

# The Educational Review.

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## THE EDUCATIONAL REVIEW.

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SOME omissions have occurred in the pages of recent numbers of the REVIEW which our subscribers will please correct with the pen: page "120," December REVIEW, should be page 140; page "120," January REVIEW, should be 160; "No 8" and "whole number 104" on title page of February REVIEW should read, No. 9 and whole number 105, respectively.

THERE was received for the REVIEW between the 10th and 15th of February a subscription of one dollar without any name. Will the subscriber who sent such amount, and who has received no receipt, kindly furnish the name, so that the amount may be properly credited.

IN this number much prominence is given to the reports of inspectors, and further extracts will be given next month. We are sure that the teachers who ponder their many excellent suggestions, and then set to work, energetically and hopefully, to carry them out, will in after years "rise up and call them blessed."

PREPARATIONS are already being made in Toronto for the proposed visit there in 1897 of the British Association for the Advancement of Science.

THREE things are urgently needed to make our schools what we would like to have them: better teachers, better wages for better teachers, and communities with a spirit fully awakened to their educational needs. The last is the thing much to be desired; the others will speedily follow it.

THE first two numbers of *Massey's Magazine*, published at Toronto, give promise of excellence both in literary matter and illustration that will soon make it a favorite. There is in the January number a portrait and sketch of Prof. Roberts, a very clever sketch in verse, by W. H. Drummond, of French Canadian life. The February number is even better in matter and illustration than the January number.

LAST month was announced the gift of Asa Dow to the University of New Brunswick. This month we have to congratulate Mt. Allison University on the splendid gift of \$100,000 left by the late Mr. Massey, of Toronto. Where will the bequest fall next month?

AT a recent meeting of the Michigan State Teachers' Association, a code of professional ethics was adopted. The fourth article reads as follows:

Each member of the teaching profession should exercise a spirit of loyalty, by giving to other teachers the benefit of his influence; by being careful not to criticise either his predecessor or associates harshly, and by speaking a good word for them whenever possible. He should avoid doing whatever might tend to weaken the influence of his fellows with school officers, fellow-teachers, parents and pupils, and most emphatically he should never underbid another.

Every teacher should feel this. It should be one of the tenets of his profession. Hence it seems somewhat out of place for a body of teachers to draw up such a code. Is there not a way to cultivate an *esprit de corps* among teachers, where it is *understood* rather than *expressed* that a certain course of conduct is undignified and unbecoming the high office of teacher.

HOW CAN better teachers be secured for the country schools? A writer in the *Chicago School News* thinks that when a comfortable cottage for the teacher, with home-like surroundings, is considered an indispensable



adjunct to the country school-house, then we shall have made a great step to secure this much desired state of things. The plan seems feasible, at least in some country districts. In these provinces but a few decades ago the teacher had to board round. An enlightened public sentiment in rural communities has frowned down this custom. The country school-house, with its library and laboratory as a literary and scientific centre, and a teacher's home as a centre of social influence, is an ideal that may be realized in the next few decades.

#### The Status of the Teacher.

It is a favorable sign in education that schools and teachers are receiving a considerable share of attention from newspapers and periodicals. The *Atlantic Monthly* recently circulated widely among superintendents and teachers inquiries touching the permanence, freedom from improper influences affecting their appointment or removal, salary and status of teachers. Replies were received from nearly 1200 teachers and superintendents, representing all the states and territories except New Mexico and Oklahoma. These answers were turned over to Dr. G. Stanley Hall, president of Clark University, who has made them the basis of an introductory article in the March number of the *Atlantic*, where the case of the public schools is considered on the testimony of these teachers. The article is a very interesting one, and instructive from this point of view that a prominent teacher and leader of educational thought is dealing with candid expressions of opinion from prominent teachers throughout the United States on themselves and their profession.

We shall quote a few extracts from Dr. Hall's article, because the same tendencies which furnish data for the investigation of excellences or defects in the United States may be seen in our own system of education.

The answer to the first question, which asks the number of pupils to each teacher, shows that there are altogether too many pupils, especially in the city schools, for any teacher to do good work with. Thus, the strain on the teacher is too great, the work ineffective, and machine methods too common.

The second question, which asks for the proportion of teachers who have changed their profession during the last ten years, shows thirty per cent. in some states (New England), and as high as sixty-five in others (Western States). One fact in these figures contains food for reflection—that female teachers, most of whom are supposed to marry after a few terms spent in teaching, furnish the lowest average in the New England States where they out-number male teachers more than ten to

one; while in Alabama, where male teachers predominate, forty two per cent have changed.

Dr. Hall makes this emphatic statement regarding the lack of training in teachers:

It is well known that many young men teach as a makeshift for a few years, with no thought of making teaching a life work. They do so to pay college debts or get money to study further, or to acquire the means for entering one of the other professions. Other statistics have shown that nearly one third of the teachers in many sections of the country change their vocation every year. The fact that so small a fraction of the teachers in the public schools have had any normal or professional training shows, also, how few regard it as a life work. Of the \$95,000,000 paid for salaries of teachers for 15,000,000 children of this country, a large proportion is thus spent upon untrained and unskilled teachers who have little interest in making their work professional. No business could ever succeed or was ever conducted on such principles, and when we reflect that the "prentice hand" is here tried upon human flesh, blood, and souls, the waste in all these respects is appalling. Those who claim that teaching can be learned only by experience, are in part right, but even the school of experience is wretchedly inadequate in this country. Moreover, on the whole, it is the best teachers who leave. Here we are far behind other countries. It is only when a teacher has mastered the details of government and method that good work can be done.

In answer to the question "What proportion of teachers are over thirty five years of age?" the estimate for the Middle States, twenty seven per cent, is the highest and that for the Western States, seventeen per cent, the lowest. "The fact that financial depression increases the average age of teachers as well as the number of male teachers, while good times decrease both, is significant."

Most striking are the answers to the questions touching teachers' tenure of position and security from improper influences, such as the church, politics, personal favor, whims of school boards. We give a few answers, with the hope that if any of the gross abuses described exist or are beginning to appear nearer home, a healthy public sentiment may put them down. In Texas, one teacher reports: "If your school board are Democratic, the teachers are Democratic; if Baptists, they must be Baptists." Teachers are said to be "pliant, timid, and servile," and political "pulls" are potent. In Washington, a city superintendent says the tenure of position is affected by "personal friends and their influence, and by the lack of them." "We must trade with the merchants, bank with the bankers, take treatment of the doctors, consult the lawyers, connive with the politicians, and even go to school elections and work for the successful candidate." In Minnesota the religious



"pull" is reported more potent than the political. In Ohio, owing to constant changes, the teacher is not recognized as a factor in social or political life." In the west: "Unless the teacher is a flatterer and keeps quiet on all political questions, he loses his position."

Such a state of things, where teachers, both by ability and position, should be leaders of thought and moral influence, is not pleasant to contemplate.

We have not space to touch on the matter of salaries, which is the burden of another question. The weight of opinion is that these are insufficient. "Poor pay is both a cause and a result of lack of appreciation."

Dr. Hall pays this tribute to women teachers:

At present, the American school system, as a whole, owes its high quality in no small measure to the noble character, enthusiasm and devotion of women who make teaching not only a means of livelihood, but in addition thereto a mission service of love for their work and for children. To increase this love is to increase the best part of their services, and to diminish it is to degrade it to mere drudgery and routine. As the culture of women gradually rises, it becomes more and more evident how unjust have been the discriminations against them in this field, where in higher and higher grades of school work their services are becoming no less valuable than men's.

#### Bird and other Observations.

In our last number—February—we gave a very full list of the migration of birds at Pictou by Mr. Hickman, with the object of showing teachers and scholars not only how to record their observations, but when to expect the appearance of many of the birds. He records when the bird is first seen, then the number he saw at the time, then when they are next seen. Then he notes when they become common and when they are last seen. Finally he notes whether the birds are rare or common, whether they breed in the locality or not, and whether they are migrants north or south. These are the points which are scheduled for observers by the committee of the American Ornithological Union and which are reported by many observers throughout America every year to the Bureau at Washington. We can not expect bird students without some experience to attempt to do better for any station in these provinces. But a little attention to the passing birds from year to year would soon make an individual an ornithologist of some value.

No persons can have better opportunities for making such observations in their respective localities than the scholars who have to walk one or two miles to school every morning and back again every evening. It will be no additional work to them, for if they are started

in the work of observing it will make the long road shorter for them, will change monotony into interest, and perhaps do much to reconcile them to continuing their attendance at school. There is no saying what else it may not do for them. And when there are no birds to be seen, there are the numerous forms of plants from the flowering ones down through the fungi, lichens, mosses and the like, which they should bring in triumph to the school-room to examine and label with popular home-made names.

Giving the proper scientific name to all these things is not at all a matter of importance even if teachers could be expected to give them. It is the observation and the examination of them that is of value, and the habit of keeping the eyes always open to see something in our surroundings which, although possibly pictured on their retinas, the multitude never see. No true teacher need be ashamed to acknowledge to the scholar that she cannot classify or name and detail the natural history of everything the prying eyes of the boys and girls can see in a mile or two of picturesque country. If the objects are only intelligently examined, the home-made names may have some points of interest in connection with them which the scientific names would not have, and a school collection of such a kind would perhaps be more interesting and instructive to a visiting botanist than a scientifically named collection. Teachers, no matter whether they are graduates of the university or not, should always take the ground with their pupils, that they are only studying these things themselves with the pupils. Such an avowal, while it prevents the teacher from being embarrassed in not being able to answer all the questions put by the pupils, is also likely to stimulate the pupils more, for they are always interested in finding as many astonishing things as possible, and enjoy the fun of trying to excel each other in their finds.

Such is the advice of some of the ablest scientific teachers in these provinces, who boast of having their pupils excel themselves in a few months in several specialities into which, after the initiatory steps, the pupils take a deep and abiding interest.

Messrs. J. & A. McMillan, St. John, publishers of Britain's "Nature Lessons," a review of which appeared in the REVIEW for February, have received a note from Sir Wm. Dawson, in which occurs the following: "I like the book very much, and think it well fitted to cultivate the observing and comparing powers of children, and excellent in tone and manner. I hope it will be inserted on our list of text-books recommended to teachers." Endorsement from such eminent authority must be gratifying to both author and publisher.



### The Chief Superintendent's Report for New Brunswick.

A very satisfactory showing has been made by the New Brunswick schools for the year, and a marked advance has been made in nearly every direction except that of the remuneration of teachers.

The superintendent says that the year "has been one of marked expansion and activity in educational work."

The superintendent returns to the subject of high and superior schools, pointing out the weaknesses that exist, and recommending the establishment of ten high schools throughout the province. There can be no doubt but that his arguments are sound from an educational standpoint. Whatever may be said regarding the grammar schools, there is much to be said in favor of the superior schools. They are conveniently situated and traditionally necessary to the pupil in the rural district, who either cannot afford or does not care to go further from home. The additional requirements for license render these schools more necessary than ever, as the course of instruction provided for ungraded schools does not meet the requirements for II class except an assistant be employed. This is not likely to be done on account of a few advanced pupils, and the superior school is the natural resort, and it is very probable that it will be utilized more in the future than it has been in the past. It is to be hoped that the chief will be able to establish the high schools without curtailing any of the privileges of the superior schools.

In view of the very unsatisfactory nature of the examinations for admission to the high schools, it is suggested that uniform examinations be held under control of the department at the same time as the normal school entrance and high school leaving examinations. In case of the adoption of the plan, the latter examinations would be omitted. There can be no doubt that such a plan would remove a great grievance to the teachers and an obstacle to the work of many of the schools. Some of the arguments that might be urged against it, would be the imposition of fees, and the expense attendant upon a short journey from home. Another argument is that the requirements for advance vary in the city and village school; and while it would be a simple matter for the town to provide for pupils who fail to pass, it is a very serious matter at times for the village. It is here that expediency comes in, which, while bad for the internal work of the schools, is equally embarrassing for school officers, if not permitted to avail themselves of it moderately. However, there is much in the step proposed to commend it to the favorable con-

sideration of school officers and teachers, and the columns of the REVIEW are open to discuss it.

All will agree with the superintendent in his suggestion of equalizing the burdens of taxation. According to the present assessment law, the taxes of the rich who are able to reside in the nearest town or village, are often paid there where it is needed the least. An increase of the county fund would meet the case exactly. In fact, if the schools were entirely supported from that source, it would be much fairer than at present. It is also to be desired, that no obstacle will be placed in the way of requiring school districts to employ teachers in accordance with their assessment value.

The REVIEW has more than once pointed out the anomaly of two matriculations examination varying in make up, and whether true or not, believed by many to vary in difficulty. What is still more peculiar: the county scholarships—the chief prizes of the competition—are only awarded at one of the examinations. No good reason has ever been given for this state of affairs; but the superintendent advances several very cogent ones against it, and it is to be hoped that he will be able to convince the senate of the university. If two examinations continue to prevail, few will take any interest in the matter longer.

### TALKS WITH TEACHERS.

The preliminary examinations of teachers for entrance to normal school in New Brunswick will take place as usual on the first Tuesday in July next, and it may not be amiss to offer a few suggestions regarding the same. The applications are to be all in by May 24th. See that they are in on or before that date, but do not send them as early as March or April. They nearly all contain money, and are rather a nuisance to have lying around so long. Before writing the inspector for information, consult your school manual. You will find all necessary information there. It is quite likely that the same stations will be used this year as in other years. In any case it will be time enough to enquire about that when you reach the place. Certificates of age and moral character are not to be sent to the inspector. They are not required until the candidate reaches the normal school. If you do not receive a reasonably prompt reply to your application, enquire at once if it has been received. If you enclose money, mention the fact. If you do not enclose money, be sure that you draw your pen through "enclosed \$1.00." If you are applying for the same class as that for which you tried last year, and you failed to obtain any class at that time, no fee is required.



Now, a word as to the candidates. They must bear in mind that the requirements have increased very greatly, and, more than that, that the examiners are doing their best, evidently, to make as difficult papers as possible within the bounds prescribed. The same qualifications are required alike from males and females. The requirements of Standard V ungraded schools will no longer prepare for II class, and unless the teacher does the work after hours, it will be necessary for most candidates to seek the nearest superior or high school. The average girl is much better fitted for the work of teaching at eighteen than at sixteen. If the teacher gives it as her opinion that the result is doubtful, wait another year. She knows better than anyone else. Do not be content with anything below second class, and do not go forward as an experiment, thinking you will try it again if you fail this time. If you fail it will be a reflection upon yourself, your teacher and your county. Be advised by your teacher.

Inquiry is often made as to whether the final examination for license can be undergone before the preliminary. Not since the first year. The preliminary examination must now be passed first.

It is very desirable that the candidates should be familiarized with the mechanical difficulties of examination papers. With this end in view, if no other, frequent written examinations should be given, and special stress laid upon margining, paragraphing, numbering of questions, folding, etc., etc. Allow a certain time for the papers in order that your pupils may get an idea of its flight during an examination. Insist upon neatness.

If at all possible obtain a copy of the school report. There is much information contained in it that all teachers should read. If you apply to any of the local members for your county before the house closes, there is no doubt but that it will be sent you.

If you have not enough black-board surface, ask the trustees for more. If they do not respond, direct the attention of the inspector to it. Do not be satisfied with knotty, shaky, rough boards, nor with the ceiling of the room blackened. Have clear pine or slates not more than two and one-half feet from the floor.

We cannot make bargains for blisses,  
Nor catch them like fishes in nets;  
And sometimes the thing our life misses  
Helps more than the thing which it gets.  
—Selected.

**Gleanings from the N. B. School Report.**

The report of the N. B. schools has been received. The statistics given are very complete, and the comparisons made are very exhaustive and instructive.

A comparison of the term ending June, 1890, with that ending June, 1895, shows the expansion of school work for the last five years :

	1890.	1895.	Increase
No. of schools, . . . . .	1,517	1,995	478
No. of teachers, . . . . .	1,617	1,790	173
No. of pupils, . . . . .	58,570	62,518	3,948
Proportion of population at school, . . . . .	1 in 5.49	1 in 5.13	dec. 30
No. of pupils under 5 years of age, . . . . .	251	231	20
No. of pupils between 5 and 15, . . . . .	54,272	57,794	3,522
No. of pupils over 15 years, . . . . .	4,007	4,663	656
No. of boys, . . . . .	31,053	32,659	1,606
No. of girls, . . . . .	27,517	29,859	2,342
Average number of pupils daily present during time schools were in session, . . . . .	32,542	38,447	5,905
Average number daily present for the full term, . . . . .	29,864	36,025	6,161
Percentage daily present during time school was in session, . . . . .	55.54	61.49	5.95
Percentage daily present during full term, . . . . .	50.96	57.62	6.66
These comparisons show that in five years the number has			
increased, . . . . .			11.7 per cent.
The number of teachers, . . . . .			10.7 " "
The number of pupils, . . . . .			6.7 " "
The average attendance during full term, . . . . .			6.66 " "

The percentage of the whole population of the province enrolled in the public schools is 21.4 and the average attendance is 60.49 of the incorporated towns. Milltown, Charlotte County, leads with an average of 85.99 for the first term and 90.37 for the second term. There is a large increase in the number of pupils pursuing nearly all the studies of the full course. There has been a marked decrease in the number of teachers employed under local license, and a very gratifying increase of licensed teachers of the higher classes. There have been issued only about thirty local licenses—nearly all in French districts. The number of third-class teachers has relatively decreased. Over 65 per cent. of the schools were not closed for a single day of the term ended December, 1894.

There is not so satisfactory a showing made in the matter of teachers' salaries—there having been a small decrease all along the line.

The total expenditure during the year for the grammar, superior and common schools (not including district assessments for school buildings, apparatus, fuel, etc.) is approximately as follows :

Provincial Grants, . . . . .	\$156,341 65
School-house grants, . . . . .	975 00
County Fund, . . . . .	92,140 28
District Assessment (approximate), . . . . .	187,160 75
<b>Total, . . . . .</b>	<b>\$436,617 68</b>

If to the above amount there should be added the district assessments for school buildings, furniture, apparatus, libraries, fuel, and other incidentals, the expenditure for the education of the blind and the deaf-



mute children of the province, the maintenance of the normal school and the university, and the cost of inspection, supervision, and the general administration of the school laws, the total expenditure would be found to exceed half a million dollars annually; a large sum in the aggregate, but involving an average cost of less than eight dollars annually for each pupil receiving instruction.

The superintendent again recommends that no ungraded school be classed as superior after the first term of 1897.

The chief superintendent argues that the work now done by the forty-nine superior and thirteen grammar schools, would be much more efficiently performed by about ten well equipped high schools established at convenient centres throughout the province.

He also recommends that an entrance examination be held for admission to the high schools, as that test is now very superficial, depending more upon expediency than merit. He would have these examinations take place at the same time as the normal school entrance and the matriculation examinations. The high school leaving examinations would in such case be abolished.

The total number admitted to the normal school was 272, a decrease of forty-three on the previous year.

It is suggested by the chief superintendent that instruction in purely professional work in the normal school, now almost entirely confined to the principal, be shared by the other instructors who are now mostly engaged in scholastic preparation.

He also expresses the hope, that in future there will be but one matriculation examination for the university, and that the county scholarships be awarded as the results of this examination.

There is a gratifying increase in the number of school libraries, and attention is directed to the new catalogue.

The inequality of the burden of taxation born by rich and poor districts is shown; and the superintendent suggests the idea of increasing the county fund from 30 cents to 50 cents per head.

He also draws attention to the fact that many wealthy districts evade full support of schools, and recommends that the head teacher of a school in a district having a taxable valuation above \$40,000.00 should hold a first-class license, and the head teacher of a school in a district having a valuation of over \$1,500.00 should hold a license not below that of second-class.

Teachers' institutes were held in all the counties except Restigouche and Madawaska. The aggregate attendance was 861.

In the appendices will be found interesting and instructive reports from the chancellor of the university of New Brunswick, the principal of the normal school, the inspectors, the boards of trustees of cities and incorporated towns, the principal of the institution for the education of the deaf and dumb, and the principal of the Halifax school for the blind.

Reference will be made to some of these in a later issue.

### N. S. Inspectors' Reports.

We give below a few choice extracts from the reports of the Nova Scotia school inspectors. They are worthy of careful perusal and study.

PRINCIPAL CALKIN of the Normal School *inter alia* reports

out of our one hundred and seventy-seven students, one hundred and seventy-one received diplomas of the various ranks—seventy one of first rank, sixty of second rank, and forty of third rank.

The tests that allows so large a percentage to pass cannot be very strict. Unless some careful process of selection takes place before students enter the school, it will be necessary, if public confidence is to be retained, that more discrimination be exercised in granting diplomas.

• • • We have accordingly placed these students in the second rank, with the recommendation that after one year's successful practice in teaching, duly certified to by an inspector, they shall be granted diplomas of first rank. It may indeed be worth considering whether in all cases successful experience for a short period under a lower class of license ought not to be an essential condition for a higher class.

This is a most valuable suggestion. We have already recommended it in these pages, and hope to see the province far enough advanced educationally, to make it prudent to have it adopted.

Principal Calkin refers to the weakness of candidates entering the normal school in certain subjects—such as vocal music, drawing, physical geography, English grammar, composition, chemistry, physics. The scientific knowledge of candidates in most cases seems to be confined to text books with no acquaintance with laboratory method.

We would also commend to our educational authorities the two excellent suggestions made below. The reason given for their adoption are so clear and convincing, that nothing needs to be said in their support.

1. I suggest that the standard of scholarship as regards the minimum pass marks be raised in certain important subjects in which, at least in the teacher, "little learning is a dangerous thing." Under present arrangements, a person having an aggregate of 400 in all subjects, and not falling below twenty five in any subject, is entitled to the scholarship certificate demanded for a first class license. But a person whose knowledge of English grammar, or indeed of almost any other subject in the syllabus, is adequately represented by such a mark, can scarcely be competent to take charge of a school.

2. I suggest that some of our high schools restrain their ambition in the matter of taking up the work of Grade XII. In my opinion it would be vastly wiser to expend their surplus energy in the way of securing greater thoroughness in the work of the other three grades. Could they not, with much greater advantage to their students, do some laboratory work in botany, chemistry, and physics, and give more attention to physical geography, English subjects, drawing, and music?

PROF. SMITH, (School of Agriculture) after describing the biological work of the first class goes on to say:

In chemistry they should have had a good general knowledge upon entering the school, but unfortunately only a few had ever performed any experiments, and these not many, while the larger portion of the class had never seen any number of experiments performed. I can scarcely withhold comment upon the worse than useless character of such methods of teaching chemistry, or any science, for that matter, as it is actually an injury to the student.



He makes the following suggestions :

(a) That the first class receive a course of instruction in horticulture, and dairying. It should be made of such a character that it would interest and instruct them, and at the same time develop their mental powers by accurate observation and reasoning.

(b) That instead of studying biology as in the past, the class should take up only a few of the most common plants and animals, and make a thorough study of these.

(c) That a regular summer course for teachers be given at the school of agriculture. . . . I should propose that such a course should begin on the Tuesday following the provincial examinations, and continue for a term of four weeks.

INSPECTOR MACINTOSH (District No. 2) :

Every year shows advancement in the class of school buildings, grounds and surroundings. New school houses are being built every year, old ones repaired and enlarged, school grounds graded and fenced, trees planted, etc. The general tendency is in the line of making the school room and its surroundings more comfortable, convenient and home like. It is very evident that while good buildings and proper apparatus are very desirable and important factors in successful work, what we need more than anything else is good teachers. We cannot have good schools without good teachers. If we could retain all our good teachers and increase their number every year by the addition of ten or fifteen good ones, we would soon have an ideal state of educational affairs. . . . Except in a limited number of the schools, writing is poorly taught, especially to beginners. More use should be made of the blackboard in explaining principles and teaching the formation of the letters, and the spacing and connecting of them. The penmanship of many high school pupils is poor, in some cases almost illegible, and no doubt assists in making failures at the provincial examination.

One hundred and fifteen sections voted on the compulsory attendance act with the result that sixty adopted it. I have no doubt that next year the act will be generally adopted throughout the district.

INSPECTOR MUNRO (District No. 3), says that music and calisthenics are receiving much attention in this district, and teachers are using great efforts in preparing themselves to teach these subjects successfully. Inspector Munro, influenced by the good results obtained from vertical writing, now advocates that it be made compulsory in junior grades.

Drawing is no longer regarded as a new subject; the belief is that it has come to stay. Consequently it is a rare thing to find a school without books. Teachers, too, are becoming better acquainted with the subject, as one can see in the improved work of their pupils. In some schools the drawing may be characterized as beautiful. In view of artistically executed work of this kind, every reasonable person will concede that the school of to-day is conferring a special boon, and that to know how to draw will ere long be a valuable element in the average pupil's equipment. . . . In Yarmouth town schools we have some teachers that, in my opinion, are equal to any in the province. They have knowledge, experience, skill; they are faithful workers, judicious in discipline, and feel that the formation of character is a matter of the first importance. The work of their pupils is tested by competent principals, and it always gives satisfaction. A brief visit to these schools is profitable. What a great benefit, then, young people looking to teaching would receive if, as a condition of getting a license, they had to pass two or three months in these schools, not as lookers on, but doing the work themselves under the direction of the teachers. With this training they would enter their own schools, grounded in the fact that to drill is the main business of the teacher—not merely to hear lessons. There are some departments in Shelburne town school to which these remarks also apply."

INSPECTOR MORSE (District No. 4) :

Poor teachers are to be found, but they are not so numerous as formerly. Higher scholastic attainments and better professional training of the present day are producing legitimate results. The number of normal trained teachers is increasing, and the influence of their training is to be seen in the work of the young teachers who are entering the profession.

The Compulsory Attendance Act was adopted in 89 out of 172 sections :

The Health Readers are now being used in most schools of this district with very beneficial results. A large amount of useful knowledge is thus being imparted in a more systematic manner than was possible to be given by inexperienced teachers without the aid of such books."

Inspector Morse recommends that for the French section an advanced French reader and a French grammar be prescribed. There is certainly no man in the province whose opinion on this subject is entitled to so much respect. Yet we cannot help doubting the wisdom of the recommendation. It would certainly be a great advantage for the French sections to have teachers able to speak both French and English, but there should be no text-books in French before the pupils had reached the eighth grade and the high school course.

INSPECTOR ROSCOE (District No. 5) :

*Calisthenics* secures the strictest attention of all the pupils, exercises the muscles of all parts of the body, gives an agreeable relaxation from work, and so enlivens the pupils that they can do much more and better work after engaging in this exercise than they otherwise could do. . . . Any time spent in singing is more than compensated for by the increased ability it gives to perform other duties. It is understood that but a short period is to be devoted each day to calisthenics and music, and this at a time when relaxation is most needed.

*Moral and Patriotic Duties*, so far, is taught principally in connection with other lessons, and at a time when some incident suggests a lesson. Occasionally a set lesson is given on such topics as "Truth," "Honesty," "Industry," "Our Flag," "Our Great Men," etc. There are plenty of topics full of interest, affording as much real education as can be secured in any other way.

*Nature Lessons*, when thoroughly and properly prepared and adapted to the age of the pupils, produce most beneficial results in the mastery of other subjects, as well as in awakening and developing the power of the mind. All these subjects have proved failures in the hands of some teachers, because the main aim seemed to be to do enough to have something to report and thus have their schools accepted. It is questionable whether any one should receive license to teach when he has never demonstrated, by actual practice, that he can teach. And it seems to me that those who have defects, which will prevent them from teaching a subject essential to the well-being of all schools, should not think of teaching as a profession.

I am pleased to report that so large a number of teachers in this district have made a success of these so-called new subjects. Many of them spent their Saturdays and holidays in going to places at some distance to be taught music, so that they could teach it in their own schools. In this way they have been benefitted themselves by the new order of things, while they were preparing to teach others. It is not now an uncommon thing to have quite young pupils write from memory the music from some of the national songs, and sing them both by note and words. We have made commendable progress along these lines. I may add that the schools in which most has been done in the subjects referred to have made the best progress in all the other required subjects. . . . If for any one day more than another a surplus of work is provided, this day is "Arbor Day." The teacher should prepare for it beforehand, and make his lessons on plants, etc., for this day, worth much to the pupils, and the work done on the grounds should be of such a kind as to prove a constant source of instruction."

INSPECTOR McISAAC (District No. 6) :

"One cannot help noticing how much the success of our common schools depends upon the excellence with which our academies and high schools, in which our teachers are usually prepared for their scholarship examination, do their work. Indeed the more the academic standard of work is raised, the more surely will our teachers in the lower schools and grades possess ability for their work. And this is true not merely in the matter of scholarships, but with regard to methods of teaching as well. The teacher very naturally endeavors to make his own the method pursued in the schools that enabled him to pass from the position of a pupil to that of a teacher. Of course, if all our teachers had the benefit of a normal school training, this dependence of the common



schools on the high schools in the matter of professional skill would in a large measure cease. . . . They forget that true education only aids the healthy growth of the mind which is slow, and not of a nature to be exhibited in a startling fashion. The full value of the incorporation into the mind of principles, and the formation of tastes and habits, will only appear after the mature years shall have developed their tendencies. Indeed, the highest and best parts of education are incapable of exhibition. The show made in examination days, which often proves so interesting to the children and visitors, is frequently but the frost-work of education, which vanishes with the occasion. The inferences drawn by parents from these occasions encourage, or perhaps create a tendency on the part of many teachers, to give undue prominence and too much time to mere mechanical drill and memoriter work. The text-book is still far too dominant; and teachers in giving direct information do not always confine themselves to the limits which should leave an inviting field for the pupil's own investigations, and secure his personal interest in pushing inquiry further."

#### Educational Progress in Nova Scotia.

"The Annual Report of the Superintendent of Education on the Public Schools of Nova Scotia" for the last year, has just been published. It indicates progress all along the line. There are more schools, more pupils, a better attendance, more teachers, and they are better trained. The number of normal school trained teachers has increased 23 per cent. Salaries have advanced.

If the population of the province is increasing, an increase of teachers and pupils in the same ratio was to be expected and would not necessarily indicate any progress, but such a large increase in the number of trained teachers, some increase of average salaries, the improvement in methods of teaching and general equipment, are causes for sincere gratulation.

For the last two or three years the superintendent has laid great stress upon the value of minute accuracy in compiling statistics, and as a result the inspectors report a very great improvement in the teachers' returns.

Cumberland leads in the number of trained teachers, but Colchester has a larger percentage—over 52 per cent. In Cape Breton Island there are 458 teachers, of whom only sixty-one have passed through the normal school. On the peninsula, the four western counties and the two eastern counties have 546 teachers, but being further from the normal school they have only seventy-six of its graduates teaching.

Inspectors Morse, Roscoe, and Craig have had large and successful teachers' institutes. In Halifax city the same objects are practically attained by a series of classes in gymnastics, tonic sol-fa, and the education course in Dalhousie college.

School libraries and scientific collections are increasing, but they are still miserably inadequate. Antigonish and Pictou academies have the largest libraries, and Pictou the only science collection of note. Hants County is doing fairly well in this respect.

Small sections are found to be a very great evil, especially in Richmond and Inverness. The time is probably not far distant when the township system, so successful in the United States, must be adopted in Nova Scotia.

In adopting the Compulsory Attendance Act, the districts of Inspectors Morse, Roscoe, McNeil and Craig, are very much ahead of the rest of the province.

The teachers and pupils throughout the country are taking very kindly to the *re-creative* studies—music, gymnastics, drawing, etc., so much insisted on of late. Like seasoning in food, the importance of these subjects is greater than it seems to be. They take less than one-fifth of the time though they include writing.

Of those who attend the public schools, one pupil in nineteen is doing high school work. The academies aggregate 1,492 students, and the other high schools twice as many. There has been extraordinary activity in high school work owing to the recent system of examinations. There were 2,399 who applied for grades. Of these, 684 received the grades for which they applied. Some of the inspectors complain that the pupils are passed on to the higher grades unprepared, and at too young an age. On this point, the superintendent says:

This year candidates went up to examination as young as the age of twelve years; and an aggregate of over 1000 was successfully made on A (classical) by a candidate of sixteen years and four months. It should be expected that the proportion of successful candidates admitted only after the mature age of sixteen and seventeen years should be very much greater than when there is no such limitation. There are, however, many advantages in favor of the general usefulness of our present system. The increasing number coming up each year proves its popularity. The only danger is, that teachers may in some cases advance pupils too rapidly. But with experienced teachers of good judgment there will be no ill advised attempts at promotion.

The fact that the results of the examination are in some respects even superior to those of the previous years, although the conditions in some respects were more severe, is a very creditable testimony to the progressive spirit of the body of our teachers.

Where schools have been under the charge of experienced and effective teachers whose pupils had had a thorough grounding in all the common school subjects, the candidates were as generally successful as could be desired. Such schools are found in various counties of the province, and are indisputable evidence of the fact that neither the course of study nor the standard of the examiners, as a general rule, is too advanced for our present conditions.

In his comments on the reports of the School of Agriculture, the superintendent has the following very appropriate remarks:

With intensive work on a few types there must be combined the comprehensive co-ordination of observations on all the natural elements lying openly at the base of industrial and social life. The teacher, as a botanist, should not only know some methods of investigating the hidden structure and marvellous genesis of typical forms of vegetable life, but should also have an outline knowledge of the classification, functions and industrial uses of the flora indigenous to the rural school section. . . . With advancing salaries for our teachers, we may soon, perhaps, be able to insist on a more extended course in which the prospective teacher may acquire a fuller and more practical training for the development of such classes of citizens as the country stands in need of. Such a teacher can conduct his lessons on nature in the rural school so as to lay the scientific foundation of domestic economy of agriculture,



of horticulture, of mining, of fishing, of mechanics, and the like. • • • The elements of all industrial science are the same. It is but the accurate observation of the manner in which the forces of nature work, and the classification of the principles observed so that the individual can easily remember and apply the knowledge gained. The teacher may change his nature lessons into any or every local industry in which his pupils can be made to take an interest.

When education is becoming universal, as it is with us, we must cease to develop it solely on the good old road leading directly to the comparatively few old-time learned professions, or else we will inevitably injure our country. In addition to the old road we must have those radiating to the wide fields of all possible industries.

Were it possible to have the schools of agriculture and horticulture consolidated, there would be much advantage in dealing with the elements of science common to them both, and more time set free for the treatment of special subjects. And when the common school pupils receive generally the proper kind of object lessons from teachers who know how to investigate their surroundings, these schools can commence their work at a more advanced stage.

For the Review.] **NATURE LESSONS.**

### Clouds — III.

For weeks the clouds had raked the hills  
And vexed the vales with raining,  
And all the woods were sad with mist,  
And all the brooks complaining.

At last, a sudden night storm tore  
The mountain veils asunder,  
And swept the valley clean before  
The bosom of the thunder.

—Among the Hills.—WHITTIER.

TEACHER.—Clouds and fog, you say, is simply fine water dust floating in the air. But is there any difference between the behavior of water dust and other dust?

SCHOOL.—Yes. Other dust is blown up in clouds from a dusty road, and then the dust falls again.

T. But does any of this road dust remain invisible in the air and then all at once become visible, like the water dust in this room, for instance? You all know that it is very frosty to-day, and we have not had the room ventilated since the school came in. But all the time each one of us has been breathing, and from your experiments on the cool glass you know there is a good deal of water given out with each breath. Where is all the water breathed out by us for the last hour in this warm room?

S. It must be in the air of the room, although we cannot see it.

T. Let us see. Open the outside door suddenly and quite wide, and note what happens.

S. Oh! a cloud of steam—fog—vapor.

T. A cloud of water dust. But where did it come from? From the floor?

S. No. It came right out of the clear air, wherever the cold air mixed with or touched the warm air with the invisible moisture in it.

T. That is an important difference between vapor clouds and dust clouds. Dust clouds rise from the

earth and fall again. But vapor clouds may grow right out of the invisible air and may again dissolve into invisible air.

S. Just like ghosts.

T. The hotter the air the more moisture it holds in an invisible state. When we boil water in this glass flask the steam inside is—

S. As clear as air.

T. But when the steam comes out into the cooler air of this warm room it becomes visible as a—

S. A cloud of vapor.

T. Does the cloud grow bigger or smaller?

S. It keeps dissolving away into the air as fast as it comes out of the flask.

T. Do clouds dissolve in the air?

S. Yes. We were watching some on our way to school, and we saw several become smaller and smaller and then disappear altogether.

T. Why did they disappear?

S. We thought that the air was dry around the clouds, so that the vapor or water dust was absorbed and became invisible.

T. Did you ever see clouds grow?

S. I saw one growing bigger.

T. How will you explain that?

S. I suppose warm, moist air was being cooled so that it could not hold so much water in it in an invisible condition.

T. Under which of these two conditions, of cloud fading or cloud growing, would you expect rain?

S. When the clouds grow. Because the more they grow the more water is thrown out of the invisible state into the state of fine water dust. And these masses of dust growing would likely also join the fine water particles with each other and become heavy drops, so that they could not float in the air, but would have to fall down as mist, or as rain.

T. Very good. I will give you now a simple calculation which I have made from the careful experiments of men who have been measuring the exact amount of moisture which the air can hold at different temperatures. This room is about thirty feet long by twenty-five feet broad; and perhaps twelve feet high. How many cubic feet of air will the room hold?

S. 9,000 cubic feet.

T. Well, it is said that when a cubic foot of air is just at the freezing point that it will hold in an invisible state a little over two grains of water without appearing as fog or vapor. That is, how many grains in this room-full?

S. Over 18,000 grains. 7,000 grains, one pound. Over two and a half pounds of water. Ten pounds of



water, one gallon. Over one quart of water may be held in an invisible state in this room when it is just freezing.

T. Correct enough. Next let us suppose the room to be thirty degrees in temperature from thirty two degrees Fahrenheit to sixty two degrees—that is nearly the ordinary temperature of the room when school is in. At this temperature it will hold two quarts of water. If I boiled this flask of water so as to fill the air of this room at sixty two degrees with as much moisture as it would hold without producing vapor, how much vapor or water dust would be rendered visible by allowing the room to be suddenly cooled down to the freezing point?

S. Half of the water—one quart.

T. Once more. Suppose we were to warm the room up another thirty degrees in temperature—to ninety two degrees—how warm would that be?

S. That would be about as hot as the hottest day we ever have in summer.

T. Correct. Well, we are told that the air will then hold four times as much water in solution as at the freezing point. Our room would therefore hold

S. Four quarts without being visible.

T. And if we should then suddenly cool down the room to the freezing point, how much water would be precipitated as cloud, vapor, or mist?

S. Three quarts. I guess it would be mist.

T. If the room were a mile high and miles wide?

S. The mist drops would become great rain drops, and the country would be flooded.

T. Just so. We would have a tropical rain storm. You can now tell where we may expect the heaviest rain storms and when?

S. In countries where the air is very warm and where it may have an opportunity of also absorbing as much water as it can; or in cold countries if warm moist air should be blown towards it from moist warm regions of the earth.

T. Very good. That will do for the present. I may mention that the vapor of water will rise into empty space as well as into the air. But as the air fills all the space of which we were talking, we have been speaking as if it was the air which was absorbing the moisture. We shall again find out the conditions which must make some portions of the earth's surface subject to much rain, while other parts may be rainless. You know the conditions now. See if you can pick out the various geographical regions of the world where such extremes may be found. Snow, hail, frost and dew, and perhaps even the frost pictures on the windows are other problems I can now ask you to begin to study so as to explain. The person who sees the most will likely get most rapidly to the correct solutions of these puzzles.

### A Drop of Water.

The water which is now in the ocean and in the river has been many times in the sky. The history of a single drop taken out of a glass of water is really a romantic one. No traveller has ever accomplished such distances in his life. That particle may have reflected the palm trees of coral islands, and has caught the sun's ray in the arch that spans a cloud clearing away from the valleys of Cumberland or California. It may have been carried by the Gulf Stream from the shores of Florida and Cuba, to be turned into a crystal of ice beside the precipices of Spitzbergen. It may have hovered over the streets of London and have formed a part of murky fog, and have glistened on the young grass blade of April in Irish fields. It has been lifted up to heaven and sailed in great wool pack clouds across the sky, forming part of a cloud mountain echoing with thunder. It has hung in a fleecy veil many miles above the earth at the close of long seasons of still weather. It has descended many times over in showers to refresh the earth, and has sparkled and bubbled in mossy fountains in every country in Europe. And it has returned to its native skies, having accomplished its purpose to be stored once again with electricity to give it new life producing qualities and equip it as heaven's messenger to earth once more.—*Chas. S. Whiting in the Museum.*

FOR THE REVIEW.]

### Why Should Not Our Queen's Good English be Preserved?

In the December number of the EDUCATIONAL REVIEW I noticed some very appropriate remarks by our friend H. C. C. in reference to pronunciation. I, as one of the oldest teachers, would ask permission to follow along the same line. In visiting schools, and since my health failed, in taking charge of small schools, I have often been pained to hear the pupils repeatedly mispronounce the commonest words, such as *with*, *beneath*, etc.; and when they come to parse, call the nominative case *nomative*, etc. Then a whip is a *wip*, when—*wen*, while—*wile*, whale—*wale*, white—*wite*, which—*witch*, *ad infinitum*; and when I have ventured to remonstrate, the answer would be: "O, I have not time for such little things." I answer: "Would a builder be justified in erecting some vast superstructure on a defective foundation?" Often in listening to preachers graduated from our higher institutions of learning murdering our good Queen's English, or Queen's good English, as the sounds of the murdered victims have jarred painfully on my ears, I have had to writhe in my seat and think: "Were I back there again I would suggest to some of the teachers that they arrange some place where the moositians might play a foo toons on their noo loots to the stoodents of the institootion on Tuesday evenings, and neither too it nor chew it." "A word to the wise," etc.

G. J. R.



For the REVIEW.]

**Principles of Grammar.**

There are many students in our common schools who have no intelligent conception of grammar.

To many the science is but a stumbling block, or one of the unpleasant studies fortunately not required for a farmer or business man. Others, more ambitious, consider it one of the luxuries of a common education, which, like the luxuries of life, every one is not *fated* to enjoy; yet they are willing to make a feeble attempt, if only for the sake of appearance.

Students in a so-called *eighth grade* have asked to be excused when grammar was mentioned. It had not been presented in its simplest form during their early training. Its sudden introduction had been attended with no ceremony, other than the presentation of a text, which, to the young, unaided student, means so much mystery.

The definition of "a word," as found in our text, reminds one of Spencer's(?) definition of evolution; and, perhaps, if we were to attempt to simplify the former, we should be no more successful than a seeker-after-simplicity was with the latter. Would one be liable to censure for the disregard of such definitions? The attractiveness of any subject is lost when it is reduced to a mechanical recitation of long sentences loaded with foreign words.

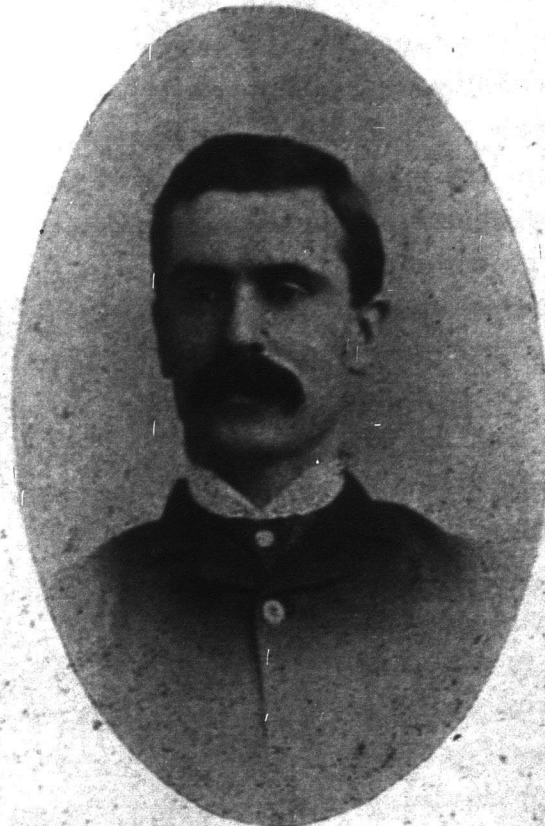
Now, when children are taught to think for themselves, and encouraged to ask so many questions, is it well to present the correct form without the principle?

The method works admirably with younger children when correcting mistakes in their ordinary conversation; but I speak from experience when I say that many senior grades would accept it with the question,—“yes! but why?”

This year it was necessary for us to begin at the first principles of grammar with a seventh grade. We took illustrations with every new step, turning to the rules at the back of the book, finding paragraphs bearing on the subject in different parts of the grammar, and hunting among the best writers for correct forms to correspond with the subject under discussion. As the writer from Yarmouth suggested, we took the sentences, but the principles always attended them. The greater part of the research must come on the teacher until the class has reached a point where they can refer to work gone over to further confirm the substance of the lesson. This plan seems to please the pupils. They become interested in helping themselves, and profited by having the same principle presented in slightly different ways. The object was to show the class the practical benefits of grammar, and we feel fairly well satisfied with the result.

J. MACLEOD.

January 1st, 1896.

**Graham Creighton.**INSPECTOR OF SCHOOLS FOR DISTRICT NO. 1.  
HALIFAX, N. S.

Mr. Creighton was born at West River, Pictou, in the year 1860. After a few terms in a country school he took a short course in the Pictou academy and afterwards at the normal school, Truro. In 1886 he entered Dalhousie college with a bursary, and gave promise of being a graduate of high standing; but after two or three years his health failed and he was obliged to relinquish his studies for a time.

He taught the schools in Shubenacadie and Maitland with so much success that when the principalship of Morris street school, Halifax, became vacant in 1889 he had no difficulty in obtaining the situation. While teaching here he studied for Grade A, and took it quite easily. Last November he was appointed to succeed the late Inspector Condon in District No. 1.

Having early to depend on his own exertions he developed a remarkable degree of self-reliance, shrewd business capacity, and an extensive knowledge of men and things. He loses no time, for he never requires to retrace his steps, and seldom makes a mis-step.

His friends are delighted with the enthusiasm and energy which he has thrown into his new work, and they predict for him a successful future in all that he undertakes.

THE successful educator is one who makes each individual pupil believe that one is his special charge; and yet who will convince the pupils that they cannot override their teacher.



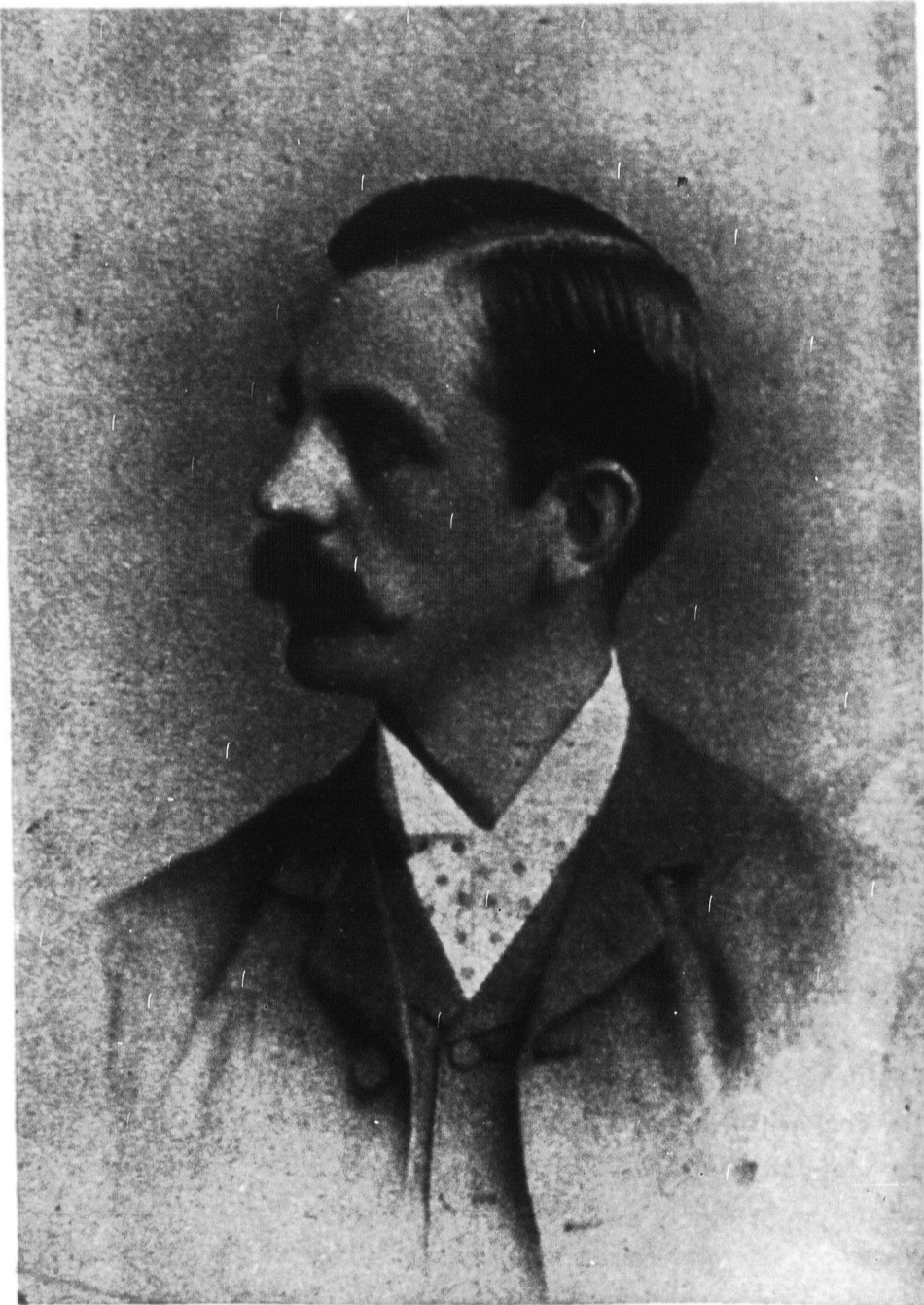
### Our School Trustees.

It takes about 5,800 men to manage the business affairs of the schools of Nova Scotia. In towns these men are called school commissioners, two being appointed by government and three by the town councils. In every country section there are three trustees elected by the people. In Halifax city there are twelve commissioners, six appointed by the government and six by the city council. The term of service is three years.

Where so many men have to be selected in so small a province, it is not to be expected that they can all be men of education, or eminent fitness for their positions. But it may be truly said that no man puts in his three years' service without being himself greatly benefitted. So far as they go, the school meetings are as much an education to the rate-payers as the schools are to their children. In the great majority of school sections the business meetings are now conducted with the utmost decorum and propriety, where twenty-five years ago only confusion reigned.

As teachers in Nova Scotia are hereafter to meet with representative laymen as delegates to the Provincial Educational Association, we would like to introduce some of them to our readers in advance. It is fitting that we should begin with the chairman of the Halifax school board. Alderman Stewart is a native of Halifax,—born in 1852. He was educated at the Halifax grammar school, where the formation of a noble character, honorable deportment and thoroughness were considered prime characteristics of the course. After some general training in office work, Mr. Stewart, in 1873, entered the firm of M. S. Brown & Co., jewellers, as a

clerk. Ten years later he became a partner. He is now sole owner of this large and prosperous establishment. When quite a young man, a delicate constitution compelled him to take an interest in gymnastics. By unremitting attention to physical exercise for a number of years he succeeded in building up a fine physique, which almost any man might envy. As gymnastics proved to be his own physical salvation, he determined to extend its benefits to others by teaching classes and fostering out door games and sports. In this way he indirectly helped the temperance cause. With the help of Alderman Redden, another good specimen of the beneficial effects of physical training, he succeeded in introducing the Swedish system of gymnastics into the Halifax schools. He organized the Maritime Commercial Travellers' Association, and was for some time its president. He took a prominent part in military training, and holds the rank of major in the first regiment of Canadian artillery. Three years ago he was elected to the city council and to the school board of which he is now chairman. As a member of the executive committee for the last two years, he has by his clemency and firmness rendered excellent service in the carrying out of the compulsory attendance act, winning



W. J. STEWART, Chairman Halifax School Board.

for it general favor. The result is a much improved school attendance. In politics he is a moderate but firm conservative; in religion an Episcopalian. But it can be truly said of him that he is incapable of allowing either his politics or his sectarianism to bias him in his public duties in the slightest degree. If he has any hobby, it is tax reform, and on this subject he has read and studied much, and may be said to lead enlightened opinion in Halifax. He forms his opinions slowly, but



clearly, and only as the result of conscious or unconscious logical processes. Though warm-hearted, he submits his judgment to reason, and when he sees his way clearly, he can be counted on to follow it to the end. He has the entire confidence of the Halifax teachers.

#### Educational Opinion.

"An education cannot be deemed complete which takes no notice of the modern sciences. It is obvious that in the existing keen competition of talents and widespread, and in itself noble and praiseworthy, passion for knowledge, Catholics ought not to be followers, but leaders. It is necessary, therefore, that they should cultivate every refinement of learning and zealously train their minds to the discovery of the truth and the investigation, so far as possible, of the entire domain of nature."—*Leo XIII, Encyclical to the hierarchy of the United States.*

"Far from seeing in science an enemy of faith, Leo XIII recognizes in it an invaluable auxiliary. Like the great Origen, he regards it as 'a prelude and introduction to Christianity.'"—*Zahn, in the Catholic University Bulletin, January, 1896.*

If I can put one touch of sunset into the life of any man or woman, I shall feel that I have worked with God.—*George McDonald.*

It is all very well to build up a school vocabulary for reading until the child can read the first half of a given primer, but he should pause in the vocabulary race for a long time and read the first half of as many other primers as possible, getting maturity through a variety of vocabularies made by different minds. The same holds good regarding number teaching, writing, etc.

The last half of the first grade work should be spent in gaining accuracy, correctness, ease and grace.

The teacher must look well to her own culture and mental improvement. The great danger of the primary teacher is that she spends too much time upon the details of methods. It is difficult for a primary teacher to find time enough to prepare for each day's lesson under the stress of modern demands for individual growth and development of mind, character and culture.

Much of our work in the school-room can be better done without too much ready-made illustration. "The king is," as Carlisle tells us, "the man who can." The ability to create gives to us a sense of kingship, a divine feeling, a right which we should not waive. And in the teacher's ability to make much of little, to contrive ingenious methods of illustration, and original plans for

occupation or the presentation of lessons, we realize this power which, after all, marks the distinction between the real teacher and the imitator, the artist and the artisan. The will has much to do with the making of a way. Materials for our work exist, in some degree, for all who have eyes to see them. All have not equal advantages, but some material for good lies at all our doors.

Neither season, nor situation, nor the character of the district, stand in the way of bright, prompt, vigorous and effective work. The parable of the talents is repeated. It is through the use of that which we have that added power and added riches become ours.—*American Teacher.*

It was a remark of Mr. Emerson's that the pupils are supposed to be taught by the teacher, but in reality they are taught by each other. That is really a great teacher who causes this teaching to become a power in his school—who recognizes and organizes it. If a hole in a rock is filled with broken pieces of quartz and a stream of water is allowed to rush in for several days, it will be found that the rough fragments have become polished spheres. (It is in this way that marbles are actually made). A teacher with fifty boys before him can teach them but little. The wise teacher sets them to teaching themselves. This is the high art of teaching. The answers given by pupils to the teacher's questions are often more instructive than the studied statements of the teacher.—*N. Y. School Journal.*

#### Literature and Pedagogy.

There are really only two things the successful teacher needs to have—knowledge of his subject-matter and knowledge of his pupils. The first of these can be gained only by study, the second only by experience. The man who has never been a real child himself cannot effectively teach children; and he who does not know by experience the warm-hearted, exuberant gaiety of school and college boys cannot successfully teach them. Furthermore, the teacher who spends more time on the method of teaching literature than on literature itself, is sure to come to grief. Greatest of all forces is the personality of the instructor; nothing in teaching is so instantly recognized and responded to by pupils; and nothing is more neglected by those who insist that teaching is a science rather than an art. After hearing a convention of very serious pedagogues discuss educational methods, in which they use all sorts of technical phraseology, one feels like applying Gladstone's cablegram, "Only common sense required."—*The Century (Editorial).*



**Educational Notes.**

The United States have no state system of education as we have in Ontario or in the Maritime Provinces. Every town is left free to develop its educational system in any way it pleases and to try any educational experiments for which it is willing to pay. The result is that in nearly all the country districts, and in most towns, education is in a backward state. But in the better cities splendid systems have been developed, owing to their freedom from the blighting and conservative influence of central control.

Ten new manual training schools are to be opened in Chicago. That will make fifteen in all in that city.

Cooking has been added to the course of studies in Detroit.

Free text-books have been made compulsory in Massachusetts, Maine, New Hampshire, Delaware, Nebraska, Rhode Island, Pennsylvania, Idaho, Vermont, and New Jersey.

In Connecticut, 168 towns held elections, and at all of them women had a right to vote on school matters; very few women appeared at the poll, and in some towns they did not cast one vote.

The western cities are rapidly outstripping the eastern cities in their common school education. They are enabled to do this because they are free from the hampering traditions of the past and because they are adopting into their systems only the best results of the costly experiments of the east.

In one of these western towns the school-board has recently decided that hereafter less attention shall be paid to technical grammar and more to the practical work of good composition and the acquisition of an easy and correct use of the English language. The works of classic English authors are to be substituted in the eighth grade for the scrappy reading books.

**Seat Work for Little Folks.**

Teacher carefully write the following on the board, and let little folks copy it, filling blanks properly.

1. My name is —.
2. I am — years old.
3. The color of my hair is —.
4. I read in the — reader.
5. I see with my —.
6. I hear with my —.
7. I smell with my —.
8. I talk with my —.
9. I hold my pen in my —.
10. I can walk home in about — minutes.

**What All Boys Should Know.**

Don't be satisfied with your boy's education or allow him to handle a Latin or Greek book until you are sure that he can

Write a good legible hand.

Spell all the words he knows how to use.

Speak and write good English.

Write a good social letter.

Add a column of figures rapidly.

Make out an ordinary account.

Deduct 16 2/3 per cent from the face of it.

Receipt it when paid.

Write an ordinary receipt.

Write an advertisement for the local paper.

Write an ordinary promissory note.

Reckon the interest or discount on it for days, months, or years.

Draw an ordinary bank check.

Take it to the proper place in a bank to get the cash.

Make neat and correct entries in day-book and ledger.

Tell the number of yards of carpet required for your parlor.

Measure a pile of lumber in your shed.

Tell the number of bushels of wheat in your largest bin, and the value at current rates.

Tell something about the great authors and statesmen of the present day.

If he can do all this, and more, it is likely he has sufficient education to make his own way in the world. If you have more time and money to spend upon him, all well and good give him higher English, give him literature, give him mathematics, give him science, and if he is very anxious about it give him Latin and Greek, or whatever the course he intends pursuing in life demands. *School Supplement.*

**Spelling Word Analysis.**

The following exercise is taken from Kennedy's "What Words Say."

**FUS MELT, POUR, SCATTER, SPREAD.**

Diffuse..... dif (dis) ..apart, abroad. (a)

Effusive..... ef (ex) ..out. (b)

Effusion..... ef (ex) ..out, forth. (c)

Fusible..... ible ..capable of. (c)

Fusion..... ion ..ing act of. (c)

Infuse..... in ..in, into. (f)

Profuse..... pro ..before, forth. (g)

Refuse..... re ..back.

Suffuse..... suf (sub) ..under, down. (h)

Transfuse..... trans ..across. (i)

(a) To *diffuse* knowledge or information is to *spread* it *abroad*. The seeds of plants are *diffused* when they are *scattered abroad*. A *diffuse* style of speech is one having a tendency to *scatter apart*.

(b) One is said to be *effusive* when he has a great flow (*pouring forth*) of words.

(c) An *effusion* is an *outpouring*, as the *effusion* of blood. An address that exhibits a ready *flow* of words is called an *effusion*, and so on.

Build up other lists, such as *mitt, miss* = send, go; as *dismission, emit*, etc.



## PRIMARY DEPARTMENT.

## My "Don't Forget" Book.

I found myself, like a child, breaking my good resolutions almost as fast as I made them, through forgetfulness. The work, the incidents, the surprises of each day would betray me into neglect of important duties that I had promised myself never to neglect again, or into faults which I had been, at one time or another, most desirous of curing. I found the following plan of aiding my treacherous memory very helpful, and this seems a good time of year to offer it for what it is worth to my sister strugglers:

I wrote upon a little blank book the title "Don't Forget," and entered in it the following:

1. Don't forget to look over my grade and my plans for the term once a week.
2. To arrange windows and ventilators first thing in the morning and regulate heat supply (in the winter) by frequent reference to the thermometer.
3. To give out all available material before school opens and at recess.
4. To have a five-minute talk with children at some time during the day on what they see and do out of school.
5. To insist on good *form* as well as correct solution in all slate and paper work.
6. To watch the pencils lest the monitor grow careless about the points or retain them in use after they are too short.
7. To have physical exercise after every period of seat work.
8. To refer children who fail in calculation to their counters.
9. To watch the monitors who watch the home readers.
10. To insist on some sign being used to express quantities in written examples, as "in" for marbles.
11. To follow language lessons with a drill on correct forms corresponding to the incorrect forms that have been used by the children.
12. To insist on distinctness in speech at all times.
13. To insist on healthful attitudes.
14. To keep the slow pupils as well advanced as possible by individual teaching.

In my efforts to make my teaching perfect, I have had no such aid as this "Don't Forget" book. Its title alone, as I catch sight of it in going through my desk for other things keeps me reminded of much that it contains.

Another teacher using this device will make other entries, as well as some of the same. Mine referred, of course, to those points in my teaching of management that were in constant danger of becoming weak points.  
—*School Journal.*

## Snowflakes.

"Father, said George Lee, what makes the snow white?"

"You know, George, replied Mr. Lee, that the snow is frozen water."

When the snowflakes first start from the clouds they are very, very small water drops.

There are so many of them, and they are so close to one another, that they freeze into tiny balls.

After a while a sunbeam peeps out at them and says, "What a lovely place! how many beautiful rooms for me to play in."

So little sunbeam goes dancing from one of the tiny rooms to another.

He leaves a bright light in every room.

By the time the little ball reaches the earth he has left a bright ray of sun in each of them.

All these little lights shining in the tiny water-drop house make it look white.

Little snowflakes always have six sides, or points.

Now, George, if any one asks you why the snowflakes are white, what will you tell them?—*S. Todd, Indianapolis, Ind.*

## Seat Work.

Busy work, to be of value, entails much preparation upon the part of the teacher. To pass out to the children work which has been so carelessly prepared that they are unable to follow the teacher's directions, discourages them and destroys all hopes of good results. But if the work has been carefully prepared, the children enjoy doing it and welcome every variety.

It rejoices the observer to see the busy little fingers deftly picking out the part which the bright eyes have selected as the right one, and their eagerness to have the teacher pass by and approve their construction is pleasing to see. Some of the best forms of busy work are these: Envelopes containing pictures, cut into a few pieces to be put together. Envelopes containing colored sticks; separate by sizes, by colors. Envelopes containing colored sticks; lay them in patterns like those on outside of envelope, or on blackboard, as squares, triangles, ladders, tables, etc. Picture book on hinged shelves at side of room. One class at a time use them. Envelopes containing colored cards to be separated by shape, by color.

Envelopes upon which are a half dozen or fewer written sentences; within the envelope, the words which compose them; arrange on desk in same order as on envelope. Envelopes upon which are written easy words; within are the letters which compose them; arrange letters in order of spelling, as on envelope. Envelopes upon which are written easy examples in number, as,  $2 + 1 =$ ,  $2 \times 2 =$ ,  $\frac{1}{2}$  of 4 and 1 are; within are figures and signs which must be arranged as on envelope.  
—*E. M. C. in Primary Education.*



## QUESTION DEPARTMENT.

A. J. B. (1) A merchant's stock-in-trade is valued on January 1, 1875, at \$40000; he has \$1750 in cash, and owes \$9350; during the year his personal expenses, \$1500, are paid out of the proceeds of the business, and on January 1, 1876, his stock is valued at \$39750; he has \$2850 in cash and owes \$7550. What is the whole profit of the year's transactions after deducting 5 per cent interest on the capital with which he began the year?

Capital January 1, 1875 = \$32400

" " 1, 1876 = \$35050

Gain \$2650. From this subtract interest on \$32400 at 5% = \$1620 and add personal expenses, \$1500, and the remainder, \$2530, will be the net gain.

(2) I received an 8 per cent dividend on railway stock, and invested the same money in the same stock at 80. My stock having increased to \$13750, what was the amount of my dividend?

On \$100 of stock the dividend was \$8.00.

\$8.00 invested in stock at 80 would purchase \$10 of new stock, which added to the original \$100, would give \$110.

If \$110 of stock comes from \$100, \$13750 would come from \$12500.

The dividend on this at 8% would be \$1000.

(3) The charter of a new railway company limits the stock to \$1500000, of which 3 instalments of 10%, 20% and 40% respectively having been paid in; the cost of construction has reached \$850000, and the estimated cost of completion is \$850000. If the company call in the final instalment of its stock and assess the stockholders for the remaining outlay, what will be the rate per cent?

Of the \$1,500,000, 30 per cent. yet remains to be collected. Besides \$200,000 or 13½ per cent. will be needed. That is 43½ per cent. will be required for the fourth instalment.

A. P.—(1) A uniform bent lever, the weights of whose arms are 5 lbs and 10 lbs., rests with the shorter arm horizontal, what weight must be attached to the end of the short arm that the lever may rest with the long arm horizontal?

The one arm will be twice as long as the other. Let the weight of the arms be supposed to be at the middle points of each, and let the short arm be of any length as 10in. Then in the first position the moments will be  $5 \times 5 = 10 \times x$ . Then  $x$  or  $2\frac{1}{2}$  will be the perpendicular distance of the middle point of the long arm, when the short arm is horizontal or the perpendicular distance of the extremity of the short arm when the long arm is horizontal.

But when the long arm is horizontal its moments will be  $10 \times 10 = 100$ , and the moments of the other

arm will be only  $5 \times 1\frac{1}{2} = 6\frac{1}{2}$ . To equalize them we need a weight ( $y$ ) at the extremity of the short arm  $2\frac{1}{2}$  in. from the perpendicular so as to make  $10 \times 10 = 5 \times 1\frac{1}{2} + (2\frac{1}{2}) \times y$ . Then  $y = 37\frac{1}{2}$ .

(2) Find the power which will sustain a weight of 90lbs. with a single moveable pulley C, the cord making an angle of 60°.

The power and the weight will have the same ratio to each other as the greater diagonal and sides of a parallelogram whose angles are 60° and 120°.

Let the sides be 1, then the diagonal will be  $\sqrt{3}$ .

Then  $\sqrt{3} : 1 :: 90 \text{ lbs.} : \text{power}$ .

$$\text{Power} = \frac{90}{\sqrt{3}} = \frac{90 \sqrt{3}}{3} = 30 \sqrt{3}.$$

(3) Show that in order that the pulleys in second system of pulleys may revolve in the same time, the diameter of the lower block must be as the numbers 1, 3, 5, and those of the upper block as 2, 4, 6.

With one moveable pulley P moves twice as far as W, that is, the cord over the first fixed pulley moves 2 feet in order to raise the weight one foot, or what is the same thing to lessen by one foot the quantity of cord that is doubled. Similarly 4 feet of cord must pass over the second fixed pulley to lessen the quadrupled part by 1 foot; but only three feet pass over the second moveable pulley because it is raised the other foot.

Lastly 6 feet of cord must pass over the third fixed pulley to shorten the sextupled part by 1 foot, but only 5 feet over the third moveable pulley because it has moved 1 foot upward. Hence the ratios are 2 : 4 : 6; and 1 : 3 : 5.

(4) If  $a : b :: c : d$ , show that  $a^2c + ac^2 : b^2d + bd^2 :: (a \times c)^3 : (b + d)^3$ .

$$\frac{a}{b} = \frac{c}{d} \text{ and } \frac{a^2c + ac^2}{b^2d + bd^2} = \frac{(a+c)^3}{(b+d)^3}$$

$$\text{Let } \frac{a}{c} = k, \text{ then } \frac{b}{d} = k; \text{ and } a = ck, b = dk.$$

$$\text{Then } \frac{a^2c + ac^2}{b^2d + bd^2} = \frac{(k^2 + k)c^3}{(k^2 + k)d^3} = \frac{c^3}{d^3}$$

$$\text{And } \frac{(a+c)^3}{(b+d)^3} = \frac{(kc+c)^3}{(kd+d)^3} = \frac{(k+1)^3 c^3}{(k+1)^3 d^3} = \frac{c^3}{d^3}$$

## A Good Method.

There was a little school-ma'am

Who had this curious way

Of drilling in subtraction

On every stormy day.

"Let's all subtract unpleasant things

Like doleful dumps and pain,

And then," said she, "you'll gladly see

That pleasant things remain."

—Anna M. Pratt in *January St. Nicholas*.



## SCHOOL AND COLLEGE.

The Moncton school board has granted \$120 for chemical and physical apparatus.

Through the efforts of principal J. L. White, superior school, Grand Falls, there have been secured a sixty dollar library, a twenty-five dollar terrestrial globe, Yaggey's Geographical portfolio—price forty-five dollars—minerals and chemical apparatus to the value of seven dollars.

It is expected that Prof. W. C. Murray, of Dalhousie University, will deliver an address on "Ethical Culture" and Prof. Stockley, of the University of N. B., one on "The Relation of the University to the Public Schools," at the Educational Institute of N. B., in June.

Principal Cameron, of Yarmouth, has been invited to deliver an address on the teaching of "English Literature," before the St. John County Teachers' Institute in September next.

Miss Iva Yerxa, lately of the Centennial school, but now on the staff of the Aberdeen, St. John, was recently the recipient of a handsome present from her former associate teachers. The presentation took the shape of a valentine, and was made on that day.

All will be glad to learn that Mr. F. O. Sullivan, of St. Stephen, is improving in health, and is likely soon to be fully restored in a short time. Mr. E. C. Coleman is supplying his place.

The educational report of New Brunswick this year is brightened by the engravings of the school houses at Fairville, St. John Co., Lord's Cove and Lambert Town, Charlotte Co. All three are most tasteful and attractive as to architecture and appearance, and most conveniently arranged as to comfort.

Mr. R. D. Hanson, A. B., has been appointed principal of the school at Beaver Harbor, Charlotte Co.

Inspector Carter will be engaged during the first part of the month of March, if travelling permits, with the schools of Westfield and Greenwich, in Kings Co., and with the schools in St. John Co., east of St. John. He will begin work in St. John city about the middle of March.

The results of the examinations given by the American Institution of Sacred Literature for 1895 have been announced. The competition is open to undergraduates of all the universities in the United States and Canada, and to graduates of two years. The winner of the first prize (\$100) in the New Testament Greek is Miss White, of Sussex, of the senior class of the University of New Brunswick. And as these examinations are more difficult than the usual college examinations in these subjects, Miss White's success reflects great credit upon herself.—*Fredericton Gleaner*.

Inspector Mersereau will visit the schools in the parish of Beresford, Restigouche, this month, and the graded schools of Northumberland in April.

## BOOK REVIEWS.

POLITICAL ECONOMY, by R. E. Thompson, A. M., S. T. D. Pages 108. Ginn & Co., Boston, 1895. Dr. Thompson has long been known as an ardent Irishman, a forcible writer, a dangerous controversialist, and one of the most uncompromising advocates of protection. He was, if I mistake not, one of the first to be appointed to the lectureship on political economy for the defence of protection, which was established by some interested manufacturers in the United States. Dr. Thompson, in the book before us, presents the views of political economy, which are held by the American or National school of List and Carey. "Political economy," he says, "is national house-keeping." The result of free trade, which professes to secure effective competition, is in reality to pit the weak and young native industries against the old and strong industries of other countries. Accordingly, nationalists oppose free trade and advocate protection. Great Britain, whose trade has always been largely foreign or international, not domestic or national, has, since the economists could be heard, been in favor of free trade. On the other hand, countries like Germany and United States, whose trade is principally domestic, have been protectionist. Great Britain's insular position is responsible not only for "her splendid isolation" in politics, but also for her system of "natural liberty in trade."

This book is written for use in high schools and academies, and is the result of twenty-five years' experience in teaching the subject in the university of Pennsylvania and elsewhere. It is well written, is very compact and spirited, and likely to prove an interesting book for those for whom it is intended.

Two interesting questions arise here. Is political economy a subject suitable to be taught in high schools and academies? If so, has Dr. Thompson written the right kind of a book? With regard to the first question, one is inclined to answer it in the affirmative; but not in the hope that it will soon be added to our courses of study for academies, etc. For we have already a sufficient number of subjects. If, however, the question at issue were of the relative merits of political economy and some other subjects, one would be inclined to favor political economy for the following reasons. No doubt the subject is abstract, yet it is not as abstract and remote from the experience of the average boy or girl as psychology or navigation. It has what many other sciences have not—human interest. The majority of high school pupils, at least, are interested in questions of trade and industry, even if they have little acquaintance with such matters. Further, the elementary notions of political economy are not difficult to grasp. Though it may not be as good as navigation for purposes of discipline, it is more useful. And what is more important, where only a fragment of a subject can be taught, it is much easier to awaken and develop a permanent interest in economic questions than in many others. Accordingly the teacher may hope that the boy who leaves the academy with some knowledge of political economy will not henceforth shun economic books and discussions. The great difficulty is the complexity of economic phenomena. Yet even in this respect



economics is less objectionable than civics. For example, which is the more difficult to grasp, the law of supply and demand or responsible government—fundamental conceptions in their respective sciences.

Has Dr. Thompson produced a book suitable for schools? In many respects, yes. It is well written, interesting, and not burdened with detail or technical terms. The author has tried to be fair and impartial, though there is never any doubt as to his own views. I hardly think that he has always succeeded in stating his opponent's case as strongly as possible. W. C. M.

THE CONNECTION OF THOUGHT AND MEMORY, by H. T. Lukens, Ph. D., Clark University. 160 pages. Price 90 cents. Publishers, D. C. Heath & Co. To teachers who have become wearied and somewhat disgusted in their efforts to obtain from metaphysical psychology any help for their school room work, we most heartily recommend Dr. Luken's excellent book. The various processes of thought and the different kinds of memory are explained with great clearness. Common sense takes the place of the usual mysticism. His application of psychological principles to the actual work of teaching is admirable and well illustrated by four examples. The bibliographical references will be of very great value to those who follow up the subject.

LE CID.—F. M. Warren, Adelbert College, Ohio. D. C. Heath & Co., Boston, publishers. 143 pages. Price 30c. It is always a pleasure to *feuilleter* a master-piece like the *Cid*, especially when it comes to us with the last touches of the author and with copious notes and comments by a competent editor. Mr. Warren's aim, in his edition of the *Cid*, is, as he says in the preface, to emphasize the literary significance of the play. Corneille's *Examen*, in which the author not only answers his critics but reviews and criticizes his own production, is therefore given, not in translation, we are glad to say, but in the idiom of the great poet. Indeed, throughout the notes and explanations of the play, the editor has, whenever possible, employed French expressions, making one term explain another. And this is assuredly the true spirit in which to deal with a master-piece in a foreign tongue. It is not sufficient that we understand it in our own language to freely enter into its spirit. One might almost as well read it in translation. Mr. Warren follows the later method of using English as little as possible. A pleasing feature of this edition is the introduction of Spanish tales of the *Cid*. These take one still nearer the original romance, and impart something of the true Spanish flavor to the great French master-piece.—F.

MANUAL TRAINING MADE SERVICEABLE TO THE SCHOOL. By Dr. W. Götze, translated by W. G. Field, M. A. 157 pages. Published by O. Neumann & Co., London. This book is a graduated course of lessons in the construction of apparatus and illustrative appliances for science teaching in the various grades of common and high schools. Not one teacher in five has had any training that will enable her to make or manipulate apparatus to illustrate fundamental scientific principles. Fewer still ever think it a duty. They are content to use the text in the book, and think it highly meritorious if they call attention to the wood cuts, and especially if they make original drawings on the blackboard. But

our methods of teaching science are changing, and it is now becoming necessary for teachers to be able not only to construct simple apparatus, but they must teach their pupils also to do so. To assist them in this they will find but few books, and perhaps none better than Dr. Götze's small volume mentioned above. It would, perhaps, be better if more space were devoted to the uses of the very large number of pieces of apparatus whose construction is so clearly described.

Scheffel: DER TROMPETER VON SAKKINGEN. Edited and abridged by Carla Wenckebach, Professor of German in Wellesley College. Pp. xvi, 181. D. C. Heath & Co., Boston, 1895. Price 70 cts. We have previously noticed an edition of Scheffel's great historical novel, "Ekkehard," prepared by the same editor. Of the *Trumpeter*, the editor, in an interesting preface, says: "Its pervading spirit is German in the happiest sense of the term. In its accurate reflection of the German nature, German customs and habits of thought, the poem deserves an honorable place beside Goethe's *Hermann and Dorothea*." The notes, which extend over thirty pages, are chiefly explanations of strange phrases of historical and literary allusions. Attention might be called to four full page illustrations, excellently done. This edition has been prepared from the 212th German edition.

PRACTICAL PLANE AND SOLID GEOMETRY, by Joseph Harrison and G. A. Boxandall. 182 pp. Price 2s., 6d. publishers, MacMillan & Co., London. The compilers of this little work have produced a book which fills a long felt want among students in geometric drawing. They have introduced a method of working by auxiliary projections, thereby enabling the beginner to gain a more thorough grasp of the principles to be imparted, and by introducing special diagrams wherever necessary they have made their book particularly interesting. It is an invaluable work to engineers, architects, draughtsmen and students, and its small cost will permit everybody to purchase a copy. CHAS. H. HOPSON, architect and civil engineer.

SOUVESTRE'S "UN PHILOSOPHE SOUS LES GAITS," edited by L. M. Moriarty, M. A., of King's College, London; published by MacMillan & Co. 253 pages. Price 2s. 6d. This diary of the philosopher of the attic, as edited by Mr. Moriarty, is especially prepared for junior students, and hence the notes have been made as simple as possible. The points of philological importance, which are beyond the comprehension of young pupils have been left unnoticed in this edition. There is a good vocabulary and also some English exercises for translation based on the text of the book. A sketch of the author and an estimate of his works are given in the introduction as well as some valuable suggestions with regard to the method to be employed in teaching the languages.—F.

METHODS OF MIND TRAINING—Concentrated Attention and Memory, by Catherine Aiken. 110 pages. Published by Harper & Brothers, New York. As teacher of a private school at Stamford, Connecticut, Miss Aiken made the discovery that the power to remember largely depended on the amount of attention, and that the power of concentrating attention could be cultivated to a wonderful degree by judicious exercises. These exer-



cises she describes in her book. Some of her devices seem to be somewhat artificial, but a few of them are very good and are in daily use in any good school. Her book will prove useful to many teachers.

LECTURES COURANTES. C. Fontaine, B. L., L. D., instructor of French in the high school of Washington, D. C. D. C. Heath & Co., Boston, publishers; 232 pages. Price \$1.00. This book contains forty lessons in French reading and conversation followed by English exercises for translation based upon the preceding lessons. "C'est la pratique qui rend maitre de la langue," is the text of Mr. Fontaine's work and he has prepared a valuable and pleasant series of lessons both for the teacher and the pupil. The subjects are of various interests, historical, artistic and biographical—and of considerable range—from Socrates to Pasteur. The questions which follow each lesson are so analyzed as to suggest other topics outside of the particular subject and therefore lead to general conversation. How different are these books from the time-honored Fasquelles' and Ollendorfs where one is lost in a maze of grammatical complications, from which he with difficulty extricates himself. Thankful indeed if he can articulate a few scattered sentences that would be recognizable as part of the French idiom!—F.

#### Literary Notes.

The eighth volume of Dr. Kingsford's History of Canada has just been published. It covers, perhaps, the most interesting period in our history—from 1808 to 1815. It treats the war of 1812 with the strictest impartiality and with great minuteness of detail. The *London Times* has a very favorable review of it, and says, among other things, that "naval and military authorities will read this volume for the benefit of the lessons it teaches."

T. Fisher Unwin, of London, and G. P. Putnam's Sons, of New York, announce the appearance in the course of this year of "The Story of Canada," by Dr. Bourinot, C. M. G., in the well-known series, "The Story of the Nations." It will be illustrated, and published simultaneously in England and the United States.

#### Educational Articles in the March Magazines.

*The Forum*: "The Best Thing A College Does for a Man," by Chas. F. Thwing; "The Manitoba School Question," by Goldwin Smith.... *Appleton's Popular Science Monthly*: "Educational Values in the Elementary School," by Prof. M. V. O'Shea.... *Atlantic Monthly*: "The Case of the Public Schools," by G. Stanley Hall.... *The Century* (editorial): "Two Ways of Teaching Literature."

## McGill University, Montreal, Faculty of Arts.

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To Students entering the First Year, two Exhibitions of \$125, one of \$100, one of \$100 and one of \$90.  
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To Students entering the Third Year, two Scholarships of \$125, one of \$100, and one of \$110. (One of these is offered in Mathematics and Logic, one in Natural Science and Logic, and two in Classics and Modern Languages.)

Subjects.—As stated in Calendar of 1895-96, page 25.

Copies of the Circular giving full particulars of subjects required, and the Calendar for the Session 1895-96 containing information respecting conditions of entrance, course of study, degrees, etc., in the several faculties and departments of the university, as follows: Faculty of Law, Faculty of Medicine, Faculty of Arts or Academic Faculty (including the Donald Special Course for Women), Faculty of Applied Science, including Departments of Civil Engineering, Mechanical Engineering, Mining Engineering, Electrical Engineering, and Practical Chemistry, Faculty of Comparative Medicine and Veterinary Science, may be obtained on application to the undersigned.

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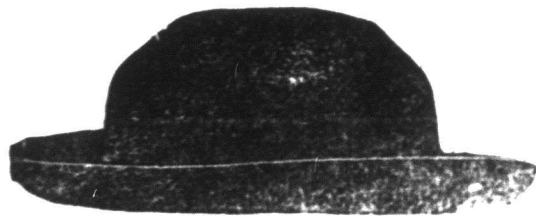
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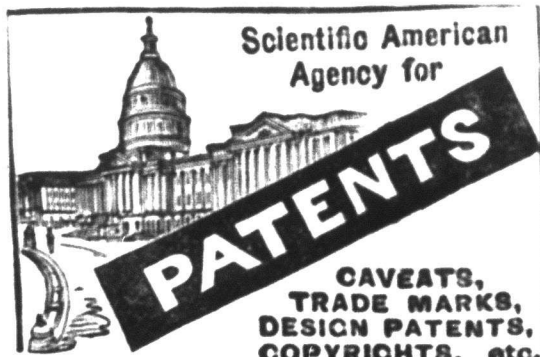


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