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The Educational Review.

Devoted to Advanced Methods of Education and General Culture.

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THE EDUCATIONAL REVIEW.

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THE death of C. W. Weldon, Esq., D. C. L., Q. C., took place at his residence, St. John, on Sunday, January 12th. Mr. Weldon had been for about two years chairman of the Board of School Trustees, and found time, amid the many active pursuits of a busy life, to give to the educational affairs of the city a large share of attention. His judicial mind, large experience in business matters, and the careful attention which he gave to the many details of this important office, caused his opinions to have great weight among those with whom he was associated, while his kindly nature and genial disposition caused him to be greatly respected by the teachers of the city.

The Week, of Toronto, has entered on its thirteenth volume. It is an excellent paper from a literary standpoint, and its calm, non-partisan discussion of political and current topics, makes it a very desirable paper for the general reader.

The death of Mr. Edward Jack, C. E., of Fredericton, occurred on New Year's day. He was a gentleman well known at home and abroad for his intimate knowledge of the timber and mineral resources of New Brunswick. His contributions to the press on these subjects, as well as on the river fisheries and the history of the province, have been many and instructive. He was at all times ready to impart his knowledge in a genial and entertaining way, that made for him many friends.

An educational article of considerable importance appears in the January *Atlantic*. It is in a measure introductory to the discussion of certain educational questions in subsequent issues, and is written by Mr. Scudder, the editor of the magazine. It treats of the School-house as a Centre.

It is understood from some remarks made by the Chief Superintendent of N. B., at a recent teachers' institute, that it is contemplated to regulate the employment of teachers according to the ability of the districts. If this plan be carried out there can be no doubt but that it will meet with the approval of all ratepayers who are interested in schools, and teachers as well. At present some of our ablest districts employ the cheapest and lowest class teachers they can engage, greatly to the disadvantage and annoyance of many ratepayers.

Sewing in the Schools.

The latest idea is to add sewing to the school curriculum for girls and take away algebra and geometry. This reform is understood to have taken its rise in Fredericton. No one will deny that sewing is a very useful branch of knowledge; so are cooking, sweeping, washing and ironing. Algebra and geometry are also very useful, and even necessary for girls who contemplate teaching or entrance upon any duties requiring a liberal education; in fact we are becoming more and more dependent upon our girls for the education of our boys as well as girls. It must also be borne in mind that the majority of the higher departments are filled with boys and girls, not girls alone, and that while the girls were receiving the teacher's undivided attention in sewing the boys would be left to themselves and could receive instruction in neither algebra, geometry, nor needle work. The instructors in algebra and geometry are in many cases men, and few of them are qualified to deal satisfactorily with all the intricacies of needle work. In one quarter a demand is being made upon

our schools to do the work of the Sunday schools, in another the work of the home, while in other quarters it is alleged that the curriculum is over crowded already

Would it not be a good plan, if instruction in this subject must be given outside the home, that its advocates arrange for Saturday classes. There is no doubt but that the use of the school rooms could be obtained, and that in the absence of other competent instructors, some of our teachers would undertake the work for a proper consideration.

Perhaps the Fredericton advocates of teaching sewing would make the beginning there, and afford the rest of the province an example worthy of imitation. In that city the services of the teachers, as instructors, would probably not be required.

TALKS WITH TEACHERS.

Last month I promised to resume the subject of spelling, and I do not know that I can do better than to quote some suggestions from "School Devices."

Ways of Examining Spelling Lessons. 1. In review lessons and in small classes the teachers should correct the lessons.

2. Pupils may exchange slates, and mark the words wrongly spelled, the teacher spelling the words slowly.

3. Pupils may retain their own slates, and the teacher may call on different pupils to spell the words orally. Those who agree with the spelling given must indicate this by raising their hands before the teacher decides as to its correctness.

4. Slates may be exchanged and the corrections made as in No. 3.

5. While the teacher writes the correct spelling on the blackboard, each pupil may correct his own work, and slates and books will then be exchanged for revision only.

6. Let the spelling come the last exercise in the morning, and direct the pupils to leave their slates upon their desks. Furnish a correct list of the words given out to two or three trusty pupils who remain at noon, and let them look over the slates and mark each error.

I am sure that all that is needed to insure the best work in this subject is a little extra vigilance along the lines I have indicated.

It is somewhat peculiar, with the increased attention supposed to be given pure professional work at the normal school, and with the added requirements for entrance, that we find those who are at least indirectly responsible for the results, holding these up to ridicule at public meetings.

When will some teachers cease to be mere machines? When will they cease slavish adherence to texts, and realize that it is upon themselves that the character of the work depends? Some of us devote more time to picking flaws in text-books than in investigating the nature of our own work. The teacher's range is not circumscribed by any one text, nor is he restrained from letting his light shine from any quarter. We must not expect to find the same treatment of subjects now as when we went to school. Growth and development is going on all along the line, and let us look to it that we keep abreast of it. Many a good book contains seeming or real inconsistencies, and few, if any, are not susceptible to criticism. This reminds me of a story once before told in these "talks," and which I repeat. "A workman using an adze cut himself severely, and indulged in loud complaint against the tool. On examining it, however, it was found to be one of the best of its kind, and the accident was not caused by a poor implement, but by the want of skill on the part of the wielder."

Now that another year has begun, let it not end without finding a step in advance in some direction. Let me advise you to increase your scholarship by systematic effort. You can do a great deal by yourselves, and although your progress may be slower by this method, it will be none the less sure. Better scholarship is being required from all our teachers, and the longer you delay self improvement the more difficult it will be to resume it. The requirements for every class of license have been added to, and in a short time it will come to be recognized that those holding recent licenses are better qualified than those of a former period. Do not be content with what you have. I think a brighter day is dawning for higher class teachers. Let us be ready for what it may bring forth.

May I again ask the teachers to inquire of their secretaries for registers before sending for them. Also to remember that the inspectors, not the education office, supply registers and return sheets, and that minutes of school meetings are to be sent to inspectors, not to the chief superintendent.

For the Review.

New Brunswick Schools of the Olden Times.

By W. O. Raymond, M. A.

(Continued.)

In the year 1816 the House of Assembly passed an act establishing a grammar school in the town of St. Andrews, and the following gentlemen were named as the first trustees or directors, namely, the Rector of St. Andrews, Robert Pagan, John Campbell, John Dunn, Colin Campbell, David W. Jack, Harris Hatch, Thomas Wyer, jr., and John Strang.

The trustees were empowered to erect a school-house, provide a master and one or more ushers, or teachers, as they should judge expedient, to enforce obedience by fines and expulsions, or other public censures, and to hold public visitations and examinations on the first Tuesday in April and first Tuesday in September. It

was further enacted that the trustees might admit any number, not exceeding eight, to be free scholars. By the terms of the act £200 was allowed by the province towards the construction of a school building, and £100 per annum towards the master's support.

During the next few years the grammar school building was erected in part by local effort, but chiefly by the aid of the province, the House of Assembly making a number of appropriations towards its completion. The particulars connected with the opening of the school may be gleaned from the following advertisement inserted in the St. John City *Gazette* and other papers of the day:

NOTICE!

The public are respectfully informed that the GRAMMAR SCHOOL of *Saint Andrews*, New Brunswick, was opened for the education of youth on the first inst., with a suitable address and prayers by the Rev. Jerome Alley, A. B., Missionary and President of the Board of Trustees of the said school, and afterwards a very excellent dissertation on education by the Rev. Mr. Cassel, Principal. The terms are as follows, per annum:

For those pupils who learn reading, writing, arithmetic and English grammar only,....	£5	0	0
For those who learn also French, geography and mathematics,.....	6	5	0
And for those who, in addition to the above, learn the dead languages,.....	7	10	0

Payments quarterly.

N. B.—A few boarders can be accommodated.

Saint Andrews, June 5th, 1819.

The Rev. Mr. Cassel, first principal of the grammar school at St. Andrews, was a Presbyterian minister, who, in addition to his scholastic duties during the week, appears to have conducted divine service for the Presbyterians on Sundays until there was a resident clergyman placed in charge of that denomination a few years later.

It will be noticed that the terms for pupils who took the full course of study at the St. Andrews grammar school were $30.00 per annum, and it is evident that only the children of wealthier parents were likely to avail themselves of the advantages of the school. Provision, it is true, was made by law for the admission of eight free scholars, but the stigma attached to a lad who was a "free scholar" was a fatal hindrance to the higher education of poor children. The St. Andrews grammar school still flourishes, having had an uninterrupted existence of about seventy-seven years, during which it has accomplished very much excellent work under succeeding masters. It now ranks third in regard to seniority among our educational institutions, the only ones having a prior existence being the grammar schools at Fredericton and St. John.

For the REVIEW.] **NATURE LESSONS.**

Lichens.—I.

This is the forest primeval. The murmuring pines and the hemlocks,
Bearded with moss, and in garments green, indistinct in the twilight,
Stand like druids of old, with voices sad and prophetic,
Stand like harpers hoar, with beards that rest on their bosoms.

Evangeline.—LONGFELLOW.

TEACHER. So you have brought in plenty of samples of the "tree-beard." Where did you get it?

SCHOLAR. I got this long bunch from the limbs of a withered fir tree.

ANOTHER S. I got it from the lower branches of a soft-wood tree which was growing all right.

ANOTHER S. I got this stubby kind of beard on the trunk of a hemlock tree, growing on the bark.

T. But if you look at the fibres of your stubby "tree-beard" you will find that they are not so round and thread-like as the others. They are stiffer and angled. It is a different kind of lichen.

S. Lichen? The "tree-beard" is a moss, is it not? According to our "Evangeline" the trees were bearded with moss like the long beard of an old man which rests on his bosom, and that was just like this specimen when it was on the tree.

T. You are quite right in seeing what the poet saw; but you must remember your "Evangeline" is poetry. It is a word painting for everybody, whether he knows much botany or not. But when we look sharply we must see that there is a great difference between one of the mosses you have collected and the lichen. You have quite a variety in your collection, I see, of what everybody calls "moss." Now all the mosses have a central stem, some of them branching, and the stem and the branches are all covered with ——

CHORUS. Little greenish leaves.

T. And you will find that when they fruit they send up sometimes quite a long, slender bristle, with a little box on the top of it, which is filled with its very fine dust-like seed, called "spores." Before these little capsules are ripe the spores are wet, forming a greenish paste. Have you ever seen anything on the tops of these capsules?

S. Yes. One big moss has squarish capsules which carries a little cap over it like a little thatched roof.

ANOTHER S. Oh, yes. We use to pull the little cap off, and then eat the little capsule before it became powdery.

T. Very well. You see that this tree-beard has no leaves. There is nothing truly green about it like the green of a growing leaf, except what the botanists say

can be seen mixed up in the middle of its substance when examined under a powerful microscope very minute round green cells all surrounded by the white cottony fibres which make up the most of the lichen when it is magnified.

S. The "tree beard" is a lichen, then; and are the other short and brushy ones lichens, too?

T. Would you not think so? And what are these large wrinkled-looking, stemless kind of leaves which you have found growing on the trees?

S. Everybody calls them lichens. They have no stems with leaves growing around them like the mosses.

T. Tell me now whether you have found many different kinds of these leaf-like sheets growing as they were creeping on the bark of the trees?

S. Yes. Here is a very large one growing pretty loosely, nearly as big as my hand. The upper side is a sort of greenish or yellowish grey, and it is all pitted as if it were trying to become honeycombed. And the under side has velvety fine fibres growing on it with large white clear spots.

T. Yes. That is the "tree lungwort," so called, because the tea made from it was supposed to be very good for the curing of all lung troubles.

S. I have found another one like it, but it is not pitted so much, and it is of a pale whitish color, a sort of greenish yellow and lead color, and it clings closer to the bark than the "tree lungwort."

T. Very good. That is a near relative. But you have seen some very much smaller, have you not, covering the bark or old wood very closely, with many narrow rounded lobes reaching out in all directions on the surface?

S. Yes. Whitish or greyish-white above and black below on the under side.

ANOTHER S. Mine has fine little black fibres, like very small roots, covering the under side. And I found it growing on old logs and on stones, as well as on the bark of trees.

T. Ah, yes. Between you both, you have noticed two of the small and most common species of Parmelia. But I see your collection is too large to go over in one day. Have you not noticed on some trees little circular stains with colors more or less different on the smooth bark of the young maple and other smoothed barked trees?

S. Yes. And they have black and sometimes brownish or whitish dots in them.

T. The dots you see are the fruits of the lichen which is so thin in these species that you have to cut the bark off in order to get the whole plant with you. There are thousands of extremely small spores formed in these fruit dots.

S. And are the pretty patches of color on the rocks, and the yellow beautiful patches on the trunks of some trees and on the old boards of ancient houses and barns lichens, too?

T. They are, and you may see the fruit dots on some of these rise up on a little stem, sometimes so short that you can see no stem, but sometimes quite long.

S. Here are stems with no leaves like mosses on them, and they have cups on their tops, and some have brown heads and some have scarlet heads, and scarlet rimmed cups. Are they lichens?

T. They are. And the scarlet and brown heads are the fruiting parts where the very minute spores are produced. There are a good many different kinds of these lichens, the reindeer "moss," so called, being one of them. I see some of you have quite a lot of this "reindeer moss." It is one of the principal foods of the reindeer in arctic regions. But our time is up, and in our next lesson we must try to learn the names of some of the more common ones.

S. Why! this is just the kind of botany to study in winter time, for we can get as many specimens as we want on the trees and the rocks and on the ground when it is not covered with snow.

T. Oh, yes. You can get perhaps a hundred different lichens in midwinter in some school sections, but that is a great many more plants than you are expected to study in a whole year. If you master a dozen or so you will do well enough; but there is no end to the fun you can have in botanizing in winter, if you only want to, for, like the monkeys, you must take to the trees principally.

For the REVIEW.]

The Howe Memorial.

To the Teachers of Nova Scotia:

The Howe Memorial Committee has asked me to solicit your assistance in securing funds to provide a statue in memory of Joseph Howe,—a statue worthy of Nova Scotia's greatest son and worthy of those who would honor him.

In addressing you there is happily no need that I should advocate Howe's claims to be thus remembered. His name is a household word throughout our province. From 1835 until his death he was the central figure in our history. His unrivalled eloquence, his invaluable political services, and his literary greatness will ever be the pride and inspiration of his countrymen. Time will but brighten the lustre of his fame.

If we would develop patriotism and noble ambition in the rising generation we must wipe away the reproach of our province, that she has failed sufficiently to honor the memory of her illustrious sons.

1. You can assist directly by contributing whatever amount you think proper. Joe Howe's strength lay in his faith in the people and in his affection for them. And now the Committee believes that all the people will deem it a privilege to contribute to this fund,—say one dollar each. You will have no difficulty in supplementing your own subscription by many others. The money should be sent to the treasurer, Mr. E. L. Thorne, cashier of the Union Bank, Halifax. He will acknowledge all receipts in the Halifax papers.

2. You can assist indirectly by making your pupils interested in Howe's great work in obtaining responsible government, a free press, railways and other privileges. There is everywhere a most lamentable ignorance regarding the nature and benefits of responsible government. This ignorance you can dispel within the sphere of your influence. As a preparation for citizenship our young people should know how we are governed. For giving such information there is no time more opportune than the present.

Every school-room should be supplied with portraits of our great men. T. C. Allen & Co., of Halifax, are preparing to supply beautiful prints of Howe, Sir John Macdonald, Alexander Mackenzie and the Queen—all for the small sum of one dollar (size 20x15 in.) Such pictures would brighten our school-rooms, cultivate good taste, develop a love of country and stimulate youthful ambition. We would suggest that at the earliest possible date a series of lessons be given in the schools on the biographies of our great men, and on our constitutional history. In colleges and the larger academies the students' clubs might appoint committees to awaken interest and collect funds for the memorial. $15,000 at least is needed.

If you will favor me with a report of progress, or with suggestions, I will be glad to submit your communication to the general committee. Let us erect a statue of which we will be proud.

Yours very truly, ALEXANDER MCKAY.

Halifax, December 23, 1895.

The Frosted Pane.

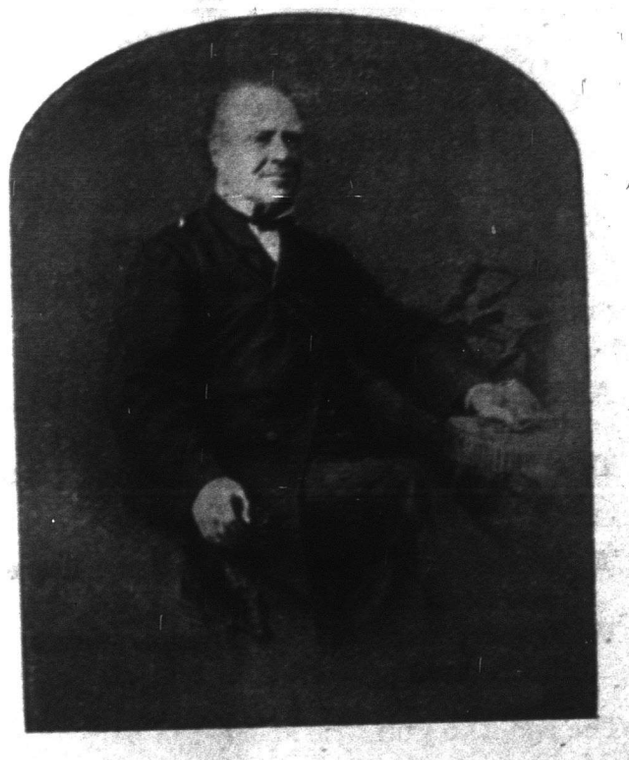
One night came Winter noiselessly, and leaned
Against my window pane.
In the deep stillness of his heart convened
The ghosts of all the slain.

Leaves, and ephemera, and stars of earth,
And fugitives of grass—
White spirits loosed from bonds of mortal birth,
He drew them on the glass.

—*Charles G. D. Roberts in Atlantic Monthly.*

For the REVIEW.]

Joseph Howe.



An extemporized public meeting was called in Halifax on the 13th of December to honor the memory of Nova Scotia's great patriot. The occasion was the ninety-first anniversary of his birthday. The day will never again be forgotten, although the "histories" do not mention it, for under the auspices of the meeting a movement has been inaugurated to give an opportunity to the people, whose champion he ever was, to raise a statue to commemorate the work of his genius. While in other dependencies of the British crown responsible government was obtained only after stress resulting in bloodshed and revolt, Howe wielded the tongue of the orator and the pen of the diplomat with more magic influence than his contemporaries could the spectacular mob and the incendiary's brand; in fact he taught them how to conjure light from the eastern sky by the sprinkling of dew drops, instead of wrecking the ebon vault with thunderbolts borne on the tornado and drenched with hail. The statesmanship of many other colonies, as well as of his own, was benefitted by the demonstration of the success of his methods.

He was born on the 13th of December, 1804, the son of a printer, and laid down his weary head to rest on the 1st of June, 1873, a governor of his native province. His father, John Howe, was one of the United Empire Loyalists who left Boston rather than change his flag. He became Queen's printer, and later the postmaster-general of the province. Joe was born and lived during his boyhood in the paternal home on the banks of the North-west Arm, Halifax, just on the margin of what is now one of the finest city parks on the continent—Point Pleasant Park. He thus refers to his natal

spot on the occasion of his fifty-ninth anniversary in one of his poems, in which he is addressing his youngest son:

Come hither, boy, and let us dream
Of birth-days long gone by;
Cloudless and merry many seem,
And some that make me sigh.

My first was stormy, wind north-west
The gathering snow-drifts piled;
But cosy was the mother's breast,
Where lay the new-born child.

* * * * *

And thirteen times the day came round,
Within that happy home,
The "North-west Arm's" enchanted ground,
Ere I began to roam.

'Midst trees, and birds, and summer flowers,
Those fleeting years went by;
With sports and books the joyous hours
Like lightning seemed to fly.

The rod, the gun, the spear, the oar,
I plied by lake and sea —
Happy to swim from shore to shore,
Or rove the woodlands free.

To skim the pond in winter time,
To pluck the flowers of spring,
'Twas then I first began to rhyme,
And verses crude to sing.

* * * * *

My next ten birth-days labor claimed,
And hard I worked, my son;
But still at something higher aimed
When'er my toil was done.

I worked the press from morn till night,
And learn'd the types to set,
And earn'd my bread with young delight,
As you will earn it yet.

In the dull metal that I moved
For many a weary hour,
I found the knowledge that I loved,
The life, the light, the power,

But something more turned those young days
Of steady toil to joy —
Something we both may kindly praise,
Your mother's smile, my boy.

And now that I am growing old,
My lyre but loosely strung,
For God's best gift my thanks be told,
I loved while I was young.

For five-and-thirty years that love
My varied life has cheered,
Through all its mazes deftly wove,
The light by which I steered.

We leave his own picture, as sketched here up to the year 1863, to mention a few of the principal events in his life as a public man. It was in 1827 he became a proprietor of the press, first of the *Acadian* and soon after of the *Nova Scotian*. Although some of his editorial writing, as well as his poetry, does not come up to his average standard, his power in the press was as great as his mesmerism on the platform. He reported with his own hand the speeches in the assembly and in public, and was always acknowledged to have dealt fairly with all, even his opponents. He had a very great power of summing up the points of a speech so as to give, as nearly as possible, the force of the whole in condensed form. His *Legislative Recruit* began to appear in 1830 and rapidly won attention. In 1835 he published that article which the oligarchists could no longer tolerate, and when indicted for libel his case appeared to the legal profession so hopeless against the high influence urging the prosecution, that he could not get counsel. He was bound to defend the case, however, because he felt he was right, and therefore determined to become his own lawyer. He borrowed his law books and commenced the study of the case with more interest than the average lawyer, it may be inferred. The circumstances of the indictment made the occasion one of transcendent interest to the public while the trial lasted. And when the defendant, in his closing address of six hours to the jury, saw the tears stream down the face of one of the old men who were soon to render the verdict, he was no doubt feeling easier; and good reason had he, for they were no more than ten minutes out until they returned, agreed on the verdict, "not guilty." This victory gave him tremendous prestige. In 1836 he was elected to parliament for the county of Halifax. Two years later he travelled in Europe in company with another famous Nova Scotian of like literary turn of mind, Judge Haliburton, the author of "Sam Slick." In 1838 he returned and entered into public life with enthusiasm, fighting the battle of the people against a government and form of government which was entirely independent of the will of the people, and, in fact, was opposed to the interests of the people. In 1848 the day of his triumph came when Mr. Uniacke was called to form a government, of which Mr. Howe became provincial secretary. In 1863, the date of the verses above quoted, he became premier in the place of William Young, who was raised to the bench. After the fall of his government in the same year he was appointed to an imperial post. He opposed the formation of the Canadian confederation in 1867 in favor of another scheme, but was from a very early time one of the most eloquent advocates of some form of imperial federation. Being unable to have the confederation act repealed, he entered the dominion cabinet

as president of the council on the condition that better terms should be conceded to the Province of Nova Scotia in 1869. The improved terms were granted; and in 1873 he was appointed governor of his native province. But his health failing for a few years back, rapid y declined, after entering government house, with the result already noted.

Very many of Mr. Howe's speeches are masterpieces of eloquence, but there is more than the eloquence of language there. He excelled, however, in framing resolutions and diplomatic letters. Perhaps more than any other statesman he appeared to have a prophetic vision of the development of history; and while the logic of his pictures convinced his hearers, time has demonstrated the accuracy of his forecasts. Much of his verse, also, is of a very high order. The genialty of his disposition, his consideration often so very thoughtful for the comfort of the poorer people, his never exhausted fund of humor and anecdote, his patriotic spirit which blotted out self, all blended together to make him a full rounded man in every walk of life.

For the Review.]

Queries and Quotations.

"An inspiring teacher is a treasure." Are you such a one?

Have you adopted the vertical writing yet? If not you had better do so. It has come to stay. "Behind the times" shall be the verdict for all those who have not adopted it.

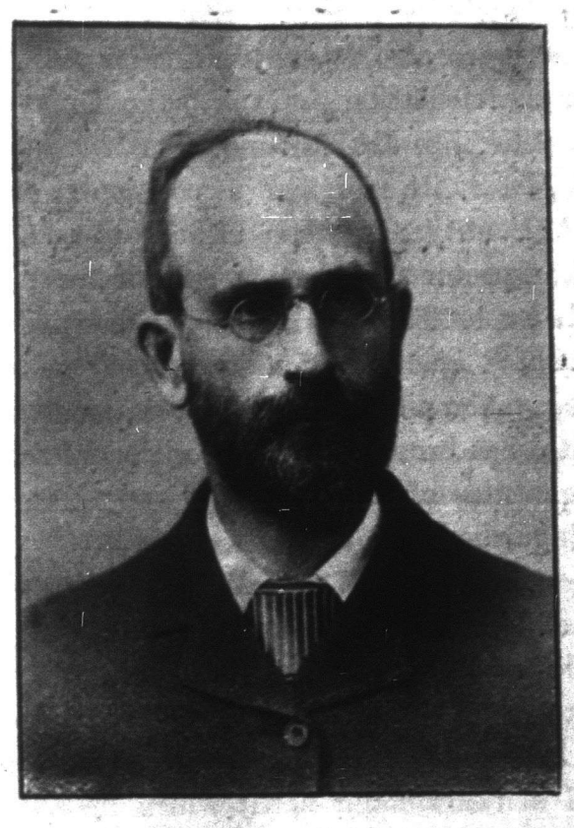
"We are to teach a child to know, to do, to think, to be." Is it your aim to teach him merely to know? How many neglect the do, think, and be?

Have you ever watched the interest evinced by your pupils in the amusements of the play-ground, and asked yourself if it were possible for some such interest to be awakened in the exercises of the class-room? It is possible to make the reading exercise as interesting as the exercise with the ball. The lack of interest is due more to wrong handling of the pupils by their teachers than to a natural dislike on the part of the pupil.

The Spaniards have a maxim, "Education is in part manners." The maxim of manners are: "Value the good opinion of others, do as you would be done by." The teacher should inculcate the necessity of good manners upon his pupils. Lead them to observe the effect of good and bad manners. What does good manners include? These among other things: Respect to parents. Respect to authority. Respect to age. Respect to sex. Respect to those beneath us. In teaching manners remember that "example is more powerful than precept," and it would be well for us sometimes, as unmannerly conduct is noted on the part of our pupils, to ask ourselves "have they learned it from me?"—S.

For the Review.]

Geo. Smith, A. B., Inspector of Schools.



The subject of the present sketch, Mr. Geo. Smith, Inspector of Schools for the Counties of Westmorland and Kent, N. B., was born in the Parish of Norton, Kings County, October 26, 1844, and is therefore in his fifty-second year. He is the oldest of New Brunswick's inspectors, both in years and seniority of appointment, which dates back to December, 1879. Mr. Smith received his early education in the common school of his native place. In his seventeenth year he began teaching. He entered the normal school in 1863 and obtained a license of the second class. During the following years he attended two terms, during the intervals of teaching, at the Norton Superior School, which had then more than a local reputation under Mr. R. C. Weldon, now a Ph. D. of Yale and Dean of the Law School of Dalhousie University, and M. P. for Albert County. Mr. Smith obtained a first class license in 1868. In 1870 he entered the University of Mt. Allison, Sackville, paying his own way by teaching in the male academy. He graduated in 1874, and continued as teacher in the academy the following year. In June, 1875, he was appointed master of the Superior School at Elgin, Albert County, which became a grammar school in 1876, when Mr. Smith passed his examination for and secured a grammar school license. During the four and a half years that he conducted the Elgin school, his success as a teacher, which had been marked at Mt. Allison for tact, thoroughness and originality of method, and the love and respect with which he was regarded by his pupils, was greatly ex-

tended, and as evidence of this it may be said that during this period of over four years he prepared more than thirty pupils for normal school, all of whom were successful, as were also two students who passed examination for matriculation—one into the University of N. B., the other into Mt. Allison.

In 1879 Mr. Smith resigned his position as master of the Albert County Grammar School to accept the position of inspector of schools for inspectoral district No. 3 as then constituted. Although the bounds of his inspectorate have been occasionally changed, no material alteration has taken place since his appointment in 1879.

Mr. Smith has brought to the position of inspector the same qualities of tact, geniality and thoroughness which distinguished him as teacher.

He was married in 1878 to Miss Angeline Steeves, and of five children of that union, three are living. Mr. Smith resides at Sackville, near his alma mater, which may serve to recall the struggles and triumphs of years ago, where he compelled regard and won respect for the plucky and self-sacrificing spirit which he showed in paying his way through college against many adverse circumstances, and where he has the gratification of seeing his only son enjoying the greatly increased facilities which that excellent institution affords for obtaining a liberal education.

For the REVIEW.]

Materials for a History of the Province of New Brunswick.

BY W. F. GANONG PH. D.

I.—THE BIBLIOGRAPHY OF NEW BRUNSWICK.

Since of making many books there is no end, it has come to pass that no one can keep track of such a multitude without the help of lists and classifications of them. Hence we have books which are lists of books, that is bibliographies; and if books continue to multiply, as of course they will, a science of arrangement of knowledge about them must arise, which perhaps will be called Bibliology.

For the existence of proper bibliographies I can think of several reasons, which may be arranged as follows:

First, there is the hugeness of the number of books, or rather of things printed, which makes it impossible for any but specialists, and hard even for them, to keep up with the advance of knowledge which they mark in any subject, while he of more general interests is well-nigh helpless. Proper bibliographies, kept up to date, enable all to know what exists upon any given topic.

Second. When future students undertake the thorough investigation of any topic, the literature will be so voluminous that without bibliographies it will be nearly impossible to find what relates to that subject, and hence much of value will be lost to him, and much already in print will be done over again. It is our duty, and will assist in the advancement of knowledge in the future, to make complete contemporary bibliographies.

Third. Many books of great interest are likely to be lost sight of by those who would value them, unless called to their notice by bibliographies. I have heard people lament the paucity of good literature relating to New Brunswick. How many know even of the existence of such works as Dean Sage's book, "The Ristigouche," by far the most superb work ever issued about any part of the Atlantic Provinces, and probably about any part of Canada. With its clear and entertaining English, its valuable original observations on the physiography, natural history and ethnology of the Restigouche region, its splendid illustrations and its sumptuous make up in type, paper, form and binding, it is a work to warm the heart of all lovers of any kind of books. Then there is Governor Gordon's "Wilderness Journeys," a classic in the literature of the esthetic utilization of our noble rivers, while Dashwood's "Chiploquorgan," Hardy's "Forest Life in Acadie," Alexander's "L'Acadie," Adams' "Field and Forest Rambles," and parts of many other books, provide an altogether unusual abundance of good matter on outdoor life in New Brunswick. Those who are interested by early New Brunswick life would, if they knew of it, find Mrs. Beavan's "Life in the Backwoods," an account of country life fifty years ago, written by a cultured and observant Englishwoman most entertaining, while Head's "Forest Scenes," and many others which I cannot even mention here, contain valuable and interesting materials upon New Brunswick history, natural history, topography, etc. There is no lack of literature about New Brunswick, but only of proper bibliographies to make it known to us.

Fourth. Perhaps the most marked feature of present educational progress is the tendency to bring students into contact with original sources of information, so that they may derive their knowledge freshly and at first hand. The naturalist sends his pupils directly to nature, and the historian is coming to send his to the original documents upon which our knowledge is founded. It will be a happy day for the schools of the Atlantic Provinces when the narratives of Cartier, Champlain, Denys and other explorers are made accessible to them in the original or in literal translation. Another tendency in higher education is the encouragement of the comprehensive and comparative study of

numbers of books, which cultivates the habit of sifting and correlating evidence to the formation of more correct judgments. Proper bibliographies show to all where original sources of information lie.

Fifth. In no way can so good a bird's eye view of the position of a country in science, art, literature, etc., be gained as is given by a good general bibliography of the works relating to that country and of the works of the authors it has produced.

Sixth. People may, through bibliographies, come to know the historic or other value of books they possess, and to make good use of them.

Seventh. Bibliographies are guides to the most delightful of hobbies—book collecting. Blessed is the man who hath a hobby, who, in his hours of leisure, or when his business goes not well, can turn for pleasure and rest to some subject which never palls. As there are many men, so there are many hobbies, and of these the greatest is book-collecting in some limited field. There are charms in musty bindings, yellow paper, *f*'s like *s*'s and grotesque cuts, in quaint style and in projection of oneself into other times where he can walk superior like a prophet, for being in one age he yet knows the future. Book-collectors often are bibliographers, and bibliographers generally are collectors.

Thus far the uses of bibliographies; let us next examine what kinds there are. They fall at once into two sorts; first, the description, and second the critical. Of these naturally the first is by far the more common. Its aim is simply to give a descriptive list of works, without attempting to estimate their value. Under description it gives author's full name, full title of the work, place and date of publication, and name of publisher, number of pages, size, number and kind of illustrations, to which may be added any interesting or important facts about its rarity, cost, etc. The ideal of such a bibliography is completeness, which may go so far as to include in it not only everything printed, but even all known manuscripts relating to that subject. Conspicuous and altogether admirable models of this kind of work are Pilling's Bibliographies of the Indian Languages, published by the U. S. Bureau of Ethnology, all of which are in the highest style of bibliographical art, and one of which, the Algonquian, includes all works relating to our own Indians. Another good example is Gagnon's "Essai de Bibliographie Canadienne," recently published at Quebec. Critical bibliographies aim not only to describe works, but to estimate their value. They can be made only for special subjects by specialists, who alone are capable of estimating the value of each work. The bibliographical notes in Winsor's "America" and in Bourinot's "Cape Breton" are conspicuous examples.

As to range and limits, these naturally vary with the subject, which may be a country, a science, the works of some man, or any particular topic whatever. Then they are of all degrees of completeness, from those which aim to include every publication upon a subject down to those which are only lists of the principal works consulted during some study. Often they aim to include only books and pamphlets, excluding articles in periodicals, since these latter are much less likely to be overlooked or lost. Another sort will include only those publications which contain original matter, and so through a variety of plans: but in all the ideal is completeness and impartiality.

Passing now from generalities to our particular subject, we have to examine what bibliographies there are for New Brunswick. They are as follows:

(1) Bibliotheca Canadensis. By Henry J. Morgan. Ottawa, 1867. A fairly complete list, alphabetically arranged by authors, of works of Canadians, from which those of each province must be picked out.

(2) Notes upon New Brunswick Books. The St. John *Sun* at intervals in 1885.

(3) Bibliographies of works relating to the Mollusca and Echinodermata of New Brunswick. Bulletins of the Natural History Society of New Brunswick, Nos. 6 (1887), 7 (1888).

(4) Bibliography of the Algonquian Languages. By James C. Pilling, Washington, 1891. Under the words Micmac, Maliseet, Passamaquoddy, Abnaki, may be found complete references to bibliography of the languages of our Indians.

(5) New Brunswick Bibliography, the Books and Writers of the Province. By W. G. MacFarlane, St. John, 1895. Re-printed from the St. John *Sun*.* Up to the present this is the only attempt to produce a complete bibliography of New Brunswick, and forms an excellent foundation for progress towards a final satisfactory work. It is fairly complete, but is marred by great unevenness of treatment, too scanty description of works, misprints, citation of anonymous works under names of their authors when known, without hint that they were published anonymously, and lack of repetition or cross references in cases of joint authorship. Despite these faults, however, it is a welcome and valuable work.

(6) Bibliography of the Members of the Royal Society of Canada. By John G. Bourinot. Trans. Royal Society of Canada, Vol. XII, 1895. Under the names of Bailey, Dawson, Ells and Matthew will be found lists of publications, many of which relate to New Brunswick.

(7) Essai de Bibliographie Canadienne. By Phileas Gagnou, Quebec, 1895. Most excellent, but very incomplete for New Brunswick.

(8) Bibliography of Publications relating to the Natural History of New Brunswick from 1890 1895. By S. W. Kain. Contained in Bulletin No. 13 of the Natural History Society of New Brunswick, 1896. This bibliography is to be issued henceforth yearly for the current year. A most praiseworthy undertaking, and one which could advantageously be imitated by the Historical Society.

All of these bibliographies are but a beginning; one complete and worthy of the province will be built upon them. But before it can be ideal, there are certain other subjects which must be worked out, which are as follows:

(1) Periodical literature relating to the province. This can be done comparatively easily for popular articles by the aid of Poole's Index to Periodical Literature.
(2) Publications of the government, including Journals of the House of Assembly, etc.
(3) Publications of societies.
(4) List of periodicals published in the province.
(5) List of New Brunswick newspapers.
(6) List of maps of the province.
(7) List of views, engravings, etc.
(8) List of manuscripts contained in government archives and private collections.

Nos. 6 and 7 of this list I am myself at work upon, and the others I commend to my fellow students.

*Some additions to this list have been offered to the St. John Sun, and will probably appear in it during the early part of the year.

The Ideal Product of the Common School.

[Read before the Provincial Educational Association, N. S., by Principal Lay, of the Amherst Academy.]

Ideals are very unsatisfactory things to write about, very elusive things to search for, except by novelists and poets, and they are on safe ground, for they manufacture not only the ideal, but the forces that produce it, and according to their skill can correlate them. In this present discussion we have the forces in being, very complicated forces, and out of a very vast and varied display of products we are supposed to be looking for an ideal. Will we find it, or, if the present speaker does so, will it be at all after the fashion of anything on the earth or in the sea of his neighbor's imaginings? I have had a good opportunity of seeing the products of our common school system, for as pupil and teacher I have known it since its inception, but up to the time of the announcement of this paper, I am doubtful whether I had seriously thought of any particular being or character as its products. In common with my fellow-teachers of similar length of service, I have followed many and varied careers in the person of old pupils. The pulpit, the bar, medicine, the farm, the ocean, the merchant's office, and even a very unique experience, the convict's cell, have sent me tokens of recognition as an old teacher of some occupant, and never did I think of their condition as the product of forces I was superintending. I acknowledged the force of the home, of companions, of heredity, but not of the school room in these products, but after all there may be floating about the direct product of our school system.

But let us try to gather from our subject what the compiler of this programme was seeking for when he evolved the title, and to do so let us study the course of study. Prominent there we find the time-honored trio, which have given all students the power to command the whole field of knowledge, and to enter and possess if he pleases.

Reading.

Our ideal reader is not only able to read to his own satisfaction, but to please his listener, for his training has given him something of elocutionary skill, and added to that, a tact for seeing the meaning readily, together with a taste for the most profitable kind of reading. And he is going to revive the good old custom in the winter evenings, of reading aloud to the assembled family circle, instead of selfishly burying himself in book or newspapers. Does our course make such readers? Is the source of the pupil's reading such as to give him a taste for good and beautiful literature? Is this spending of a year at a reading book that does not contain as much as a good daily newspaper, often perhaps familiar beforehand through the reading of the last class, this repeating and re-repeating of old lessons until the time comes for a new book, to profit? Do those books contain the most judicious kind of reading? Are our teachers getting the kind of training that will enable them to produce our ideal reader?

Writing.

Then our ideal pupil is a good writer, no flourishes, but a plain honest hand that taxes no one's eyes or patience, but lies level, black and upright before you on the page. His copy books have been so well graded, his teacher's watchfulness so ever present, that he is a good writer, and prides himself upon it. He knows when he writes a letter, just how to fold the paper to fit the envelope, instead of thrusting it in in a bundle. The address looks fair from east to west, and is plain enough to run the risk of the dead letter office. He knows that his writing is the first testimonial he will present to the world which he is eager to enter, and he is not afraid of its inspection.

Arithmetic.

He is able to perform the fundamental rules correctly and neatly rather than quickly. There is no more chance of making a mistake in the addition of a lengthy column than of a dwarf one. His knowledge of frac-

tions will enable him to add or substract $3\frac{3}{8}$ and $4\frac{1}{2}$ without reducing to improper fractions and finding the common denominator, and there is no chance of his misplacing the decimal point. He can tell you the number of cords in a pile of wood, the number of bushels in a bin of grain, the thousands of shingles or feet of boards necessary to cover a building. He may not know how much above cost to put the price of his father's hay or butter or beef, so that a certain per cent may be dropped, and the old man still make a profit of another certain per cent, but he is able to tell the cost of butter or beef, or hay, and whether ruling prices are giving him a profit or not. He does not grieve if he is ignorant of the metric system, for his father has told him how easily the pupils of a former generation dropped into the use of dollars and cents when this use was made a necessity, although the boys and girls were not educated up to it by years of drill in the arithmetic. He is satisfied that when the government calls upon men to use metre and kilogram, that they will pick them up as easily as their fathers did the dollars and cents, and that necessity after all is the only schoolmaster that educates people up to the point of adopting the new for the old. He is not quite sure about true discount, but he can calculate the interest on a note correctly.

He can keep a correct account of his doings with his neighbors. It may be all done in one book, preferably a cash book, for he has reached that point in ethics which requires him to owe no man anything, but that book shows him his standing, and can yield him just as plain a balance sheet as if he knew all about ledger and day book and all the multifarious rules of journalizing. He can write you a note if necessary without leaving out the essential parts, and can give a receipt.

His knowledge of drawing enables him to draw the plan of the interior of a house and a fair elevation of it. He cannot perhaps, draw a cone in different positions, but he can sketch a maze of country roads to the untravelled stranger. He is not good at ornamental designs, but he can sketch to the carpenter what he wants in door or bookcase, can draw a field or garden plot, perhaps measure its angles and estimate its area.

What little manual training he received has been in connection with this, so that his knife, at the least, can follow his pencil plan. and his designs show in relief as well as on the flat. He can fold and tie a parcel neatly, can give a good point to a lead pencil, and do many a little thing that only a careful teacher sees can be made useful in his training.

His careful attention to form and frequent re-writing of common words enable him to spell the ordinary words in a letter, while his teacher's care in drilling him in the use of a dictionary keeps him from making a dash at the extraordinary ones. He is still hoping for the spelling reform, but his teacher tells him it seems to be farther away now than a decade of Associations ago.

Grammar.

I am afraid a rigid examiner would find his parsing and analysis a little out, and his definitions not always correct. He has forgotten many of the rules of syntax, and forgotten page after page of etymology, but his faithful instructor has so cultivated his ear that it is pained by bad syntax, and has so carefully watched his playground English that he speaks correctly. We understand his meaning, spoken or written, which is more than we can say about our text books on grammar sometimes, and we thank our school system and take courage, since he has been enabled to steer clear of the Giant Despair of formal grammar, and in spite of him walk erect before his castle, clothed in the armor of honest Anglo-Saxon.

I would like to see the experiment tried of putting the text-book on grammar out of the schools for three or four years, and then a careful examination made to see whether our ideal speaks and writes the English language more or less correctly as the result. Will he be any more apt to say he "laid in bed too long" and to tell his dog "to lay down," than he is now? When he hears they are going to begin the study of grammar again, will he be any the less likely to say "I ain't going to study no grammar?"

Composition.

As to composition, our Grade VIII describes it well. "Pupils at this stage should be able to express themselves fluently and with fair accuracy in writing for all ordinary purposes," though how they are at this particular stage to do so is not, perhaps, quite so plain. But all along the way advice has been given and principles laid down evolving a boy who can write an interesting letter home about school or scenery—not the ones in the comic papers, they are written by grown up boys who are paid for it—but a description that tells us plainly what the writer wishes us to know. And he has not forgotten his punctuation marks, for he has been taught to get along fairly well with comma and period, and a question mark if he needs one. The capitals are all in their proper places, and if he has been taught to paragraph, the divisions are as patent to the eye as to the mind.

Geography.

He leaves in his text-book, instead of his head, the heights of mountains, lengths of rivers, latitude and longitude, but is able to sketch from memory a fairly

correct map of his county, his province, and even of the continents. He knows a good deal about the surface of his native country, the direction of its rivers, the slope of the land, facilities for farming or manufacturing or mining, and has some general idea of the same in foreign countries. He has pretty shrewd notions of the effect of situation, slope and surroundings of a place on its climate and even its soil, and can figure a little on early frosts or drought in such a locality. As you see, a good deal of his geography has been learned out of doors. He has traced a brook to its source, and watched its work; has seen the work of the stream in bringing down its tidal sediment and wearing away the land, enough for him to understand something of what these forces have accomplished in the past.

History.

He does not know a great deal about history, but he has had enough interest aroused in his mind on the subject in the school room to determine him to read up as soon as he can get the books. What he has learned about the colonization and discovery of his native province has whetted his curiosity about his forefathers and their history, and what he has gathered about government is going, by and by, to set him seeking into the politics of other countries. His past relations with his neighbors have given him an interest in present ones. He has heard much interesting biography from his teacher, the lives of the true and the brave have been brought near to him, and he is going to emulate them. He knows about the government of the school section, who the members of the county council are, how they are elected, and what are their duties. He knows who goes from his county to Halifax every spring for the session of parliament, who sends him and what he goes for, ditto about the greater personage that journeys to Ottawa. In short, although not great at dates or genealogies, his human interest with the rest of the big family of man has been touched, and he is a better member of that family, and better equipped to take his place in it, and help shoulder it along the path of progress.

Nature Lessons.

These have been so numerous and so varied, that it is hard to say just how our ideal pupil is equipped by their aid, but the teacher's faithfulness and the help of the course cannot have been in vain; he must have imbibed a strong love for nature. He has forgotton, or perhaps never heard the botanical terms, but he knows the rose, fern and heath whenever he meets one of their numerous offspring, and this acquaintance begets interest. He knows an annual from a perennial weed, and he knows whether it is necessary to destroy the root or not. He knows something about grafting and sets, and altogether his knowledge, although not very bookish, is of the nature that leads to practical results. And then he has learned a little about soil and plant food, not much, but enough to tell him the difference between hungry and fertile soil, between the food necessary for the pea and for the potato.

For minerals, he knows a piece of quartz when he sees it in other ways than by its colour, can tell limestone from plaster, gold from pyrites, is quite sure about iron ore, and certain that he won't mistake any variety of it for manganese. He would not prospect for coal along the granite coasts of Guysboro, nor for gold in a Cumberland freestone quarry, and although some of this is the result of later experience, the lessons of the course have had an important place in obtaining this knowledge.

He knows the life history of an insect, can recognize the injurious ones, and knows a little about their poisons, will not kill the lady bug and the ant along with the aphis, but will recognize them as friendly fellow-destroyers. When some new maggot attacks his carrots or onions, he knows it is a larva, patiently tracks it to its pupating home, preserves it till the insect appears, sends his information to the man of science, from whom he receives the compliments due a discoverer, and who sends a learned disquisition or some simple formula conducive to the future welfare of onion and carrot crop.

He understands the use of the barometer and thermometer, can tell you the danger of bad ventilation, learns its signs and some simple ways of overcoming it. His simple health lessons have taught him the danger of narcotics, the advantage of exercise, necessity of care in eating and drinking, care of his teeth, how to stop bleeding in case of accident, what to do in case of drowning accidents, scalding, etc., till the doctor comes

Moral and Patriotic Duties.

He may not be able to give an exact definition of loyalty or patriotism, but he feels both. His lessons on the old flag, the greatness of the mother land, and the future of his native one, the stories of those who have battled for what he now enjoys, have started in him a little plant of patriotism that is bound to grow, and has made him a loyal son of Canada, and when he comes to manhood, whether he be Grit or Tory, and the ideal boy is going to be largely grit, he will see that his country's birthday is going to be a school holiday. His morals have not been neglected. He has been taught to love purity and truth, to be honest in everything, respectful and gentle to all, scorning a mean action, delighting to help the weak, doing as good a day's work for his neighbor as for himself.

These are some of his equipments, but not all. I trust that along with them the true end of his training is not lost, the power has been put in him of acquiring new knowledge. His eye and hand and mind have been taught to work together, not to pile up truths in his memory that others have hewn out of the rough, but to pick up their untouched or discarded blocks, and by his own 'prentice hand discover what is hidden, to use his mind, his eye and his hand in observing the visible world around him and in judging according to evidence.

Now, I flatter myself I have sketched quite a delightful young person, and one whom you are all glad to know, and you all know him, for is he not the product of our common school system? *i. e.*, the ideal product? If not, where lies the fault? In the course? Assuredly not, for it has everything down in black and white that I have mapped out, and a good deal more. Does the course then demand too much? You would be loath to think so, after accepting it unreservedly for so many years. You would be throwing a grave reflection on your judgment. Are our boys and girls not of the make up to digest this food? You reject that. Again, our teachers themselves are the product, and presumably the best product of this course, for it all leads up to the teaching syllabus. This increases our perplexity. Where then is the difficulty? It must be in the teaching; these good appliances must be misused. In what other way can we explain it, if our ideal is not to be found, or if so rare as to be a museum curio? My own opinion is that the teacher in the mass must be blameable, but he has not to bear all the blame; the heaviest part of that rests on the system that calls an unskilled workmen to perform skilled labor; that puts into the hands of the raw apprentice the costly tools and delicate material that should fall to the lot of the master workman, and, worst of all, leaves it there. But the workman must serve his apprenticeship! True. He must make mistakes? True, again. We are forced to employ this unskilled labor! But the terrible truth is that the apprentice takes possession of the shop, and although he remain an apprentice all his days, he stays there. Even after a normal school training, he is but an apprentice, his manner of approaching his work a little more confident, his tools a little brighter, but perhaps not more skilfully handled when he comes to use them from under the eyes of his master.

And I am here to testify that in scores of hamlets in Cumberland and Colchester, when those polished tools, that went so smoothly through the carefully prepared material at Truro struck against the rough knots of the raw material that they were thrown aside with the terrible disappointment of failure, often never to be resumed.

The trouble then is, that the apprentice does not go on "from more to more," mainly because his training ends so soon. Where is this after help to come from? There is the rub. I have my own opinion about it, but that is another matter.

I may be allowed a word of explanation here. I took the liberty of changing the title announced for my paper. It should be not *the*, but *my* ideal product of the common school course. The ideal product of my idea of a course might present more striking peculiarities. I do not want its shoulders to be burdened by more than it has to bear.

For the Review.]

Teachers' Conventions.

York County, N. B.

York County Institute for 1895, which met in Fredericton 19th and 20th December, is now a thing of the past. Still it lives, let us hope, in the memory of the many members, and may it bear the fruit of increased enthusiasm and improved methods during 1896.

Was it a successful institute? That depends upon the idea one holds in regard to what makes success. Is it numbers? We had an enrolment of one hundred and twenty-two, the largest on record. Is it the regular attendance of the members? This year showed a marked improvement along this line. Is it the attention of these members? Never did we notice such earnest and eager listeners. Is it taking part in the discussions? If so, here we failed. The reason for this may have been that the papers were so exhaustive in treatment and so carefnlly prepared, that they needed no additions, and no faults could be found. The closing session was the most lively. The subject under discussion was grammar. All seemed to agree that the formal teaching of this subject was imperative. An impromptu lesson given by a very enthusiastic teacher enlivened affairs considerably, and doubtless gave to some, new ideas concerning manner and method. Unfortunately, the darkness fell upon our talk and we had to adjourn, although several felt that much might and should have been said to emphasize the necessity of teaching formal grammar. Many privately expressed regret that attention had not been called to the slighting remarks concerning the study of syntax and analysis that sometimes creep into the "Notes on English" in the Educational Review. Perhaps these remarks have more influence, and the suggestions may be carried further by inexperienced teachers than the writer intends. Perhaps, sometime, he will explain how we

can correct the language in essay work or in conversation, unless the pupils have some knowledge of the rules of syntax. Suppose they have a false concord, how can you explain the error so that it, or one like unto it, may not occur again unless the pupil has studied the rules governing such a case?

But grammar was not the only subject discussed. An afternoon devoted to music was most enjoyable. Our honored inspector gave a scholarly and interesting talk upon music in general and its effect in the school. Professor Cadwallader followed, giving a practical lesson on the Tonic Sol-fa, convincing everyone of its simplicity and great advantages over the old staff system. Some of us who were unfortunate enough to be without that sixth musical sense, were about persuaded that had we been taught in that way in our youth, we need not "to die with all our music in us."

Principal Foster, of the Fredericton Grammar School, read a most helpful paper upon "Moral Teaching in our Public Schools." He evidently did not agree with Browning that, "'Lied' is a rough phrase; say he fell from truth in climbing towards it!" but seemed to think it better to call things by their right names and to leave euphemistic language to the poets. Several of the members of the institute expressed a strong desire to see this paper in print, and would be glad if the REVIEW could secure it for publication.

Principal Mullin, of the Normal School, gave a "Talk on Psychology." His principal points were:—"Read one or two good text-books; be a student of human nature; know yourself; know your pupils; sympathize with them; have faith in them," etc. As there are not many Mrs. MacFadjens in the world, some points may be omitted. Professor Davidson, of the University of New Brunswick, addressed the institute on this subject. He thought our greatest mistake as teachers was, that we did not put ourselves where our pupils are, and so fail to understand why they do not understand. He emphasized the necessity of studying good text-books.

We were pleased to have Dr. Inch with us so much of the time. His address was listened to with much appreciation.

Prof. Dixon, of the University of New Brunswick, gave us an evening devoted to the study of Mars. The hall of the normal school was pretty well filled, and the lecture was full of interesting information. Many of the points of interest might be taken up, but space forbids.

The officers for next year, are:—President, Mr. A. S. McFarlane; Vice-President, Mr. H. H. Hagerman; Sec'y-Treasurer, Miss Ella L. Thorne.

Additional Members of Executive:—Messrs. B. C. Foster, J. F. Rogers, and J. F. Owens, and Misses E. Thompson, and Eliza B. Hunter. ONE PRESENT.

CARLETON COUNTY.

The Carleton County Teachers' Institute met at Woodstock on Thursday and Friday, December 19 and 20. Inspector Meagher presided. Papers were read by Henry Harvey Stewart on "History in the Public Schools;" by Edwin E. Kinney on "Composition;" by Mrs. Gilmor on "Reading;" by Miss Jennie Cadwallader, on "Nature Study," and Mr. E. E. Kinney gave a lesson in writing to a class of pupils. On Thursday evening a very enjoyable conversazione was held at which there were music, addresses and refreshments. The following officers were elected for the current year: Allan A. Rideout, President; Miss Kate McLeod, Vice-President; Frank A. Good, Secretary; C. H. Gray and Miss Minnie Carman, additional members of the executive.

Religion in the Schools.

To obtain opinions of educators and others on this question, Dr. Levi Seely, professor of education in the New Jersey normal school, proposes by circular these questions:

1. *Is religious education necessary to a properly developed character?*
2. If so, are the American youth receiving such education?
3. Is the church (including the Sunday-school) accomplishing it?
4. Is the home accomplishing it?
5. Or are these two agencies combined (or any other agency) accomplishing it?
6. *Is religious education necessary to good citizenship?*
7. If so, ought the state to provide it?
8. Under our peculiar institutions and conditions, how far should the state go? (*a*) Sacred history and literature? (*b*) Doctrines and creeds? (*c*) Church history? (*d*) Moral lessons from the Bible?
9. Do you distinguish moral and religious instruction?
10. What are the chief obstacles to the introduction of religious instruction into the public schools?
11. What are the objections that will be raised?
12. Would you favor its introduction under such limitations as you have above expressed (if any)?
13. Are you willing that your answers to the above questions shall be made use of in connection with your name?

He requests also the position, the religious confession, and the signature of those who reply.

The nickname "Bluenose" as applied to Nova Scotians is said to have been given on account of a superior quality of potato of that name that was at one time largely exported to Boston from the Cornwallis Valley.

Sending Notes to Parents.

How many woeful mistakes do teachers sometimes commit in the matter of sending notes home to parents? Nine out of ten are unfitted to do such business and will generally say and do the wrong thing, so that what they call an "insulting" note will be sure to come back in reply. And then how foolish to engage in sending back as "good as we get" and at once cause a complaint to be lodged with a director that "that teacher is a crank and utterly unfit to manage children." And, of course, if that teacher will lose sight of her dignity, and will run against the sharp corners of the world, she will get just so many knocks until her common sense asserts itself and shows her that the best way out of such difficulties is to make the acquaintance of the parents face to face, and let them see, by reasoning together, that her whole desire is to do the best for her pupils under all circumstances.

Probably the most potent force in the teacher to win the affection and respect of her pupils, and to make the control of her school easy, is her manners. They exert a silent, unconscious influence far more powerful in moulding the character of the child than the school itself. "Those happy ways of doing things, each one a stroke of genius or of love, now repeated and hardened into usage," that bring sympathy to the dull child and shame to the vicious child, that forbid the use of the sneer, or of sarcasm, that "seeth good in all things," are the strongest weapons of the good teacher in directing the untrained forces of the young.

Indeed, it is seriously charged against the public school that too many of its teachers lack culture and those traits which distinguish the woman of breeding from the woman who has none. Whether this be so or not, it is an undeniable fact that this is given by some as one of the reasons for sending their children to private schools. That the world puts a high value upon manners and high perceptions in the teacher is also apparent in the fact, as Mr. Robert Grant, in a late number of *Scribner's*, points out, that while mental acquirements were once regarded as sufficient for the woman who aspired to be the head of a college or other first-class institution for girls, the first question asked to-day is: "Is she a lady?" That is to say, the world to-day demands of the teacher not only the graces of scholarship and wide culture, but it also demands that she shall, before all, not be loud in voice, dress, or manners, but be ever gracious and kindly in all her ways.—*Sup't. H. C. Missimer, in Erie Report, 1893–94.*

Of most boys the supposed rudeness is only their crudeness. Deal gently with them and you will make gentlemen of them. Deal roughly with them and you will make ruffians of them.

PRIMARY DEPARTMENT.

An Exercise in Mental Arithmetic.

FOR SECOND TERM.

The problems are written on the board to serve as a reading exercise. If they contain new words, these words are taught and the problems read orally. If not, silent reading is deemed sufficient and the pupil is called upon for the arithmetical solution and explanation only.

The pupils are directed to solve the problem mentally, and to put the right hand (or the left—an exercise in listening to commands) on the head when they know the answer.

Wrong answers are dealt with somewhat as follows:

Example.—If 1 yard of lace cost 18 cents, how much lace can I get for 6 cents?

Wrong Answer.—$\frac{1}{2}$ yard.

Teacher.—Draw the yard of lace here on the blackboard. (Child draws a line about a yard long.) Cut it into halves. How much is this half? (6 cents). And this half? (6 cents). That makes how much for the whole yard? (12 cents). But how much does the example say the lace is worth? (18 cents). Then you must be wrong. Try again. (Child reads example and perhaps answers $\frac{1}{4}$ yard). Erase your sixes and divide your yard of lace into fourths. How much will this fourth cost? And this? And this? And this? That makes how much for all? (24 cents). Is that right? You have told me about 12-cent ribbon and 24-cent ribbon; now tell me about the 18-cent ribbon.

The class observed had learned halves, thirds, and fourths. The only guess remaining was $\frac{1}{3}$. The child made it. The teacher turned to the class and asked: "Right or wrong?" and, "Why do you think Annie is right this time?" A pupil answered, "Because 6 is $\frac{1}{3}$ of 18."

Then the same test was applied as in the case of the incorrect answers and this time "it proved."

The 6 in the example was changed to a 9, and this made a new example.

When this had been dispossed of, the 18 was changed to 27.

Afterward the 1 was changed to 3. Thus, by successive substitutions, examples enough were made to occupy the entire twenty minntes devoted to the work, and the mind was kept on pure number, instead of being partially engaged in picturing different commodities.—*School Journal.*

London is now connected with Edinburgh and Dublin by a telephone system which works perfectly. A three minutes' talk with Edinburgh costs $1.12, with Dublin $1.87.

Geography for First Grades.

GRADE I.

To the Teacher.—Have talks with the children on subjects within their comprehension, preparatory to regular work in geography, as form, size, position, etc., of common objects in or near the school-house. Train pupils to observe and describe the position of objects on the table or in the room, using terms, right, left, front, back, front-right-hand corner, back-left-hand corner, middle, centre.

Draw on the blackboard the outline of the school-room, requiring the pupils to tell you where to place the representation of each object.

Teach the location and names of the streets near the school.

Require the pupils to tell through and across what streets they pass while coming to school.

Teach the direction in which the streets extend, that is, teach the cardinal and semi-cardinal points of the compass.

Show pictures, and relate real or imaginary journeys, using such words as forests, fields, hills, mountains, valleys, brooks, springs, rivers, trees, etc. Be sure that the children understand the words used.

Teach the names of the common fruits and grains, how they are planted, how they grow, how they are used or made into foods.

Teach in the same way the different kinds of native trees, and for what the wood is used.

Teach something about the character and uses of the common domestic animals.

Teach other similar topics. Let your work in this direction be limited only by the intellectual capacity of the children.

Give incidental lessons at appropriate times, as about rain on rainy days, about clouds on cloudy days, about the sun on sunny days, about snow on snowy days, etc.

Encourage the little ones to bring into the school-room pretty leaves, pebbles, etc., and use them, when possible, in oral language, drawing, reading and number lessons. Provide for the children's use a large sand-table upon which to play. Let sand and clay modeling form a large part of the busy work for the first year.—*Topics in Geography, by D. C. Heath & Co.*

Without a central hall large enough to contain the whole of the scholars, the corporate life of a school cannot be properly sustained, and many opportunities are lost of making the scholars conscious of their relations to each other and to the general repute and success of the school.—*J. G. Fitch.*

Use of Pictures in Teaching Primary Reading.

The pictures of the first book put into a child's hands are of great importance, both in the way of making the pages attractive, and of affording substantial aid in their direct application to the lessons.—*Franklin First Reader.*

In teaching the first lessons, constant reference should be made to the pictures. The principle of association comes powerfully into play here. The picture suggests the whole story, and the parts of the picture suggest the words used in telling the story. *Students' First Reader.*

Begin the lesson, therefore, by calling the attention of the pupils to the picture. Let them tell what they see in it. Ask one of them to name an object in the picture, and show them on the chart, and also on the blackboard, the name by which the object is known. Let the children learn this word so thoroughly as to be able to find it wherever it occurs and to pronounce it properly. Teach words that cannot be represented by pictures along with those that can.—*Butler's Chart Primer.*

QUESTION DEPARTMENT.

S. B. A. (1.) A level reach in a canal, 14 miles 6 furlongs long, and 48 ft. broad, is kept up by a lock 80 ft. long, 12 ft. broad and having a fall of 8 ft. 6 in.; how many barges might pass through the lock before the water in the upper canal was lowered one inch?

The question is how often will the *lock* be filled by a *level reach* of water $14\frac{3}{4}$ mi. × 48 ft. × 1 in.

Find the cubic feet of each and divide.

$$\text{The level reach, } \frac{(14\frac{3}{4} \times 5280 \times 48 \times \frac{1}{12})}{\text{The lock, } (80 \times 12 \times 8\frac{1}{2})} = 38$$

If the lock can be filled 38 times, then that supply of water will enable 38 barges to pass.

(2). Could you give me the name, and where sold, of a good practical Mental Arithmetic suitable for pupils from the V Grade to the VIII inclusive?

Ans. Teachers not sufficiently posted will find McLellan's Mental Arithmetic, Parts I and II the best. But of course a good teacher will only use such books to obtain hints as to the best methods.

G. D.—An endless screw which is turned by a wheel 10 ft. in circumference, acts upon a wheel having 81 teeth; this wheel has an axle 18 in. in circumference; the power is 75 lbs; what weight can be supported from the axle?

For one turn of the axle the wheel has to take 81 turns; that is, a point on the wheel moves through a space represented by $10 \times 12 \times 81 = 9720$ in. while a point on the axle moves only 18 in.; hence the power is increased $9720 \div 18 = 540$ times.

$75 \text{ lbs.} \times 540 = 40500$ lbs. Ans.

I find the REVIEW an excellent help, being full of live thought and many good hints. O. E. C.

Kings County, N. B.

SCHOOL AND COLLEGE.

The Executive of the N. B. Teachers' Institute met at Fredericton, January 2nd. It was decided that the next meeting be held in Fredericton, beginning Monday, June 29th, and continuing until Thursday, July 2nd, next. Wednesday, July 1st, being a public holiday, an excursion will be arranged for on that day. The programme was left in the hands of a committee.

The semi-annual conference of the Chief Superintendent of New Brunswick with the inspectors was held in the education office, Fredericton, January 3rd. A very useful and instructive meeting was held.

The REVIEW extends congratulations to Mr. N. W. Brown, who was married during vacation. Mr. Brown is engaged as principal of the Sussex grammar school. He is a very enthusiastic teacher and will no doubt be successful.

Mr. J. B. Sutherland, A. B., the efficient and popular principal of the Miltown, N. B., high school was, during vacation, united in marriage to Miss Minnie Dewar, the equally efficient teacher of the primary department. The REVIEW extends congratulations.

On December 14th, at an extra session of Dorchester Superior School, Mr. Geo. J. Oulton, B. A., who was called from Moncton to be present, was presented by the teachers and pupils with a beautiful copy of the "Standard Dictionary," accompanied by a very complimentary address. It will be remembered that Mr. Oulton was principal of the school for the past nine years, but resigned last July, having been appointed to the position of science teacher in the Moncton high school.

Miss Nellie Lingley, of the St. Stephen staff, has been granted a six months' leave of absence; Miss Grace Wilson will supply for her.

The teachers of St. Martins, N. B., by means of a school concert, raised nearly $30.00, with which they purpose to add to the school library.

Mr. Ralph Colpitts, B. A., has been appointed to the principalship of the Hopewell Cape (Albert County) superior school.

The Albert (Albert Co.) school has recently been graded. Mr. Thos. Baizley is the principal.

Mr. A. Schurman, of Truro, the well-known railway engineer and conductor, who has been in Cape Breton for some years, and who has just returned home, has brought with him a number of magnificent specimens of fossils from the coal regions of Cape Breton, which he has kindly placed in the museum of the academy.—*Col. Sun.*

The teachers and students of Truro academy have been fortunate in securing for their museum a very fine collection of minerals, rocks, fossils and shells. The collection has been the life-work of Dr. Borthwick, a well-known scientist of Montreal, and contains specimens of almost every known mineral, rock and precious stone, arranged and classified according to Dana. There is also a large collection of rare and curious shells, Louisburg relics, and other curios. The whole makes one of the finest museums for school purposes in Canada, and will prove a valuable boon to the schools and a credit to the town. In order to secure the necessary funds to purchase the collection a subscription list was opened, and in little more than a week the necessary funds were raised. The citizens of Truro have just reason to be proud of the excellent work which their academy is doing, and the readiness with which they responded to the appeal of teachers and students for aid is ample evidence that they appreciate their academy and its work.

BOOK REVIEWS.

MURCHÉ'S SCIENCE READERS, Books V and VI, by Vincent T. Murché. Pages 238 and 255; price 1s. 6d. each. Macmillan & Co., publishers, London and New York. The fifth and sixth parts of these excellent readers still further develop the principles of science as taught in the earlier books of this series, which have been already noted in the REVIEW. These volumes are well bound, attractive in appearance, profusely illustrated, and the matter reproduced in an easy chatty style that wins the interest of youthful readers. Used to supplement oral lessons the books cannot fail to rivet the truths of scientific teaching on the mind.

THE GREATER POEMS OF VIRGIL, Vol. I, edited by J. B. Greenough and G. L. Kittredge. Cloth; price $1.25. Publishers, Ginn & Co., Boston. This volume embraces the first six books of the Æneid, and contains an introduction and sufficient vocabulary, with notes and references to Allen & Greenough's grammar. It is a careful revision of the edition of Virgil published in 1882, but omits the pastoral poems. The present volume, therefore, is not so bulky, is greatly improved by the increased number and improved execution of the illustrations, these being based, for the most part, in the text where they will readily meet the eye of the reader; and the notes, while not so full, are perhaps more suggestive. The introduction deals more fully than that of the former edition, with the life and times of Virgil, as well as with his literary models. There have been added also an entirely new account of the development of epic poetry and a discussion of the influence of Virgil on modern, especially English literature. This has led to that most excellent practice of inserting in the notes parallel passages from English, literature. On the whole this edition is a great improvement on its predecessor, although that excellent edition left little to be desired by students.

SPOTTON'S BOTANICAL NOTE BOOKS.—Parts I and II, price 50c. and 60c. respectively. Published by the W. J. Gage Co., Toronto. Although this is not the season for botanical work in most of our schools, teachers and

students should secure one or both of these excellent series of note-books, to be fully equipped for the study of this subject when it is begun in early spring. Part I contains schedules for the descriptions of plants, and drawings, with practical exercises designed to train the eye and judgment of the observer. Part second contains, in addition to the matter of part first, a brief account of minute structure, some practical hints for carrying on microscopic work, descriptions of certain types of cryptogamous plants,—valuable additions, because they are of great assistance to students in taking up the minute structure of plants.

MILTON'S PARADISE LOST, Book IV, edited with introduction and notes by M. Macmillan, B. A. (Oxon.), Professor of English Literature, Elphinstone College, Bombay. Pages 89; price 1s. 3d. Publishers, Macmillan & Co., London and New York. This book has been prepared for class-work, but all readers will be interested in what is perhaps the most interesting portion of the Paradise Lost—the description of the garden of Eden and what took place therein. The introduction contains an excellent account of the life of Milton, with a critical estimate of his works. The notes, too, have a fine literary flavor from the number of parallelisms, suggested by passages in the text.

THE HISTORY OF MANKIND, published in parts (one shilling each), by Macmillan & Co., London and New York, promises to be a work of great interest. Parts I–IV have been published. The work is admirably illustrated.

N. B. EDUCATION DEPARTMENT.

Official Notices.

ADVANCE OF CLASS.

1. Teachers who hold certificates of having passed the preliminary examination for the class desired (and only such) may be admitted to the Normal School at the beginning of the second term in January; and to the closing examinations for license in June following.

2. Holders of third class licenses who have spent only one term at the Normal School are required to spend an additional winter term at the Normal School before they can be admitted to the closing examinations for advance of class.

3. Holders of second class licenses who have passed the preliminary examination for first class, may be exempted from attending an additional winter term at the Normal School from the special conditions as to professional classification and certificates of superior scholarship, or of having taught two full years, as required by Reg. 31, 5 (a) (b).

DEPARTMENTAL EXAMINATIONS, JULY 1896.

The usual Normal School entrance, Junior leaving examinations, and Junior matriculation examinations, will be held in July, 1896, in accordance with the provisions of Reg. 31, 3 (1), and Reg 45 of School Manual.

1. NORMAL SCHOOL ENTRANCE.—All candidates for admission to the Normal School in September, 1896, and all holders of second or third class licenses who propose to enter the Normal School in January, 1897, or to become eligible for examination for advance of class in June, 1897, are required to pass the preliminary examinations in July, 1896. (See School Manual, Reg. 31, 3, and Reg 38, 6.)

2. JUNIOR LEAVING EXAMINATIONS.—This examination will be based upon the requirements of the course of study for grammar and high schools as given in the syllabus for Grades IX and X, and will include the following subjects: English Grammar and Analysis; English Composition and Literature; Arithmetic and Book-keeping; Algebra; Geometry; History and Geography; Botany and Physics; and either Latin or French, or Chemistry, or Physiology and Hygiene. (Eight papers in all.)

The pupils of any school in the province are eligible for admission to this examination upon giving notice on or before the 24th of May to the inspector within whose inspectorate he wishes to be examined, and enclosing an examination fee of two dollars. (See Manual, Reg. 45, 14). Diplomas are granted to successful candidates.

3. JUNIOR MATRICULATION EXAMINATION.—This examination will be based on the requirements for matriculation in the University of New Brunswick as laid down in the university calendar (candidates will receive a calendar upon application to the chancellor of the university or to the education office). Any high or grammar school pupil who has completed Grade XI of the high school course should be prepared for matriculation.

NOTE. Elementary Chemistry as in Williams' Introduction to Chemical Science (Chapters I to XXX inclusive) is now required of all candidates for matriculation.

In cases in which the language studies of the high school course are different from the language studies as indicated in the university calendar, candidates may take either course by giving notice at the time of making application for examination. (See Manual, Reg. 45, 14.)

☞ The English literature for the closing examinations for license in June, 1896, and for the junior leaving examination, will be Shakespeare's Julius Cæsar and Scott's Lady of the Lake.

Examination Questions for 1895, Courses of Study, and university calendar, will be sent, on application, to any teacher or intending candidate.

The Syllabus of Normal School entrance and Normal School closing examinations as given in Regulation 32 School Manual has been revised to read as follows

SYLLABUS OF EXAMINATIONS.

REGULATION 32.—(1) *Normal School Entrance Examinations; and Preliminary Examinations for Advance of Class.*

These shall include the following subjects for all classes, viz.; Reading, Spelling, Writing, English Grammar and Composition, Geography, History, Arithmetic, and Elementary Natural Science. Candidates for the first class will also be required to pass examination on the First and Second Books of Geometry with exercises, and on Algebra to the end of Simple Equations. Candidates for the second class will be required to pass examinations on the First Book of Geometry with exercises, and on Algebra, including the Elementary Rules and Simple Equations of one unknown quantity.

REMARK.—The examination papers on the above subjects will be graded as to extent and difficulty according to the class of license applied for by the candidates respectively. For example, candidates for the third class will be examined on the Outlines of Canadian and British History, the General Geography of North America and Europe, with the Geography of New Brunswick in detail (including the drawing from memory of an outline map of the province), the Elementary Arithmetic as prescribed, and the Nature Lessons as indicated in Course of Study Grades I to VI.

Candidates for the second class will be required to show a more extensive knowledge of Grammar, History and Geography (particularly of the several provinces of the Dominion of Canada), advanced Arithmetic to the end of Compound Interest, the keeping of Accounts by Single Entry, and Natural Science as in Course of Study, Grades I to VII.

Candidates for first class will be required to have an intelligent acquaintance with Prescribed Text Books, except that on General History, and as limited by the above Regulation in regard to Geometry and Algebra.

2.—CLOSING EXAMINATIONS.

The following shall be required of all candidates:

1. THE SCHOOL SYSTEM.—To be familiar with the leading principles of the School Law of New Brunswick and the Regulations of the Board of Education.

2. SCHOOL MANAGEMENT.—To have a knowledge of school organization, as applied under the law of New Brunswick, the classification of pupils, the arrangement of studies, the object and means of discipline, the necessity and means of adequate ventilation of school-rooms and suitable means of securing the comfort of pupils.

3. TEACHING.—To have a knowledge of Method, and to be able to exemplify the same by notes of lessons on any given subject of instruction.

4. INDUSTRIAL DRAWING.—To show a practical acquaintance with the Manual and Drawing Books prescribed by the Board, and to sketch familiar objects exhibited as models at the time of examination.

5. READING AND ELOCUTION.—To read both prose and verse so as to give a correct and effective expression of the thoughts and sentiments of the passages selected, and to be familiar with the principles and rules of Vocal Expression as contained in the prescribed Manual.

6. DOMESTIC ECONOMY.—As contained in the prescribed Text-Book. [For female candidates only]

Remark.—The questions set in the foregoing subjects will be graduated according to the class of license applied for.

ADDITIONAL REQUIREMENTS FOR THE SEVERAL CLASSES.

CLASS III.

English Language.—Grammar, Analysis and Composition, as in Meiklejohn's Short Grammar.

Arithmetic.—The Elementary Arithmetic, prescribed.

Hygiene and Temperance.—Health Reader, No. 2.

CLASS II.

English Language.—Grammar and Analysis, Meiklejohn's English Language, Part I.

English Literature and Composition.—Poetry of Readers V and VI, and Meiklejohn's English Language, Part II.

Mathematics:

Geometry.—Books I and II, with exercises. H. Smith's Geometry.

Algebra.—Prescribed Text Book, to the end of Simple Equations.

Book keeping and Arithmetic.—Single Entry and Commercial Rules.

Natural Science:

Botany and Physics.—Plant Analysis, Plant Growth and Assimilation. Characteristics of the Buttercup, Cress, Pulse, Rose, Aster, Buckwheat, Pine, Lily and Grass families. Physics are required by the course of study for first eight grades.

Chemistry and Agriculture.—Williams' Introduction to Chemical Science, Chapter I to XX. Tanners' Agriculture, or an equivalent.

Physiology and Hygiene.—Chapters I-IX of Blaisdell's "Our Bodies and How we Live."