

Authority in the Gov't Printing Office, and with the U. S. Supreme Court. It is recommended by the State Sup'ts of Schools in 36 States, and by leading College Presidents of U.S. and Canada.

It is an invaluable possession for every School and for every Family.

S. J. C. Booksellers, Printing Co., G. & C. MERRIAM & CO., Publishers, Springfield, Mass.

Trunks, Valises, Ladies' and Gents' Travelling Bags, Shawl Straps, &c.

70 GERMAIN STREET.

South Side, King Street, St. John, N. B.

WANTED A TEACHER At once to do three weeks work. Good Pay. Applicants address: Box 18 St. John, N. B.