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THE

# JOURNAL OF EDUCATION.

FOR THE PROVINCE OF NOVA SCOTIA.

## ABOUT SCHOOL BOOKS.

WE have received a communication from "A Trustee since 1864," in which he desires that the following queries be answered through the columns of the *Journal*:—

"1st.—Is the provision of a sum for the purchase of school books by assessment, obligatory or permissive? As I read the law I view it as permissive; but in the Regulations of Council I observe a threat is held out that failure to provide such sum will subject a Section to the loss of the public grants."

"2nd.—In the event of the refusal of the ratepayers to vote any sum for the purchase of books, is it legal to collect from the parents of the children attending school the money required to purchase books; that is, on the certificate of the Trustees that such books are wanted for the school, can they be obtained at half-cost, in the same way as if the money had been raised by assessment?"

In reply to the first of the above queries we would observe that it is entirely optional, with any section, whether any and how much money shall be voted for any school purpose whatsoever. Unless the ratepayers choose to provide and equip their schools, there is nothing in the law by which they can be compelled to do so. The "threat" of which our correspondent speaks refers not to the voting of money, but to the supply of books. The Regulation reads:

"Any Section neglecting to provide a sufficient supply of books, maps, and apparatus, may be deprived of the public grants."

The law has but one aim, to provide good schools. Any school unsupplied with books and other requisites is likely to be very far from being a good one; at all events, it must be very far from attaining that degree of efficiency which, with plenty of books, and apparatus, might be obtained. There can be no doubt as to the attitude the law assumes towards such a school. It has no tolerance for a poor school where there might as well be a good one.

In reply to the second question of "A Trustee since 1864" we would say that when Trustees forward money for the purchase of books no questions are asked as to the source whence the money was derived. The business of the department is to see that the books &c, sent in return, are used for the purposes and in the way contemplated by the law. Free Education for every child in the land, is the mottoe of our school system. And this is held to apply not only to the teaching, but to all the helps and appliances used in teaching. A child needs the use of books, maps &c., quite as much as he does the aid of a teacher. If he has a right to the one free of cost, he has an equal right to the other. When the Province offers to bear half the expense in providing books for the schools, it does so on the condition that the use of the books so provided shall be given, free of charge, to the pupils, so long as they may be needed. Before receiving books, the Trustees bind themselves to carry out strictly and in good faith the Regulations contained in No. VII. of the official notices published in this *Journal*. According to these Regulations school books as well as all other articles furnished at half-cost are to be regarded as the public property of the Section. Wherever the money has come from to purchase them, they belong to the whole school: one child has as much claim to them as another. If the Trustees, in distributing them, are guided by the amount a child's parent may have contributed towards purchasing them, they are guilty of violating a solemn obligation; and where any such breach of faith becomes known to the Department, the Section will forfeit the privilege of purchasing school materials at half-cost, until such time as it furnishes a guarantee that the written pledge of its Trustees will be honourably kept.

Reg. 5 permits (but does not compel) the Trustees to sell books to pupils desiring to purchase, "provided the same be done without prejudice to the claims of other pupils." No pupil can be compelled to purchase, but has the right to demand the use of such

books, as, in the opinion of the teacher he needs, free of charge. We doubt if the Trustees of any Section refusing to provide books for any pupils in such a case, could enforce the collection of any rate for school purposes. The rights belonging to the pupil of a public school not having been recognized, it would be difficult to defend its character as a public school, if challenged in law.

Our correspondent is anxious to throw the responsibility of procuring books for each pupil directly on the individual parent. We do not share his anxiety. If we are to have a free system, let us have it free throughout. Why should a distinction be made between the books and all the other things required by the child at school? It is not a gift of books to the pupil, but the free use of such books as he may require, and only so long as he may require them. He is responsible for the care of the books while in his possession, and when he needs them no longer, the teacher being the judge, they are to be restored to the Trustees. Our correspondent thinks this a dangerous course to pursue, fearing that parents may be encouraged to look too much for "outside help in the performance of a sacred duty, instead of exerting themselves as they ought." But this objection lies not alone against free books, but against the whole theory of free education. We have yet to learn that free schools in any country have made parents less devoted to their children or more inclined to look for outside help in providing for their wants. But even if it could be proved that there is this evil tendency in free schools, we must not forget that there is at least one greater misfortune for a child than that his parent should lean too much on outside help—to be left to grow up in ignorance. The principle of leaving to each parent to bear the full weight of his "sacred duty" in this matter has been well and faithfully tried in this Province. Our correspondent is aware of the result. A new system has been inaugurated, and though it has not been long enough in operation to speak very confidently as to its influence in causing parents to lean overmuch on outside help, yet we think "A Trustee since 1864" will agree in the opinion that it has already done enough unmistakable good for the Province to entitle it to a full and honest trial.

## PRIZES FOR SCHOOLS.

IN accordance with a resolution of the House of Assembly, 300 sets (900 volumes) of MURDOCH'S *History of Nova Scotia* have been purchased by the Educational Department, to be offered as prizes to be competed for by the pupils of the Public Schools of the Province. The competition for these books will take place during the next School Term. They will be awarded to the pupils manifesting the greatest proficiency in such branches of a common school education as may hereafter be decided upon. Due notice will be given of the subjects and the mode of examination.

It has been decided to distribute the volumes among the different counties as nearly as possible in proportion to the number of pupils attending school in each during the past year. This mode gives the following quota to each:—

Pictou	28	sets	Annapolis	14	sets
Colchester	22	"	Antigonish	14	"
Halifax	22	"	Yarmouth	12	"
Cumberland	20	"	Digby	11	"
Cape Breton	16	"	Richmond	9	"
Halifax City	16	"	Shelburne	9	"
Hants	16	"	Victoria	9	"
Inverness	16	"	Guysboro'	8	"
King's	16	"	Queen's	6	"
Lunenburg	15	"			

As a considerable amount of labour will be entailed on the Inspectors in connexion with the competition, it is proposed to present each with a set of the volumes.

Each set of this *History* consists of three large volumes, and contains some 1800 pages. In it Mr. MURDOCH has embodied a

mass of highly interesting and reliable information relating to the settlement and growth of the Province.

The retail price of the work is \$7.00 a set. It will therefore be seen that, even in a pecuniary point of view, prizes of considerable value are thrown open to the competition of the pupils of our public schools. We trust they will show their appreciation by entering on the competition with ardour.

WE are happy to be able to state that the attendance of pupils at the public schools in the Province during the Term ended April 30th, was some 15,000 over that of the corresponding Term of 1866. This is progress of which every Novascotian may be proud.

ANY Inspector having on hand spare copies of the blank for Trustees' Half-yearly Return, Graded Schools, will please forward the same to the Education Office at once. Even a single copy may be of service.

TRUSTEES and Teachers in the Eastern Shore, District of Halifax, are notified, that the Inspector intends visiting the schools in that district commencing at Musquodoboit Harbour on Tuesday 20th Aug., and continuing eastward to the county line.

IN another part of this number will be found the commencement of an outline course of oral lessons on Number. Miss Mayo, Prof. Hermann Krusi, and E. A. Sheldon, have each contributed toward the production of these outlines. We would recommend teachers to procure a copy of Sheldon's "Elementary Instruction."

ERRATA.—*Journal of Education*, p. 90, Queen's Co., A. Hendry, for "\$13.45" read \$20.16; p. 105, Colchester Co., for "West New Annand," "Glade," read West New Annapolis, \*Slade's.

#### JUDGE JOHNSTONE ON THE PUBLIC SCHOOL SYSTEM OF NOVA SCOTIA.

HIS HONOR the Judge in Equity, in his recent charges to the Grand Juries of Colchester and Cumberland, gave utterance to the following sentiments. Their importance, justice, and grandeur, stamp them as worthy of the venerable speaker, the occasions, and the subject; and we heartily commend them to our readers. To the Grand Jury of Colchester he said:—

"A few years later a revolution was effected in the Educational system of the Province which it would be a misuse of words to call an improvement—it was a new creation. The reproach is taken away which attached to us as a people from the fact of thousands of our population being untaught. Henceforth the reproach of ignorance will attach to the individuals who with the means of instruction have spurned it, if such there shall be, and I hope and believe their number will be small, and be lessened every year,—but no reproach to the community which offers to all on equal terms the blessings of education without price. That the machinery should not at first work quite smoothly—that so great a change should induce some hardships and create many dissatisfactions, were things almost inevitable. But that an intelligent and virtuous people should long remain insensible to the blessings of universal education, or begrudge their individual contribution towards its support, was not possible. To those who have children or relations to be educated, the money thus contributed comes back in direct benefit, and the contributions of those who have not are sanctioned by the good they assist in effecting. The well-being of the country is promoted by the general instruction of its population, and the law of love is fulfilled when the education of the poor is attained on terms which do not wound their sensitive feelings. He who having the means begrudges the small appropriation he may be called on to make for objects so beneficent, seems to me to fail in appreciating alike the duty and the privilege both of patriotism, and philanthropy.

"Perfection does not belong to human institutions, and it is an evil incident to general systems of education supported by the common resources of the people, that religious instruction may be found incompatible with that liberty of conscience which is the inheritance of us all. Nevertheless, religious instruction lies at the foundation of truly useful education, and is essential alike for national prosperity and individual happiness.

"This conviction in former years animated my efforts in behalf of the denominational principle applied to the higher Seminaries,

and leads me now to invoke your attention to the subject—not to discuss this delicate and difficult question, but to impress the duty of sedulously supplying at the domestic hearth the deficiencies of the school room in this transcendently important matter, where deficiencies do exist, for in many cases they need not exist; and especially to enforce in all cases the necessity of supporting, encouraging and extending those invaluable auxiliaries of domestic religious teaching—the Sabbath Schools."

To the Grand Jury of Cumberland he said:—

"There is one event which has taken place within the last few years, which cannot fail to leave its impress on all Nova Scotia for all time to come. I refer to the enlarged system of education which has been introduced. I will not condescend, gentlemen, to ask whether the present means of instruction, which is afforded to the rich as well as the poor, on terms perfectly equal and free of all charge,—I will not ask, I say, whether such a state of things is likely to be beneficial or not. It must be beneficial. It is impossible to imagine that in a free country it can fail to be of vast benefit to enable all its inhabitants to take a share in promoting the welfare of their own country,—to take advantage of its material resources and industrial pursuits. I am quite sure that the advantages derived from a system of education of this kind are not confined to those who derive direct advantage from it in the education of their children and relatives. The indirect advantages are diffused over the whole country. No man can exist without being benefitted by the intellectual uprising of the community in which he lives. The man who contributes of his means towards the maintenance of this educational system, does so in a manner which is sure to bring back to himself beneficial results, both directly and indirectly.

"There is one observation which I always wish to make in connection with this subject. A system of education in public schools cannot embrace religious instruction to that extent which is essential, not only to the well-being of individuals, but to the prosperity of the community, for at the bottom of all prosperity lies religious instruction, and without it all other instruction is a mistake. By the establishment of this free-school system, the duty is imposed with increased obligation on every man and woman who holds the parental relation, to forward at their own homes, and by their own firesides, the religious instruction of their children. It is also essential to encourage those excellent institutions,—the Sunday Schools. Let every man carry impressed on his mind this principle, that just as the means of obtaining secular instruction are increased, so is the duty increased of every parent to promote the religious and moral instruction of his children.

"As we are British subjects and desire to perpetuate British principles and institutions, we ought to encourage those principles and institutions by every means in our power. We ought to present before our children the memory of British glory. We should show them that we respect British principles ourselves. We ought, I think, to cultivate, more than we do, British literature, especially in the education of our children. Nothing has afforded me more pleasure in connection with the recent change in our educational institutions than the introduction of a series of school books of the most elevated character and which have been formed on the principles to which I have referred. I think that the Nova Scotia series of school books redounds very highly to the credit of those who have been concerned in their preparation and introduction. Let us introduce works of a similar character into our houses. Let the books which we read by our firesides contain English sentiment and English memories. We need be at no loss for such works, for the English literature of that kind is now of the most excellent character, both as regards style, illustrations, and literary excellence. Take up the *British Workman*, and the British Sunday School books for children, and you will find in them illustrations which surprise you by their excellence. I have seen in the *British Workman*,—which can be bought in Halifax for two cents,—prints well worthy of being framed, and articles of a style manly and elevating. These publications are also, on the whole, cheaper than the American,—a consideration of great importance. We are not all aware of this, but it is really the case. The British publications are, I repeat, of the highest character as regards artistic embellishment, literary excellence, and moral and religious sentiments. I shall be very glad if public attention is directed to this subject. I find no fault with the books which are now used in our Sunday Schools. Let us, however, follow the example of our neighbours who impress on their children the political sentiments with which they desire them to grow up. Let us do the same. If we really love British institutions, let us train our children to know more of them and to revere them."

#### ON THE STUDY OF THE CLASSICS.

BY REV. THEODORE D. WOOLSKY, D. D., PRESIDENT OF YALE COLLEGE.

IN a country like ours, which lives on hope rather than on memory, which is prone to slight history, as if it furnished no rules nor precedents for our new experience, which regards the man of the past as the child, and the man of the future as destined to be the mature representative of the human family, it is natural that the study of the classics should be held by many to be useless,

and hardly worthy to form a part of the American system of education. On the other hand, some go to the opposite extreme from a dislike to the prevailing tendency towards the practical, and maintain that no education is worthy of the name, the staple of which does not consist of the ancient classics. To steer between these parties, each of which only holds half the truth, will be our aim in our present remarks on classical studies. We are far from believing that an education founded on them alone would be the best one. We do not deny that an education into which they do not enter may be in some respects a very good one. Our position is, that they have some peculiar advantages in training the mind, in cultivating the taste, in bringing the influences from the past into harmony with those from the present, and that it is not easy to find a substitute for them, nor to discard them without disaster to our discipline and our culture.

There are studies which have a worth for their own sakes, or, to express the same thought in its highest form, because they reveal to us the thoughts of God. There are other studies which train us for all thinking and all acquisition, but which are rather instruments than ends. It would be no great loss for the grown-up man to forget Algebra and Euclid, although they may have been most important means of fashioning him into his present intellectual shape. He could not have become the man he is without their help. To this second class belongs philology or the study of language. Its main use is as a means, although it is by no means without worth for what it contains in itself. The two classes of studies hold a relation to one another something like that of fixed capital to circulating, in political economy. Without fixed, we cannot produce circulating capital to the same advantage, if at all. The fixed capital is but a means, yet no one finds fault with it because it is not turned into money but retained for future production. It is more productive in its present shape.

The first point which asks for our consideration, when we look at classical studies, is their agency in training the intellect. To illustrate this, let us first look at the study of language in general, no matter what the language studied may be. Here the materials for the mind to work upon are words themselves as signs of thought, alone or in combinations, and their forms and relations, or what we call Grammar. Grammar, as it used to be taught, was a dull and deadening study, a picking up of chips and a putting of them into the basket of the mind: but as it is beginning to be taught it reveals to us a power of language-making now extinct, which joined little words to roots or general expressions for ideas, and out of their union created a vocabulary capable of almost boundless expansion. In our modern tongues which are broken down and half in ruins, this process does not appear; but the classical tongues are nearer to the period of formation, and retain evident marks of the original plan. Then, again, in these languages the fulness of inflections which the moderns have lost, is connected with a most refined syntax, the study of which is of high use to the logical faculty.

But passing beyond Grammar to words as expressions of thought, we notice first the single word which is instinct with life, and has passed, like nations and like the material world, through a series of transitions, to which the imagination, the power of abstraction, usage and other causes, have contributed. The single word, however, and grammar are but preparatory for the next and main thing to be noticed, for sentences, paragraphs, entire works. Here the task for the individual is to enter into the thoughts of his fellow-men through the past ages, to gather to himself what the wisest and most gifted of the race have collected and placed within his reach. The process by which this is done we call interpretation, and the study of the classics consists of endeavors to ascertain their meaning. Now we claim that this study, faithfully pursued, is its own reward, and would greatly strengthen the mind if there were nothing of elegance in the style, nothing of value in the thinking of the ancients. The art of interpreting is one which calls forth various faculties of the human mind. The lawyer in his profoundest arguments on points of law is but an interpreter; the theologian has the same office when he discusses the meaning of Scripture. The exercise of our powers within the field of our own language is comparatively small; the task is far greater when we attempt to understand men of other times, of old ways of thinking, of other languages, institutions and religions.

In our efforts to explain an ancient document, the judgment is continually on the stretch. A word of many senses must be

brought into harmony and rational connection with other words of like kind. A sentence must have a relation to another sentence such as our reason approves. We advance to larger divisions, comprehending as we go, until the idea of a whole work is before our minds. In all this we are constructing a product of thought over again, we are estimating probabilities, balancing arguments for this or that interpretation, exercising our independent judgments according to our ability. If wrong, we learn by our mistakes, and the training pays for itself in spite of our mistakes. There is thus a continual activity of the logical faculty called forth in the study of language, especially if that language differs considerably from our own.

Concerning this discipline we have several remarks to make. *First*, it is eminently a practical discipline, since it consists in rapidly estimating the probability that this and that word have this and that sense, that such a clause stands so related to such another clause, and one sentence continues and harmonizes with the meaning of another. These logical processes are the same in kind to those of the lawyer and the preacher. Hence the inference is a direct one that such a training is eminently adapted to be a preparation for these learned professions. And the same remark will hold good in regard to the study of all the moral and political sciences.

In the *second* place, this discipline is fitted to make logical writers and thinkers. We do not say that it will form good writers or sound thinkers as a matter of course, for the mind of the individual may be natively murky or awkward or dull. But what we mean to say is that the habits formed by philological training almost compel a man to avoid ambiguities, to be consecutive, and to have his subject mapped out in his mind.

*Thirdly*, as in the interpretation of written documents, so in decisions on all the probabilities of life the study of language is of great use. It promotes the practical habit of rapid judgment on probable evidence, of which we have already spoken. We think, therefore, that the author of "Eece Deus" speaks the truth when he refers to the "admitted effect of high classical culture upon the discussions of general questions of political and literary life." "The man," says he, "who has been thoroughly drilled in ancient literature will, other things being equal, be better able to discuss subjects of common interest, to trace their bearings and forecast their consequences than the unlettered man; not that there is any very patent connection between philology and politics, but because of the severe intellectual discipline and consequent self-mastery which such drill necessitates."

But, again, it is a corrective of a one-sided tendency of mathematical study. That study is of great importance in education, but as it has to do with demonstrative evidence only, it will, if exclusively pursued, unfit us for practical life. Life is controlled by probabilities, but mathematical science knows only absolute certainties. The tendency to scepticism and unpractical judgments which mathematics, notwithstanding its excellent effects in training the mind, is apt to generate, is met and corrected by another discipline, that of language, which favors sound practical sense, and puts our mind in trim for the interpretation of the probabilities of life.

But it may be fairly asked, why a modern language cannot have the same healthy influence on the mind, besides furnishing the learner with an instrument which may be of the greatest use in the affairs of life, and with a key which may unlock vast stores of modern literature and science.

The answer is two-fold. *First*, while we admit that the discipline in learning all languages is the same in kind, we contend that it is not the same in degree. The modern languages are spoken or written by men of our own civilization, of our own times, who think like us, whose stock of thoughts is much the same as ours. It is plain that the effort to learn, the drill and exercise in learning such languages, must be much less than in overcoming the difficulties of one of the ancient tongues. But in the *second* place, the acquisition of those tongues is an excellent preparation for an easier and speedier acquaintance with modern languages. This is owing not only to the philological skill which classical study cherishes, but, in the case of several of the existing European dialects, is due to the fact that they are daughters of the Latin, with a stock of words derived from Latin roots, and with a grammar, broken down indeed, but showing everywhere traces of its Roman parentage. We have little question that if the object were to teach

the four principal Romanic languages,—Italian, Spanish, Portuguese and French,—and if four years were assigned to this task, and the pupil who was trained exclusively, during the first two years, in the classical tongues, and gave the next two to the languages in question, would have a better mastery over them at the end, than he who should be put through the whole of the period to the study of the modern tongues alone. No time, in fact, would have been lost. The introductory studies would have paid for themselves, both by their superior discipline, and by the greater facility which they had imparted.

Another benefit to be set to the account of classical studies is their æsthetic culture. The forms in which thought is expressed appeal not only to the understanding and the logical power, but to the emotions and the sense of beauty. It is of the highest importance that the last be cultivated, else we train up men of naked intellect, of a baldly practical character, without any generosity, warmth, or loftiness of soul. The refinement of the taste, it is true, goes on as long as life lasts, and is mainly drawn from books in the English language to which we have access. All the literature of the whole world beside has less power over our souls than the writers of our own dear mother-tongue. But granting this, we claim that if outside of our own language there is a literature superior in its forms and its finish to others, it may be serviceable in forming our tastes, in increasing our sensibility to beauties and defects of style, in raising our standard of literary execution, in impressing us, by its grace or its majesty, with the perfection which man can reach in the art of composition. Such a literature is that of the classical tongues, especially of the Greek. M. Guizot, in comparing ancient and modern civilization, expresses himself to the effect that ancient literature is superior in form and style, and modern in variety and depth. In accordance with this view is the fact that modern style and modern taste have always drawn healthy influences from ancient. It was so at the revival of classical study in Italy; it was so in Milton's days; it is so even now. Such a master in composition as Goethe, to whom all times and lands paid tribute, could never have become what he was without having inhaled the breath of classic elegance. In the most finished works of the ancients we find all the materials for elevating and refining the taste. Rhythm of linked words, poetical measures, most varied, delightful, and fit for every feeling and every mood, wonderful variety and freedom in the construction of sentences, taste in composition which either by instinct or by study produces something finished and exquisite, a calculation of the parts of a work with reference to the whole so nice and skillful as to resemble the organism of the most elegant living forms—such qualities as these, which appear in the best ancient classics more than in any others down to the present time, cannot fail to nourish the sense of beauty, of harmony, of fitness, even in the most ordinary minds.

But besides refining our taste, so that we are enabled to write our own language better and to judge of its writers better, classical study gives us a better idea of the meaning of our English words, and of the component parts of our mother tongue. English, we regret to say, is a very composite language. The Norman conquest extinguished the life of the Anglo-Saxon, and brought in a multitude of words from the French, which were generally of Latin origin. The revival of letters and the study of Latin added to our stores of words from this new source, and modern science has imported a new stock, pedantic enough in form and sound, from the Greek as well as from the Latin. Our language, therefore, having unhappily lost its native power of composition and derivation, resorts to the extinct tongues, as the Roman barons of the middle ages built their palaces by the help of the grand ruins with which the city was filled. It is obvious if such be the fact, that a knowledge of Greek and Latin must be of great use, both in suggesting the meanings of a vast number of words which are dark to the English mind, and in making easier the comprehension of those terms which need a scientific interpreter. But in addition to this, we may say that he who is able and accustomed to trace the meanings of our words back to their sources has found for himself a very high enjoyment. He has a vivid sense of the powers with which language is invested. Words which are dead to other persons are alive to him; and there is often vast beauty spread before him, when he discovers how by some figure, some elegant transition, these descendants of Greece and Rome, these wanderers from the old world, have become introduced into our modern English with the full rights of citizenship.

The last advantage to be drawn from classical study which we mention is, that it greatly helps our conception of ancient history and of ancient civilization. The history of the olden times, though written by a Grote or a Merivale, brings us into contact with a world strange to us and unlike ours. Indeed the more skillfully the history is written, the more will the contrasts between the ages be made to stand out. But it is one thing to become familiar with events, and quite another to penetrate into the thinking, the religion, the morals, the politics, the art of a different civilization. This is best done by becoming acquainted with the documents of the form of society in question. Its history teaches us not only what has come to pass in a certain part of the world, but how its own historians, such as Thucydides or Tacitus, have viewed their times. Its religion and morals tell us what the need was of such an appearance as that of Christ in history, and what was the difference between the times as they are counted down to His birth and the times as they flowed from His birth onward. There is a vivid impression going with the adequate study of classic authors which history in modern hands cannot wholly reproduce. A man can become an accomplished geographer without ever stirring from his closet; but how much more lively is his sense of the reality of the world, how much more just his estimate of it who has travelled over even a small portion of its surface. So acquaintance with classic authors give life to the olden times; the haze that settles on the remote landscape is in part dispersed, and we gaze on the distant mountain without the danger of taking it for a cloud. Nor is it too much to say that no man is so capable of appreciating the claims on our faith which are made by a historical revelation like Christianity as he who, through his familiarity with ancient records, can form a clear picture to himself of the time when our religion was brought into the world.

Our advice to young men would be—first of all, not to be one-sided either in regarding any one kind of discipline as able alone to meet all the wants of the mind, or in despising any discipline to which high importance has been ascribed by thinking men. That discipline, surely from classical study, to which poets like Tennyson and public men like Everett and Gladstone owe a large part of their culture, is not to be lightly thought of. If it bore the single fruit of training the judgment and the reasoning power—if, to use the expression of another, it only taught us what the word *therefore* denotes, it would do for the mind what perhaps no other discipline can do as well. And if, afterwards, its stores of words and of things were to be stolen out of our memories by the hand of Time, it might still claim to have wrought something of great importance within us. But if, besides this fruit, it bears for the faithful student those other fruits which we have noticed in the course of this essay, it certainly deserves to be called a many-sided, most useful discipline, and is not likely to be superseded by others or to become obsolete.

#### PHYLLOTAXIS.

BY PRESIDENT HILL, OF HARVARD UNIVERSITY.

I WISH to go round and round a circle in equal steps, each step making a new division in the circumference, at each step to have the circumference, if possible, divided approximately into equal parts. Required the length of the step.

SOLUTION.—The first step, A, must, by the conditions, be approximately one half the circumference; let us suppose it less than one half; let us call the second step B, and the remainder of the circumference after subtracting A + B, let us denote by C. Now, by the conditions of the question, C ought to be as nearly equal to A, or B, as A is to B + C, else the second step does not divide the circumference into thirds as nearly as the first divides it into halves. Putting this in the form of ratio, we may say the whole circumference is to its larger half as the larger half is to its larger half:  $A + B + C : B + C = B + C : B$ ; or, since  $B = A$ , the circle is divided in extreme and mean ratio, and the step is .381932 of the circumference,  $= \frac{1}{2}(3 - \sqrt{5})$ . Had we supposed the step larger than  $\frac{1}{2}$ , we should simply have obtained  $.618067 = \frac{1}{2}(1 + \sqrt{5})$ .

SECOND SOLUTION.—The same important problem may be solved also in this way. The step A must be nearly  $\frac{1}{2}$  yet nearly  $\frac{1}{3}$  as shown before. The same reasoning might seem to show that it ought to be approximately equal to the same number of fourths, fifths, sixths, sevenths, eighths, ninths, and so on, in order to pre-

serve equal division of the circumference. But  $\frac{1}{2}$  is excluded because it does not approximate  $\frac{1}{3}$ . Two-fifths is accepted as a third approximation. One-sixth is excluded, as  $\frac{1}{3}$  is, for not approximating to numbers already found;  $\frac{2}{3}$  and  $\frac{3}{4}$  are excluded for being less than  $\frac{1}{3}$ , and therefore not sufficiently approximating  $\frac{1}{3}$ ;  $\frac{4}{5}$  approximates  $\frac{1}{3}$ , but is excluded because it is larger than  $\frac{1}{3}$ , and therefore does not come near enough to  $\frac{1}{3}$ ;  $\frac{5}{6}$  is accepted as a fourth approximation. The like reasoning would exclude all fractions not found in the series  $\frac{1}{2}, \frac{1}{3}, \frac{2}{3}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{1}{6}, \frac{2}{6}, \frac{3}{6}, \frac{4}{6}, \frac{1}{7}, \frac{2}{7}, \frac{3}{7}, \frac{4}{7}, \frac{5}{7}, \frac{6}{7}$ , etc., etc., which continually approximate  $\frac{1}{3}$  ( $\sqrt[3]{5}$ ).

**THIRD SOLUTION.**—Using A, B and C in the sense of the first solution, it may be shown as there that  $\frac{A}{2A+C}$  is between  $\frac{1}{3}$  and  $\frac{1}{2}$ , put it therefore equal to  $\frac{1}{2+\frac{1}{n}}$ . But C must be more than half A

in order to approximate a division into thirds, therefore n is less than two, or of the form  $1+\frac{1}{m}$ . But when the third step is taken, overlapping the original starting point by D, we must have D approximate in value C, and therefore be more than  $\frac{1}{2}$  C; therefore  $m=1+\frac{1}{p}$ . The like reasoning, by the aid of a simple diagram, would show that p is less than 2; and, thus continuing, we should show that the step A must equal a continued fraction whose first denominator is 2, and each subsequent denominator 1, which is easily shown to be equal to  $\frac{1}{3}$  ( $\sqrt[3]{5}$ ).

This problem was proposed and solved by Mr. Chauncey Wright, in *Runkle's Mathematical Monthly*, and I have merely simplified and popularized the proof.

Botanists have known for nearly forty years that the leaves of plants are arranged by this law, and Mr. Wright's problem simply shows that the law gives the most rapid and thorough distribution of the leaves. Astronomers also show that the points of conjunction of the planets are scattered about the sun in the same manner; that is, by a law of time which is algebraically or intellectually the same with the law of spaces among leaves; and theology cannot fail to infer the reign of Intellect in the creation of plants and planets.

### SELF-RELIANCE.

THE two great objects of intellectual education, are mental discipline and the acquisition of knowledge. The highest and most important of these objects is mental discipline, or the power of using the mind to the best advantage. The price of this discipline is effort. No man ever yet made intellectual progress without intellectual labour. It is this alone that can strengthen and invigorate the noble faculties with which we are endowed.

However much we may regret that we do not live a century later, because we can not have the benefit of the improvements that are to be made during the next hundred years, of one thing we may rest assured, that intellectual eminence will be attained during the 20th century just as it is in the 19th—by the *labour of the brain*. We are not to look for any new discovery or invention that shall supersede the necessity of mental toil; we are not to desire it. If we had but to supplicate some kind genius, and he would at once endow us with all the knowledge in the universe, the gift would prove a curse to us, and not a blessing. We must have the discipline of *acquiring* knowledge, and in the manner established by the Author of our being. Without this discipline our intellectual stores would be worse than useless.

The general law of intellectual growth is manifestly this;—whatever may be the mental power which we at any time possess, it requires a repetition of mental efforts, equal in degree to those which we have put forth before, to prevent actual deterioration. Every considerable step of advance from this point must be by a new and still higher intellectual performance.

There are many impediments in the path of the student, which it is desirable to remove; but he who attempts to remove all difficulties, or as many of them as possible, wars against the highest law of intellectual development. There can not be a more fatal mistake in education, than that of a teacher who adopts the sentiment, that his duty requires him to render the daily tasks of his pupils as easy as possible.

There is, perhaps no error in our schools at the present time more deeply seated or more widely extended than the ruinous practice of aiding pupils in doing work which it is all-important they should do for themselves. Our progress in the art of cultivating habits of earnest, independent thought, has not kept pace with our improvements in other departments of education. Familiar explanations, and illustrations, and simplifications, and dilutions, too often spare the pupil the labour of thinking for himself, and thus dwarf the intellect, and defeat the highest object for which our schools are established.

To secure from a pupil the solution of a difficult problem will often cost time which the teacher can ill afford; it may often cost

more effort to secure a solution from the pupil, than it costs the pupil to do the work. The pupil has tried the problem, and satisfied himself that he is not able to solve it; the teacher may be satisfied that the pupil can perform it, but if he can not make the pupil think so too, it will be difficult to bring his best energies to bear upon it; and even after the pupil is persuaded that he is able to accomplish the task, it may still be necessary for the teacher to adopt special measures to set the pupil's mind at work. The pupil may have the ability to solve the problem; he may believe that he has this ability; and he may have a willing mind; and, after all, fail entirely of doing it. And this brings to view what must be regarded as the highest gift of the teacher: namely, the ability to teach his pupils how to think and act, without doing their thinking and acting for them.

When a pupil has failed to overcome an obstacle, his mind may often be quickened to attempt by requesting him to explain the steps he has taken. "Great thoughts," says Dr. Channing, "are never fully possessed till he who has conceived them has given them fit utterance." So with a pupil attempting to surmount a difficulty; the very effort required to express a thought in language often aids materially in grasping the thought itself.

A scholar had become discouraged over a difficult question. He had gone through the solution again and again, but could not obtain the answer sought. The teacher availed himself of a favourable opportunity, and requested the pupil to go through the work slowly and carefully in his presence. As the pupil proceeded the teacher required him to explain each step of the process; and when he reached the point where his previous error occurred, as the teacher asked him to give his reason, the pupil's eye flashed with delight and he exclaimed, "I see my mistake!" Without further assistance he soon reached a correct result. The teacher had not furnished the slightest hint in respect to the solution of the problem. He had only taken measures which brought the pupil's own strength to bear upon it.

There are, however, peculiar cases which no such method will reach. The pupil may be required to repeat his solution a hundred times, in the presence of the teacher or alone, with reasons or without, and all to no purpose. The result, if he reaches one, is sure to be wrong. It is not time, even now, for the teacher to give over in despair. Let him ask the pupil such questions as will call to mind the principles which he has occasion to apply, and, in a majority of cases, the pupil will need no further aid.

The same end may usually be gained by giving the pupil an example involving the difficulty over which he has stumbled, but less complicated in other respects; or by giving him several examples, leading gradually to the main obstacle to be overcome. I believe the cases are exceedingly rare in which minds properly disciplined would ever be benefited by direct assistance, in an ordinary course of mathematical study. But if it be thought best, in extreme cases, to afford this assistance, let the pupil, by all means, be required to *repeat the process*, after the teacher's work has been entirely erased; and thus derive, at least, the benefit of *reproducing*, though he has not the power to *originate*.

The teacher will find it a highly useful exercise to give his pupils an occasional *model of thinking*. Let him take a problem to the blackboard, and *think aloud* as he proceeds with the solution; so that the pupils may witness the action of the teacher's mind, and observe the questions he asks himself, and the various associations and comparisons that arise, as he advances from step to step in the process.

I am aware that in many schools the teachers can not dwell upon particular points with the degree of thoroughness that I have recommended; but this does not affect the importance of the principle, which should be applied whenever the circumstances permit.

In most of our schools pupils indulge, to a greater or less extent, in the practice of assisting one another in the solution of difficult questions. I need not say that we should labour most assiduously to eradicate this injurious practice. Pupils should be taught to regard it as dishonourable, either to assist others or to receive assistance, except under the special cognizance and direction of the teacher.

Permit me, in this connection, to allude to one of the *helps* kindly furnished by a large class of publishers and authors, for the special benefit of teachers; but which many pupils have thought to be quite as well suited to their wants as to the wants of instructors. I refer to printed *keys*, containing solutions of all the more difficult problems in arithmetic and other branches of mathematics.

There are undoubtedly cases in which the *time* of the teacher is so limited that it is necessary for him to resort to the use of a key; but with pupils their effect is always injurious, sapping the very foundation of everything adapted to promote manly, independent thought. Even with teachers who are compelled to resort to the use of keys for the purpose of saving time, it must be confessed that the *tendency* of the practice is to render instruction superficial.

The practice of introducing young children to the study of English grammar as a science, and assigning them daily lessons to be prepared from a text-book, is exceedingly injurious in its influence upon their mental habits. A thorough and intelligent analysis of the structure of language is beyond the capacity of children eight or nine years of age.

Instruction in the use of language should be commenced as soon as children enter school, and all the primary classes should have

frequent oral and written exercises in cultivating this important art; but the practice of requiring pupils under ten years of age to prepare set lessons from a grammatical text-book, often accomplishes little more than to form and strengthen the habit of studying without thinking.

Few of us have any just conception of the latent energies of our own minds. It was eloquently said by Prof. B. B. Edwards, that "Genius lies buried on our mountains and in our valleys;" and he might with equal truth have added, that genius lies buried in our schools and colleges.

A successful teacher, of many years' experience, was accustomed to say to his pupils that he did not believe their average intellectual progress was over half so great as they were capable of making. But it would be absurd to suppose that pupils do not generally devote half so much time to study as their duty requires. Most of the pupils in our higher seminaries study too many hours in a day already. The loss is in the manner of studying. The mind is not perfectly abstracted from every thing except the subject in hand. The mental energies are not all aroused and concentrated on a single point.

A young man was employed, some years ago, as an assistant teacher in a flourishing New England academy. Among the classes which he was called to instruct was one composed mostly of older pupils, in Day's Algebra. He had been over the greater part of this text-book before, but there were two or three problems which he had never been able to solve. There was one in particular on which he had already tried his strength a number of times without success. His class was now rapidly approaching this portion of the book, and he must be prepared for any emergency. He accordingly set himself at work, and devoted several hours to the unsolved problem; but still the desired result was as far from his grasp as ever.

Mortifying as the alternative was, he decided at length to go to one of the teachers of the school, and ask for assistance. The teacher kindly engaged to examine the question, but remarked that it was some time since he had been over this portion of the work, and he really was not quite sure that the method of solving it would readily occur to him. The class had now reached the section in which his difficulty occurred, and there was no time to be lost. After waiting one or two days the problem was returned to him, without a solution. What could be done? To go before his class and acknowledge that he was unable to master it, would be to lose caste at once. The necessity of the case suggested one more expedient. He had a friend, in an adjoining city, who was quite distinguished as a teacher of mathematics. To the house of his friend he now directed his course with as little delay as possible, but on arriving he learned that his friend had left the city and would not return for several days.

His last hope had fled, and his heart sunk within him. With a burden of chagrin and mortification that was almost insupportable, he commenced retracing his steps. "What," thought he to himself, "am I doing? Why am I here?" And his steps gradually quickened, as the excitement of his mind increased. He walked a few moments in silence; but his emotions soon found audible utterance. "I can solve the problem," he said, with emphatic gesture, "and I will solve it!" He went to his room, seated himself at his table, and did not rise till the task was accomplished.

This single triumph was worth more to him than a year of ordinary tuition, and the pleasure it afforded seemed to him like the concentration of a life of bliss. The solution was written out in full, and at the end of it there still stands a memorandum of the date and the hour of the night when the desired answer was obtained.

If we examine the intellectual efforts of our pupils we shall probably find that nine-tenths of them fall below the maximum of their own previous efforts, and can not therefore be taken into the account in estimating their intellectual progress.

Two pupils of equal abilities have the same lesson to prepare for recitation. One accomplishes the task by putting forth twenty distinct mental efforts. Eighteen of these cost him no greater energy or activity of mind than he has often brought into exercise before. The other two relate to difficulties which can not be overcome without efforts one degree higher than any that he has previously made. But the appearance of new difficulties only stimulates his mind to action, and the task is accomplished.

The other pupil puts forth the eighteen efforts that come within the range of his previous attainments, and leaves the two difficulties which would cost a new effort, to be explained at the recitation. To a superficial observer, these two pupils may seem to progress in the ratio of 20 to 18; but the true philosopher will tell us that their progress, so far as intellectual growth is concerned, is in the ratio of 2 to 0.

It is our misfortune that we have no means of measuring and recording from day to day the successive steps of mental growth. Heat and cold, the lapse of time, the speed of lightning, are made tangible, and measured with ease and exactness. We can even form a tolerably correct estimate of the amount of knowledge acquired in a single day or hour; but our estimates of progress in intellectual strength are exceedingly uncertain and often fallacious. It is to be feared, that we often give our pupils credit for having passed a very profitable day in school, when they have actually deteriorated in mental power. We are in danger of forgetting that they may add to their stores of knowledge, without increasing their intellectual strength.

Let me here suggest the importance of having lessons recited by pupils, and not by teachers. Many teachers fall into the habit of supplying all the *ellipses* made by their pupils during recitation. A pupil rises in his place with an air of assurance, and proceeds with a full voice till he meets with some trifling difficulty, when the teacher supplies the desired word or hint, and the pupil proceeds as before, till another difficulty arises, and the teacher again comes to his aid.

In this way a very fair recitation is made out; and neither teacher nor pupil appears to know that if the pupil had been left to stand independent and alone he would have made almost an entire failure.

The practice of asking questions that suggest, directly or indirectly, the desired answer, has been exposed and condemned again and again in educational conventions and educational journals, but it has not yet been banished from the school-room. Many teachers who are careful to avoid *leading questions*, still ask altogether too many questions. Instead of giving the pupil a general topic, and expecting him to exhaust it, they kindly throw in a number of *additional questions*, to draw out the particulars which the pupil ought to associate with the main thought, and present in full, without this aid. Younger pupils require more questions than those more advanced; but even younger pupils should be allowed to carry some portion of a recitation without assistance.

Let me not be misunderstood in the views I have expressed respecting the importance of requiring pupils to rely upon their own resources. The first germs of knowledge must come from *without* and not from *within*, and very much of the knowledge acquired by younger classes, must be imparted directly by teachers and others. There are many branches of learning which we must all derive, in a greater or less degree, from teachers and books. The treasures of knowledge that have been accumulating for nearly 6000 years, are not to be rejected nor lightly esteemed. They are a precious inheritance; but he who contents himself in idleness and ease, and neglects to put his inheritance to usury, will find that his riches are little better than shadows.

But there are other departments of study, in which the value of our acquisitions depends almost entirely upon the action of our own minds; and it is upon these branches that we depend in a great degree for intellectual growth. Here, then, I would apply most rigidly the rule—never do for a pupil what he is capable of doing for himself.

*Passive instruction* is always attended with danger to the mental habits of pupils. A happy faculty of explaining and illustrating the principles of a lesson is an exceedingly valuable gift, but it is a gift that is often exercised to the detriment of learners. Whatever instruction we attempt to impart orally, should be given in such a manner that it will not fail to find a lodgment in the mind of the pupil. It is not sufficient to illustrate principles by examples and then leave them. They may even be *understood* at the time, and yet not fully *possessed*. The learner must go through the process *himself*, to be sure he is master of it.

Five boys of a class had failed to solve a difficult example in their lesson. The teacher went to the blackboard, and explained very carefully the manner in which the work was to be performed. He then requested those that understood the explanation to manifest it, and the five hands were all promptly raised. "Well," said the teacher, removing his work from the board, "you may all perform it now on your slates." The effort was made, but the result showed that only two of the five were able to perform the task. The others were perhaps right in saying that they *understood* the work, as the teacher explained it, step by step, on the board; but it was quite another thing to *do it*.

In our efforts to cultivate habits of self-reliance on the part of our pupils, one of the best and most feasible measures to which we can resort is the practice of introducing frequent written reviews.

Several topics are written distinctly on the black-board, and the pupils are required to expand them as fully and accurately as possible. Each pupil is seated by himself, and furnished with pen and paper but receives no assistance, direct or indirect, from either teacher or text-book.

There are too many teachers who seem to regard it as their chief business to exercise and develop their *own* minds, instead of attending to the minds of their pupils. There are those who even manage to sustain a very good degree of popularity, in school and in the community, by a display of themselves. "What stores of knowledge he possesses," says one. "How beautiful his illustrations," says another. This display of the teacher's knowledge may serve for *exhibition*, but it will prove of little value to the pupils in after life. The scholar whose attainments at school are but the echo of what the teacher has learned, will be sure to become one of that large class of citizens whose opinions and actions are always governed by those who have the independence to think and act for themselves.

I have dwelt at considerable length upon the subject of this article, because I believe that very few pupils are taught to rely sufficiently upon their own resources, and because I believe that many of the modern appliances in schools militate directly against the accomplishment of this object.

A few brief quotations will close this article.

"One preliminary truth is to be kept steadily in view in all the pro-

cesses of teaching, and in the preparation of all its instruments, viz., that though much may be done by others to aid, yet the effective labour must be performed by the learner himself."—*Horace Mann.*

"Alas! how many examples are now present to our memory, of young men the most anxiously and expensively be-schooled, be-tutored, be-lectured, any thing but *educated*, who have received arms and ammunition, instead of skill, strength, and courage, varnished rather than polished, perilous, over-civilized, and most pitifully un-cultivated! And all from inattention to the method dictated by nature herself, to the simple truth, that as the forms in all organized existence, so must all true and living knowledge proceed from within; that it may be trained, supported, fed, excited, but can never be infused or impressed."—*Coleridge.*

"A man can no more learn by the sweat of another man's brains than he can take exercise by getting another man to walk for him. All mental improvement resolves itself ultimately into self-improvement."—*Dr. Booth, of Wandsworth, England.*

"The first error in education is teaching men to *imitate*, or *repeat*, rather than to *think*. We need to take but a very cursory glance at the great theatre of human life, to know how deep a root this radical error has struck into the foundations of education."—*Mansfield's American Education.*—FROM WELLS' "GRADED SCHOOLS."

LITTLE WHITE LILY.

**L**ITTLE white Lily  
Sat by a stone,  
Drooping and waiting  
Till the sun shone.  
Little white Lily  
Sunshine has fed;  
Little white Lily  
Is lifting her head.

Little white Lily  
Said, 'It is good;  
Little white Lily's  
Clothing and food.'  
Little white Lily,  
Dressed like a bride!  
Shining with whiteness,  
And crowned beside!

Little white Lily  
Droopeth with pain,  
Waiting and waiting  
For the cool rain.

Little white Lily  
Holdeth her cup;  
Rain is fast falling  
And tilting it up.

Little white Lily  
Said, 'Good again,  
When I am thirsty  
To have nice rain;  
Now I am stronger,  
Now I am cool  
Heat cannot burn me,  
My veins are so full.'

Little white Lily  
Smells very sweet;  
On her head sunshine,  
Rain at her feet.  
'Thanks to the sunshine,  
'Thanks to the rain!  
Little white Lily  
Is happy again!'

NUMBER.

A COURSE OF LESSONS PREPARATORY TO THE USE OF A TEXT-BOOK ON ARITHMETIC.

I.

**L**ESSONS on number introduce the pupil to subjects which afford a higher exercise of mental power than those on color and form.

In the study of the properties of number, Pestalozzi did not aim at the mere acquisition of the science, and of mechanical dexterity in calculation; he considered the subject to be a valuable means of awakening intelligence, of forming the judgment, and of developing the reasoning faculty. His method of presenting the first principles of the science also differs greatly from that ordinarily pursued; he trained the mind to grasp the full perception of the value of numbers, by observation upon them as illustrated in surrounding familiar objects; and when by this process the abstract idea was acquired, he then, but not till then, communicated the symbol by which it is conventionally represented. It was found that pupils trained on these principles were themselves enabled to deduce the practical rules of arithmetical calculation from the very examples on which their minds had been previously exercised.

This may be a slow process; but it has been well observed, that "when the true end of intellectual education shall be admitted to be, first, the attainment of mental power, and then the application of it to practical and scientific purposes, that plan of early instruction which dwells long on first principles, and does not haste to make learned, will be acknowledged as the most economical, because the most effectual."

To some persons, the detail, the analysis, the repetition recommended in the following lessons, may seem wearisome; and it is true, a careless or unobservant teacher may make a weariness of such instruction, and, indeed, of any other plan of education. But if those who have long understood the meaning of one, two, and three, were able to remember the mental process by which they themselves acquired their understanding of these numbers, they

would find it was by some process not very dissimilar from that here recommended. It may be they were never taught on such a plan—truth was never thus clearly presented to the mind in its own natural simplicity, rising step by step into greater complexity; it may be, that instead of learning such truth easily and surely, as those will do who are led through these lessons, they had to gather it here and there, under disadvantages of every kind, so that even still, perhaps, the beautiful properties of numbers, constantly as experience presents them, are but seen through a mist; but it is indisputable, that any amount of clear perception such persons may have attained to, they have attained it by the fact of the mind, itself an observant faculty, having done for itself that which the teacher omitted to do for it, and having done it, also, by some such process as this, with the visible world for its book, and with God's gifts of observation and reflection for its ever willing guides. Remembering these things, the judicious teacher will guard against dwelling too long on these analytical lessons, using them just so long as there may be work to be done by them, while avoiding also the opposite extreme of rapid but unsound progression.

FIRST STEP.

*The Numbers One to Ten.*

**Object.**—I. To lead the children to the perception of number, by presenting it as it is exemplified in surrounding objects; and to teach the word by which each number or which an idea has been gained, may be expressed. II. To teach the power and name of each number, when used as an ordinal. III. To exercise the mind on the numbers of which the knowledge has been attained, by exhibiting their gradual increase by ones, and by comparing their general magnitudes.

**Plan.**—I. Successively develop the distinct perception of the value of numbers, beginning with one, and taking each number separately in its order as far as ten, by the exhibition of the corresponding number of objects. Any convenient appliances,\* such as books, balls, pebbles, slate-pencils, or marbles, may serve as illustrations. It is well that these should be diversified, that the child may the more clearly perceive that number is a property of all separate objects—of objects of all qualities, shapes, sizes, and colors alike.

As clear perception is thus successively gained of each of the several numbers, the teacher should tell the name of the number. The class must then be practised in associating the number with its name. In carrying out this—

1. The teacher gives the name, the children bring forward the corresponding number of objects.
2. The teacher shows the children a definite number of objects, requiring them to apply the name of the number to them.
3. Lastly, the children enumerate or count from one to the number last attained, ascending; and inversely from it to one, descending, again and again, till perfect in the exercise.

II. The plan of teaching the powers and names of the numbers when used as expressing order of time or of position, will appear as we advance with this Step.

*I.—Examples of Lessons on this Plan.*

To develop the perception of the number expressed by the word ONE, and to communicate the name of the number.

This first lesson is most important, as it involves that which is the foundation of all number—the grand idea of *One*, or *UNITY*. The teacher must not think the idea so simple as to need no illustration.

The child should be led to appreciate the notion of this number by the means already recommended. One object may be taken from many of its kind, and held before the class, or it may be placed in some unusual place, the teacher telling the children, even though they may already know the fact, that such a number of anything whatsoever is said to be *one* of it. The word should be applied to diverse objects, the children being allowed to describe them. How many do I hold? One. One of what? One marble. And this? One pencil. And this? One book. A child may be told to bring one slate, or one ball, or to give one shout, one clap, &c.; and the attention of each child may be guided to observation on itself as one separate individual, or to those objects in nature which exist in oneness, as one sun, one moon.

*A Lesson to Develop the Perception of the Number expressed by the Word "Three," and to Communicate the Name of the Number.*

The following sketch of a lesson will show the plan to be pursued with all the numbers as far as ten.

Before commencing a lesson on a number which is new to the children, the teacher should ascertain that they have clear ideas of those on which they have already received instruction. In this instance it is supposed that the number *two* has been the subject of a lesson, and is thoroughly understood, and that the teacher tests

\* Were the common ball-frame alone depended on for illustration, the children might be led to associate their ideas of number with one species of exclusive objects, and their attainment of the abstract idea of number, as a universal property of all objects, might be retarded. The true province of the ball-frame is rather to assist in working out some of the simple processes of calculation, when a notion of number in the abstract has been gained.



this by directing one of the children to bring *two* pencils, or *two* books, &c., while the others look on observantly, and approve or otherwise, as the case may demand. If the requirement be rightly met, the class may simultaneously describe the objects as they are presented, saying, "Two pencils," "Two slates," "Two books," &c. Here also the objects should be diverse.

With this attainment made, the class may be led on to the observation of the number *THREE*.

1. The teacher should now add one pencil to the two pencils, one slate to the two slates, or one book to the two books, and, as this is done, require the children to say, in each case, "Three pencils," "Three slates," "Three books, &c. As an exercise, groups of *three* of different objects may be placed before the class, and one of the children desired to bring a similar number of the same object, or of some other. When observation has been well exercised by varied examples of this kind, the children may again be told that such a number of any object whatever is called *three* of it, and that the name of that number is *THREE*.

2. The teacher should then try to discover how far the children are able to connect the word *three* with the corresponding number, by calling upon several of them in rotation to bring three pencils, or three books, or three pins—to bring three of their companions to the teacher, to hold up three fingers, or to clap their hands three times, &c.

3. The object of the next exercise is to ascertain whether the children can promptly apply the proper name to the number, when presented to them in different objects. The teacher may hold up three fingers, and ask how many are held up, and then take up three pencils, and again ask how many there are, or make three strokes upon the slate, and ask how many such a number of anything is said to be.

It may confirm ideas already gained as to the *succession* of numbers, if the children are required to tell in regular succession those they have acquired, while the succession is enacted, as it were, by the teacher. Several sets of objects should be at hand, from each of which the teacher takes first one, then a second, then a third; the children saying, as this is done, "One pencil," "Two pencils," "Three pencils;" "One pin," "Two pins," "Three pins," &c.

This should be followed by an exercise in ascending and descending enumeration; thus:—

"Now, all together say with me, *One, two, three*; and again, *Three, two, one*. And now say the same without me, for I shall be silent."

In these exercises, which will need frequent repetition, great care must be taken not to perplex the children; the perception of number should be permitted to grow upon them almost without their being conscious of the attainment. It should be attained by simple observation, rather than by a process of reasoning, although it is true that at a further stage of the child's education it will be found that all the higher calculations of arithmetical reasoning are, in fact, based upon the knowledge for which it is the aim of these initiatory lessons to prepare.

A right method of carrying out this early instruction in number is so important, that it is thought advisable to introduce in this place the following notes of a lesson actually given by an experienced teacher to a class of very young children, on the development of the number *four*. The lesson was given in the presence of strangers, to whom the teacher gave the following introductory explanation of the plan to be pursued:—

1. I shall exercise the children in the number *three*, to ascertain whether they have a correct idea of it. For example, I will call a child to bring me three pointers from among many; then three bottles, &c. To give the idea of *four*, I will add one pointer to the three pointers, one bottle to the three bottles, &c.

2. To ascertain whether they connect the right idea with the name, I will ask them to bring me four pointers, four bottles, &c.

3. To see if they can apply the names themselves, I will hold up four bottles, four pointers, &c., and require them to tell me how many there are.

Lastly, I will make them go over together in succession, the numbers they have learnt, that they may obtain a clear perception of numeration; as, "One bottle, two bottles," &c.; and after this make them say, "One, two, three, four," several times.

#### THE LESSON

*Teacher.* I should like a little child to bring me three bottles. Let Charles bring them.

The child named brought *two*.

*T.* Is he right? *Several.* No.

*T.* Who can do it? *Several.* I can.

A little boy rose at the bidding of the teacher, and brought another bottle to her, making up the number *three*.

*T.* Now who can bring me three shells? (*pointing to some placed at a little distance.*) *Several.* I can.

*T.* Let Emma bring them.

The little girl referred to brought the proper number.

*T.* Now who can bring me three pointers? *A little girl.* I can.

The child rose, and brought the number of pointers required.

*T.* Has she brought the right number? *All.* Yes.

*T.* Now some child bring me three stones.

A little girl brought three stones.

The teacher, finding that the children had a correct idea of *three*, placed before them the same objects in groups of *four*, and called upon them to repeat after her, "Four pointers."

*All.* Four pointers.

The words were repeated three or four times.

*T.* Now say, "Four stones." *All.* Four stones.

The same repetition took place as in the case of the bottles and shells.

The teacher's next point was to ascertain whether, when she used the name *FOUR*, the children connected the right idea with the name.

*T.* Who can bring me four pointers? *A little girl.* I can.

The child rose, and brought them to the teacher.

*T.* How many pointers are there here? *All.* Four.

*T.* Then did Lizzy bring the right number? *Three or four voices.* Yes.

*T.* Now I should like to have four bottles.

A little boy rose, and brought *three* to the teacher.

*T.* Is he right? *Several voices.* No.

*T.* Who can make the number to be four? *A little boy.* I can.

He then rose, and brought one bottle more.

*T.* Now, how many bottles are there? *Several voices.* Four.

*T.* Who can bring me four shells? *A little boy.* I can.

He brought them to the teacher.

*T.* Is he right? *Many voices.* Yes.

The same thing was repeated in the case of four stones: "One stone, two stones, three stones, four stones;" "One bottle, two bottles, three bottles, four bottles," &c.

The teacher's third point was to find if the children could themselves correctly apply the name. To do this, he called upon them to pick up four shells, four stones, &c., which they did correctly. They then practised numeration up to the point they had reached, to obtain an accurate perception of the *increase* of numbers, saying after the teacher: "One stone, two stones, three stones, four stones;" "One bottle, two bottles, three bottles, four bottles;" "One, two, three, four."

*T.* Now, Thomas (*addressing one of the children*), can you bring me four children? *four* who are sitting up nicely.

The little boy spoken to, rose, selected *three*, and led them to the teacher.

*T.* Well, Thomas, have you brought four? *Thomas.* Yes.

*T.* (*to all.*) Thomas says he has brought four children; are there four here? *Nearly all.* No.

*T.* Let us count them: one child, two children, three children. Let me have four, Thomas.

He brought another boy, who walked before the rest to take his place by their side.

*T.* (*to all.*) Should he have gone in front of the other children? *Two or three voices.* No.

*T.* Certainly not; he should have come round behind them.

The child was then led round, and placed by the side of the three children.

*T.* Now say, "One child, two children, three children, four children." This was done.

*T.* Now let three children go to their seats. Now one child.

The children then went to their seats.

*T.* Who can show me four fingers?

A little boy held up all the fingers and the thumb of both hands.

*T.* (*to all.*) Are there only four there? *Several voices.* No.

*T.* See what a number of fingers! How many did I ask for? *Several voices.* Four.

The teacher then counted four on her own fingers.

*T.* Now, Emily, show me four.

The little girl addressed held up that number of fingers.

*T.* How many does she hold up? *Four.*

It is unnecessary to pursue these detailed lessons further. In working out the idea of the higher numbers, it is necessary simply to adhere to the plan here recommended, adding one additional marble, pebble, or book, to the group last considered, recognized, and named, the teacher then calling on the class to form successive groups of objects, to the numbers of which the names *four, five, six, seven, eight, nine, and ten* are applicable; and then requiring the children themselves to give the proper name, as groups of objects containing such numbers are successively presented to them, concluding the lesson by ascending and descending enumeration.

It must be left to the discretion of the teacher where to put a limit to lessons such as these. "The degree of power in children, and the time of development, are so various that nothing but careful observation can make the teacher aware what time or labor each step will require, before it is thoroughly understood by the pupil." One child will be embarrassed when required to tell the number of ten or twenty objects which lie before him, while another will determine it at a glance. In one of these cases the power of perception needs to be developed by a patiently conducted gradual process; in the other it will steadily acquire increased scope as larger numbers are presented to the child's observation. As a general rule, the number *ten* should be the limit of these initiatory lessons on number for some considerable time.

#### II.—The Order of Numbers.

The object of this lesson is to bring out the relation in which numbers stand to each other when used as ordinals, and when the perception has been awakened, to communicate the name applied to each number when so used. It is manifest that, though closely allied to the abstract value of a number, its power as an ordinal is

a relative quality. The number three is *always* three, under all possible circumstances; but an object is *third*, only when some other is *second*; and that object again is *second* because some other separate object is *first* in order. The idea of *three* is quite unchangeable, but the notion of *third* is mutable, as regards the object which for the time is qualified by the word; for the object which is *third* may be made the *second*, or the *first*; and the object which is *first*, may be made *second*, *third*, *fiftieth*, &c., infinitely. These facts deserve a distinct lesson for their elucidation. lest the mind should indulge an ill-defined perception of a well-defined truth. When, also, each new property of numbers is thus made the subject of concentrated attention, the mind gradually gains power to think with vigor, to rely on its own attainments, and to apply the knowledge gained with accuracy and precision. If, however, the teacher should not consider the children sufficiently advanced for these lessons, simpler Exercises, may precede them; and even addition may be commenced upon before they are given.

*A Lesson to Develop the Idea of the Order of Succession in Numbers, as First, Second, Third, &c., to Tenth.*

In giving this lesson, a small ladder containing but ten "rounds" may be used for illustration. This, being a new object, will arrest attention. It is also an extremely appropriate object for such a purpose.

The children should first count the rounds or steps; they should then be led to observe their order. If a boy wished to mount this ladder, what would he first do? He would put his foot on the step. On which? Would you say on the *one* step? No, teacher; on the *first* step. And then on the *two* step? No; on the *second*. And so on, to the tenth. When would you say, "One step, two steps, three steps," &c.? When simply counting how many there are. And when you would you say, "First step, second step," &c.? When using the steps in going up or down, or when thinking of them as coming before or after each other.

If these ordinal names are already known to the children, as some of them will probably be, the teacher will merely have to superintend the correct application of them. If, however, they are not known, as may be the case with very young children, one child may be called out and placed in front of the class, ready, when directed by the teacher, to place his hand on each round, beginning with the lowest, as he supposes himself climbing to the top. As each round is touched, the teacher may give its ordinal name of *first, second, third, fourth, &c., to tenth*, the whole class pronouncing it after her. After several repetitions of this ascending process, the descending enumeration may begin, and be followed out in the same way. The teacher may then vary the exercise by enumerating from first to tenth, and from tenth to first, immediately. After this the teacher should require the children to give the ordinal name of each step when pointed out by another.

The attainments of the children may be tested, by their being required to lay the hand upon any round named by another, and again to give the name of any round on which the teacher places the hand. They may be asked to say what is the name of that step which is above the second, and of that below it; and then to give the name of each *alternate* step, beginning with the first, so as to elicit the series—*first, third, fifth, seventh, ninth*; and then starting from the second, so as to produce the series—*second, fourth, sixth, eighth, tenth*. This may be done also in descending order, beginning consecutively with tenth, and ninth.

In applying the ordinals to other groups of objects, an attractive illustration might be afforded by placing a class of ten children in front of the gallery, in which the relative position of each individual might be ascertained and described. Small objects, which may be easily moved from place to place, and put in a variety of relative positions, are most useful in lessons such as these. The number of the objects presented should be first determined, and then their relative position. One of them may then be moved into a new place. The effect upon the whole series, as well as upon the single object moved, will attract attention, and deepen impressions already made.

A few original miscellaneous questions may now be asked, as tests of acquirement.

What is the first meal of every day? What the second? What the third?

In what place does this child stand in this class? &c.

EDUCATIONAL INTELLIGENCE.

AT HOME.

**Kings College.**—We take the following account of the Encœnia of Kings College from the *Church Monitor*:—

The annual meeting of the friends of King's College, Windsor, took place last week. The attendance was large, the weather was fine, and the business and the pleasure of the accustomed assemblage dispatched and enjoyed as in other years. The public prints have already informed us upon all the details in which people in general would feel any interest, and there is no necessity to repeat that which has thus already been published in several of the most widely circulated journals.

The ordinary routine of electing Governors and officers of the Associate Alumni was attended to on Wednesday; Divine service

at the parish church, and the ceremonies conducted at the hall, occupied the early part of the following day.

During a discussion on Wednesday among the members of the Associate Alumni the pleasing information was elicited that a large number of students matriculated during the past term.

We have been furnished with the following list of honors &c., conferred at the last Encœnia, which we believe to be correct:

DEGREES, 1867.

- Weldon, 1st Satisfecit, of St. John, N. B.
- Wheelwright, do., England.
- King, do., Windsor.
- Metzler, 2nd Satisfecit, Truro.

RESPONSIONS.

Pointz, of Windsor; Deveber, of St. John.

General Williams' Prizes of \$60 each.—Modern Languages—Wheelwright; Engineering—Armstrong; Metallurgy—Bowman.

Welsford Testimonial, of \$24, founded by Dr. Almon in honor of the gallant Welsford.—E. Owen, son of the Rev. H. L. Owen, Lunenburg.

Alumni Certificate—Chemistry.—Shreve, son of the Rev. C. Shreve, Chester.

Do. French.—S. Boyd, son of the late Dr. Boyd, of St. John, N. B.

Professor McLeod's Prize of Books—Algebra.—Mutch, of P.E.I. Do. Euclid.—Shreve, of Chester.

DEGREES CONFERRED.

Professor Hensley, D. D. Beamish Murdoch, Q. C., D. C. L. Smith, B. A., Nickerson, B. A., Metzler, B. A., Brown, B. A., Davis, B. A., Symonds, B. A., Chipman, B. A., Borden, B. A.

**Pictou Co.**—The Inspector, having completed his inspection of the southern district of this county, writes as follows:—"It will afford you much pleasure to be informed, that, with one solitary exception, every school in our southern district is in full operation, with a largely increased attendance. In 58 schools just inspected the number of pupils on the register is 2689. This is much in advance of any former report; and from what I have ascertained, I trust to be able to give as good an account of north Pictou.

My earliest visitations were directed to those schools in the remote sections (north and south) which were vacant last winter; in nearly all these teachers are now engaged. For the last four years Hopewell, East River section, has been without a school; we have now two large and elegant school-houses completed, and two schools in operation. The school-house in Lower Hopewell is ornamented with a handsome belfry and bell. Several other new houses are in progress of erection in the county not before reported; I have the promise that all will be completed, seated, &c., before next winter. The new school-house in Pictou town is nearly completed; outside finished, painted, &c.—adorned with an elegant bell tower, &c., it will be the handsomest building in Pictou. A large building has been erected at the Albion Mines in connection with Mr. McKenzie's department; two additional teachers will be engaged. We have now an abundant supply of teachers, and I have much satisfaction in reporting a great improvement in the organization and method of instruction in our schools, and increased zeal and energy on the part of most of our teachers.

The great advantages of our present educational system over the past, the valuable and interesting information to people and teacher, conveyed through the *Journal of Education*, the reduced cost of apparatus, books, &c., to the people, the evident advantages of the present mode of instruction adopted by most of our teachers, are now fully acknowledged and appreciated by the great majority of our people."

**Lunenburg Co.**—The Inspector reports:—The number of schools in operation in the county is as follows:

Lunenburg.....	44
New Dublin.....	22
Chester.....	16
Total.....	82

This number has never before been equalled in this county during any one time, and in the coming winter term I expect the number will exceed a hundred. I am happy to say the law is now working very satisfactorily in this county, and is getting into favour with the general community more and more every day; for with the exception of some of those persons, here and there, who have no children to educate, and are therefore not in a capacity to reap any direct benefit from its admirable provisions, it is very generally hailed as one of the greatest blessings ever bestowed on the country.

The school-house built in the north-west section, No. 22, Lunenburg, in 1864, has been nicely finished and furnished of late; the trustees have also been able, after some difficulty, to procure a quarter of an acre of land adjoining it for a play ground, which they have neatly fenced and are otherwise improving. They have

also erected a neat outhouse. The Oakland section have also built commodious building, which will be quite finished and furnished in such manner as will enable them to compete for the superior grant at the beginning of the ensuing term. This section never before had a school-house. What schools they have had formerly were only intermittent, and were always kept in a room in some private house. The Clearland section is also building a new house, which they will endeavour to have finished before November, if possible. The schools having increased in number, my work increases in proportion."

**Yarmouth Co.**—G. J. Farish, Esq., M.D., Inspector, reports.—The summer holidays have interfered with my inspection, still, during the month I have visited 18 schools in different parts of the county, and perceive a steady and decided improvement in nearly all. Except in a few remote sections, I find a good number of the prescribed books in use in the schools, and the trustees are anxious to procure more, but are waiting for a vote at the October meeting to enable them to do so.

The summer vacation of the Yarmouth Seminary commenced on the 19th inst. It was preceded by a public examination, which passed off well.

There are at present in successful operation in this county sixty-one legal schools, and four private schools, beside the two higher departments of the Yarmouth Seminary. Of these sixty-one, there are six competing for the superior School Grant. The legal schools are all, of course, supported by assessment; the private ones by voluntary contributions or fees.

The number of legal common schools in this county last summer was 48, against 61 for this term. No better evidence can be produced that the educational advantages of the country are increasing.

The following alterations have taken place in teachers during the present term. Mr. Francis Checkly has resigned the Principalship of the Lower Town school, and his place has been supplied by Mr. Alfred Smith, B.A., of Sackville, and Mr. Angus Sinclair has retired from the Central Town section. The situation has been filled by Mr. Jacob Durkee, a pupil from the Seminary.

As a proof of the increasing interest that is taken in Education in this county, I may mention that in eighteen cases where the rate-payers refused at the last October meetings to vote sufficient money for the support of the schools during the year, they have freely come forward at special meetings and furnished the necessary funds for that purpose, and in two other cases, at special meetings, voted money for building houses.

There have been completed during the present year, or are now in course of erection, in this county, nine new houses, most of them buildings of the first class, and three others have been enlarged, repaired, and refurnished."

**Digby Co.**—The Inspector for the county of Digby reports.—"It gives me pleasure to be able to report that the work of building and repairing school-houses is making steady progress in this county. In six or seven sections the well-directed efforts of a few individuals were for a long time frustrated by the stern opposition they had to encounter, and they began almost to give up all hope of seeing a school-house erected in their midst. But their resolution and perseverance will, ere long, be crowned with complete success. One of the houses referred to, will replace that which caught fire more than two years ago, and had just then undergone thorough repair. This accident will, however, result in great good to the section, as it will thus give it a school-house very superior to the one which it lost. Another will form a striking contrast to the wretched hotel, shall I call it, to which some cling with remarkable tenacity, simply because a commodious building would involve a little outlay.

It is most gratifying also to be able to state that in two sections, of which I almost despair, the school-houses have been put in thorough repair, and are now occupied. Others, in which the work had been in abeyance some time, will be, speedily, in a forward state.

There are 54 schools actually in operation this term, being an increase of 9 over the last. The attendance, so far as I have inspected, is satisfactory. There will be a considerable increase of enrolled pupils. The attendance last term exceeded that of the summer of 1866, by 738. There can be little doubt, therefore, that the registered number of children, during the summer of 1867, will exhibit an increase over that of 1866, of at least 900. Increasing efforts are made to procure proper apparatus. Several sections have recently procured a good supply of books, maps, and diagrams; without these educational appliances, however earnest and able a teacher may be, it is difficult to see how any school can be efficiently conducted."

**Queens Co.**—Samuel P. Fairbanks, Esq., Commissioner of Crown Lands, in a letter acquainting the Inspector of Queens Co. that he (Mr. F.) had given a lot of land to the Trustees of the section near Port Jolie, for the purpose of a public school-house, adds:—"I have also requested the Superintendent of Education to select as many Elementary School-books as may be required for about 20 or 30 scholars, and to forward them to your care, trusting that you will take the trouble to place them in the hands of the trustees, to be distributed among the pupils free of charge. I sincerely hope that the cause of education will advance in Queens County. Some of the older inhabitants will recollect that I was not indifferent to the subject when I dwelt amongst them. I recognize in the present educational system a well-considered and

judicious measure,—a vast improvement upon the former,—and I shall continue to watch its progress, in the fullest confidence that it will receive the support of parents, and become a blessing to their children."

The Inspector reports:—"Liverpool is now thoroughly embarked in the erection of its long-contemplated County Academy. The edifice will be, I presume, in architectural style, in size and commodiousness, second to none in the province. It will be on the ground 76 x 54 feet with 35 feet posts, and a basement excavated from the solid rock for furnaces, &c. It is just now put under contract, to be completed by the new year. The frame will go up next week. It will occupy one of the most commanding sites in town. The citizens of Liverpool pride themselves in stately public buildings. There are at present five flourishing schools in town, but all struggling against a strong tide of obstacles arising from inadequate accommodation. Another school is needed, but there is no place for it. Already the people's educational boon is inaugurating a new and bright era for Liverpool.

In other parts of the county several other fine houses are advancing towards completion. A few days since Brooklyn section had the misfortune to lose its house by fire. This was a large two story building, intended to accommodate a graded school with three teachers, and was nearly ready for the furniture. The cause of the fire is unknown. It probably originated from a match with which a tobacco pipe had been lighted, or from a cask of lime.

S. P. Fairbanks, Esq., of Halifax, has generously presented Catharine's River section with a site for a school-house, and, as you are already aware, has made arrangements to furnish the school, as a further gift, with the prescribed school books. This is a noteworthy example, especially as the section is poor and scattered."

**Colchester Co.**—H. C. Upham, Esq., reports:—"During the week commencing July 1, I visited the schools in the following Sections,—Lower Onslow, Lower Village of Truro, Old Barns, Clifton or Black Rock, Beaver Brook, Green's Creek No. 2, Green's Creek, No. 1, Princeport, and Pleasant Valley. A pleasing feature in this week's travel is that there is no vacant school-house. The school at Lower Onslow has been under the charge of Mr. John R. Downing since the beginning of 1864, excepting one term when Mr. D. attended the Normal School. He is in most respects a very valuable teacher, having a happy faculty of imparting knowledge and governing his school with facility. The school at Lower Village of Truro is an exception to the general rule, the teacher having been brought up in the section, and possessing the confidence and esteem of the pupils and parents. The school at Old Barns is in like manner an evidence that a young man brought up in a section, and mostly educated in its school, may become a valuable teacher in his own home. Neither of the young men referred to have any difficulty in managing their respective schools without severity or harshness. The people of Beaver Brook have discovered that a very little more added to the sectional assessment gives the services of a first-class teacher, and secures for the section superior educational advantages. In all of the above Sections improvements and progress have been made during the past year. Lower Village has a new house completely finished and furnished; Old Barns school-house has benefited from fresh paint and white-wash; Clifton school-house has been well scented; Beaver Brook house has been slightly improved; of the Green's Creek houses, No. 1 has been finished, and No. 2 has made some progress. All the schools but Clifton have been provided with books, and most of them have some addition to their apparatus.

During the week commencing July 8, I visited schools at Earleton Village, West Earleton, North Earleton, Rossville and Bairechan. The outside of the new house at Earleton village is completed. Although the school is taught in the building, the interior is entirely unfinished. It is of fine dimensions, and will be, when finished, well adapted to the work of the section. It is certainly absurd that the pupils should be very indifferently furnished with books, and these too, not authorized—the N. S. Reading Books not having been introduced. The attendance is very miserable, evincing a great want of interest the average being for six weeks only 49 per cent. This is to be the more regretted, since the school is conducted in a most efficient manner. The school-house at Rossville Section is in a similar condition. There is no apparatus except a very poor black-board and two poor maps. The benches are of a most scandalous character, such as no one could expect to find in a respectable, let alone settled, and comparatively wealthy neighbourhood like this, in the present day.

During the week beginning July 15, I visited the schools in North River, West Branch North River, Kempton, Upper Pictou Road, Riversdale and Greenfield Sections, and Union Section which has no school. The new school-house in North River is in progress. It occupies a pleasant central site, and will be in strong contrast with the premises now occupied. The appearance of things at Kempton is improving. There is a larger attendance in the Upper Pictou Road school, and the efforts of one or two persons in the section are worthy of high praise.

The school at Greenfield presents a better appearance than formerly, in attendance, order, and attention to work.

On the 30th I visited the school at Folly Mountain, West. I referred in a former report to the pleasing change in this section. Still further improvement has been made. The fine site is enclosed with a neat substantial fence.

On Wednesday, 27th ult., a Pic-nic was held for the entertainment of the pupils of the school in Great Village.

The day appointed proved as fine as we could wish, and at an early hour we assembled at the school-room. Processions formed at one o'clock, and marched to the picnic grounds—distant about three-quarters of a mile. The pupils amused themselves with swings and other games until half-past three, at which time they repaired to tables near the margin of the Great Village River, which were beautifully shaded with trees and shrubbery, and loaded with every dainty which the thoughtful care of our kind parents could suggest. After the appetites (which had been necessarily sharpened by the previous exercises) had been satisfied, the pupils returned to their sports, and refreshments were then partaken of by our parents and friends, who favoured us with their presence. After the tables were cleared away the pupils were called into a beautiful arena, where they recited several interesting dialogues, among which were "City sights with Country eyes," "The Yankee Marksman," the "Model School," and others.

The recitations and exercises were interspersed with appropriate music. "Ossian's Serenade," "Vacation Days," "Yearly Jubilee," &c., were among the pieces sung. This was followed by an entertaining exercise on the principles of penmanship; and an address from Commissioner W. E. McRobert, M.D., in which he spoke of the benefits likely to result from the pupils committing to memory, and also in commendatory terms of the perseverance and progress exhibited.

The whole performance reflected credit on the teachers, Mr. W. D. Corbet and Miss Amelia Spencer, and the scholars. The proceedings closed with the "National Anthem," in which all joined with true British fervor, and returned to their homes, feeling, no doubt, satisfied with the day's pleasure, and in joyful anticipation of the Vacation which was thus pleasantly commenced.—*Cor. Amherst Gazette.*

**Hants Co.**—Mr. Editor,—My notes of inspection for the month, furnish some interesting particulars of educational progress. The people of the Hantsport section have lately purchased the upper story of the large and splendid building in which their school is kept, and the lower story of which they purchased more than a year ago. The entire building is now the property of the section, costing altogether \$3000. By an internal alteration of the house lately made, the school has now the whole benefit of this enlarged accommodation. The High School is assigned to the beautifully finished upper room, size 40 x 40. The Elementary and Preparatory Departments have each a room 26 x 30, and there are still left two rooms 10 x 20 each, besides the capacious entrance rooms above and below. The Hantsport section has no idea of lagging behind in the educational race.

On the 24th inst., I visited the Elmsdale section. Here a school-house 25 x 34, and two stories high—the upper part being used as a Hall—has recently been erected. The old house—size about 12 x 15—has been moved a few yards to make room for the new one, and will continue to be occupied by the school while the other is being completed. These two houses—the one large and stylish, the other insignificant and mean,—seem in their present close proximity very clearly to mark the line where the old educational dispensation ends and the new begins.

The day following found me in the Renfrew school. In this school there are scholars from different counties in Nova Scotia, from different provinces of the Dominion, and from some of the States of the neighbouring Union, their parents having been drawn to the place by the prospect of gain. But the best site in all the Diggings, in my opinion, is Mr. Greenough's school. Here, wherever an excavation is made, the gleaming ore is discovered, and no crusher is needed to extract it. At the close of the inspection, which was creditable alike to teacher and taught, seventy-four children rose and sang "God save the Queen" with an enthusiasm which made my loyal blood tingle in every vein.

A school-house 22 x 35 has lately been erected in Renfrew, to be finished in the fall vacation. It is, however, rather small for the section. But the people, knowing the fluctuations to which gold mining populations are liable did not like to build larger.

The Welsford section—now enlarged by a large slice from Colchester County—will probably make arrangements at the coming annual meeting, for a building similar in style and capacity to those in Selma and Rockville.

The contract for the Windsor school-house has been let. It is to be 34 x 70, two stories, and finished by the end of October.

July 1867.

D. M. WELTON, Inspector Hants Co.

**Kings Co.**—Wm. Eaton, Esq., Inspector, writes as follows.—"To any one at all conversant with the position of school matters in this County a few years ago, either with respect to buildings, apparatus, text-books, play-grounds, out-buildings, method of teaching, or special interest in school affairs manifested by trustees, a comparison with things as they now are cannot but be a source of deep gratification as showing the advantage of system over loose, desultory operations.

Satisfactory progress during the present term is almost every where apparent. Nine new school-houses are being erected, and a few repaired. These will be ready for occupation at the commencement of the coming term. Wolfville, Kinsman's Corner, and

Lakeville are having large buildings, and of a style in keeping with the importance of the object for which they are built. Scarcity of money, difficulty in selection of suitable sites, and opposition of a few narrow-minded individuals who seem to regard their own private pecuniary matters as paramount to every other consideration, are reasons why ten others, for which arrangements for building were made last autumn, are not now in process of erection. We may fairly conclude, however, that those sections where failure to carry out the resolutions passed last autumn occurred from either of the above causes, successful efforts will be made next term.

Scarcely anything arrests the attention of any one acquainted with the almost endless diversity of text-books which have heretofore been used, more than the general introduction of the prescribed books—especially the readers. Very few schools are without a suitable supply. The delay (I suppose unavoidable) in reference to text-books in Grammar and Geography is felt seriously in many of the schools, as there is an unwillingness to purchase anything like a sufficient supply of the kinds which have been in use, not knowing how soon they are to be surpassed by others.

There are a few more schools in operation this term than in the corresponding term of last year, and the attendance in most cases is highly satisfactory.

Although individual instances of opposition are frequently to be found, yet, without doubt, the present school law is winning its way generally into the affections of the people, so that if the present measure, if advancement is continued, there will shortly not be a section in the county in which there will not be found a large majority ready to lend their hearty efforts in carrying it into effect.

The Teachers' Association, located in Kentville, and which holds its meetings quarterly, cannot be without its influence for good. Essays and discussions on school management and method of teaching, are the means "taken for mutual improvement."

**Antigonish Co.**—Rodd McDonald, Esq., Inspector, reports: "During this month I have examined twenty-five schools and visited a few more. I am happy to state that there is every appearance of improvement. Since this time last year the attendance is better, there is more system, and the progress of pupils is satisfactory. In some of the schools visited, however, there is confusion in the reading classes, owing to the want of uniformity in the text-books. Five sections, in which there was no school last winter, have schools this summer, and I have every hope, that ere long, there will be a school in every section in the county. Mr. Staples, from Halifax, visited several schools with me, and gave instructions in the art of penmanship. From the lucid manner in which he explained his excellent system, I have no doubt that his visits will prove of much benefit. I very much regretted that his stay could not be prolonged, so that every school in the county might benefit by his instructions."

**Annapolis Co.**—The Rev. George Armstrong, in his monthly statement, speaks as follows.—"The good results of the working of the new school law in the hands of the people, and with their co-operation is apparent almost everywhere in this county—at least in by far the greater number of sections. The schools in operation this term will exceed by at least one-fifth the number open during the last term. Several poor sections, in which no schools were in operation last term, and in some of which none had been kept for years, have schools now working well. Some of them under the direction of first class teachers. Such sections begin to see, some of them clearly, the great advantages put directly within their reach by the new law. This is very encouraging. True, some poor sections seem resolved to remain poor, and to condemn their children to ignorance and degradation. This is sad. Some sections, too, in the county, abundantly able to provide well for the education of the children within their borders, are doing nothing to educate them. This is yet sadder, but the light is spreading, and hard and dark places must, ere long, yield their cherished prejudices, and repudiate impracticable and defunct notions.

The County Academy is now in full operation. Mr. Alex. Ross, B. A., holds the head mastership. The preparatory department is under the charge of Mr. Augustus Fullerton, while the elementary department is under the charge of Miss M. O. Starrall. These teachers are fully competent for their work. Notwithstanding obstacles which heretofore existed, and which need not now be mentioned, Annapolis section is doing well, and seems determined to prepare her children intellectually, at least for the times of improvement and prosperity which are soon, it is hoped, to dawn upon them.

Bridgeport is also doing well, having established a graded school under competent teachers, Mr. M. J. Lyons having charge of the preparatory department, the elementary department being under the control of Miss A. Martell. The classification of pupils according to their attainments and capabilities without any nice regard to age, thus making two or three departments, and assigning one or more teachers to each, is an excellent plan. This division of labour is found to work admirably and efficiently wherever it has been tried. The good results are seen very clearly in this section; there is better order, more study, and much more efficiency than in an ordinary miscellaneous school with the same material.

I am happy to be able to report that the new school-house in Bridgetown has been opened this term for its appropriate and much needed use. A graded school is now in efficient operation in it under competent teachers, the preparatory department being under the charge of Mr. C. W. Hiltz, and the elementary under the care

of Miss Lizzie Palfrey. A department for the colored children is also open and at work in this section.

A dilapidated, ill contrived and located house; school-rooms deficient in proper apparatus, with not infrequently a small or very irregular attendance, and that too not always of the most orderly, presented great obstacles to work and progress, insuperable in fact except to indomitable decision and energy in the teacher, and some good degree of interest and persistent action on the part of the people. The proper accommodations and appliances not being provided, no teacher in this town for several years past has had a fair opportunity to distinguish himself much in his profession. All attempts to provide a new school-house by the mode so often applauded, but now happily exploded,—subscriptions, utterly failed. The people somewhat slowly and reluctantly, but nevertheless wisely, adopted the new law, and empowered the trustees to build the house that now adorns the town, and which is destined, under proper management and with competent instruction, to furnish to our children that intellectual culture and training that are no less required to bring them up side by side with the youths in other sections in the county than to enable them to meet the demands everywhere made in this age for increasing knowledge and culture. Assessment in the hands of the people has given this town a school-house second to none in this or the adjacent counties. It is true some of the residents in the section feel the burden thus imposed to be heavy; but had a school-house been provided as the necessities and interest of the section demanded for years, and for want of which school work was almost a nullity, in some instances perhaps worse, the support of a school under the new regime would by no means be burdensome to any. But even those, on whose purses the pressure has fallen most heavily, may comfort themselves that one reproach at least is removed from the town; that instead of a school-house not fit for a child to enter, and the offer of which to a teacher would be an insult, there now stands on a most healthful and beautiful site, a commodious and elegant structure, in which both teacher and pupils can do their work in comfort, and without risk to health and morals such as previously existed, and that now every child in the section can be supplied with a good common school education. Is not this something worth paying for? Will not such expenditure pay well? I am confident when a person looks properly at the bearing of education on general social improvement for material prosperity, he will not fail to see that what has been required of him for school purposes is not lost, but is wisely and safely invested; and that his farm and other fixed property is, in consequence of a new and respectable school-house in his section, increased in value,—at least to the full extent of his rate for the purpose named,—than, if no such indispensable accommodation, for a high state of civilization, progress, and christianity existed at his doors. This is a comfort—the money is not lost—it is invested—it is at work and showering blessings on the rising generation, and will bless others to come.

I am happy to state that the conviction is extending and deepening among the people, that education, sound and true, fully compensates society for all the expenditure incurred for its extension and support. When individuals, who now have no direct interest in school operations, and to whom it seems a great hardship to have to pay for them, discover the evident bearing of such education on shaping the elements that compose society, and its influence on the successful and happy working of the entire social machine, they will not only see the benevolence of the arrangement which compels every one to contribute to the support of public schools, but will feel and acquiesce in its wisdom and justice."

**Victoria Co.**—Chas. R. McDonald, Esq., Inspector, reports: "Five schools are competing for the superior school grant.—Washabuck, Boulangerie, Hunter's Mountain, Middle River, and West Side Baddeck River. I think all teachers' engagements made since May last will be found to be in accordance with law. In April the law was explained fully to all the teachers present at the examination. This county is pretty thoroughly organized."

**Gaysboro' Co.**—Inspector Russell reports:—"I am happy to be able to state that our schools will number over 40 this term. School buildings are rapidly improving. Every section in the township of Manchester has a school-house either completed or in process of completion. When the Superintendent of Education visited this township a year ago, neither schools nor school-houses were to be found within its limits. The world moves. I think every teacher employed this term has a legal engagement, with the trustees."

**Inverness Co.**—The Inspector reports:—"There are 88 schools in operation in this county this term; and if teachers could be got the number would be larger. There are a few sections with new houses erected that could not procure teachers this term. During the month I have visited and inspected 35 schools, and found some improvement in most of them. I found all the schools well attended. The number of pupils registered in several of the schools visited exceeds the number between 5 and 15 years of age in those sections."

The number of children at school in this county, this term, will largely exceed that ever before in attendance. Improvements in school accommodations are still going on. The Broad Cove Interval school-house has been enlarged and very much improved this summer. The Hillsborough school-house is undergoing much im-

provement also, and a fine house has been erected at Plaster Cove, and is in process of completion. Many of the new houses first erected are now found to be too small, and some of the trustees begin to talk of cutting down and enlarging them. If they had taken my advice at first, and built them larger, they would not require now to add unnecessary expense. Many of the poor sections deserve credit for the educational progress made."

**Shelburne Co.**—The Rev. G. M. Clarke, Inspector, writes:—"The Shelburne Academy has been, for over a year, under the charge of the late or Mr. C. W. McLeod, Head Master, Messrs. Robt. McLeod and E. M. Rind, and Miss M. Bowers. The institution has been respectably conducted by these teachers, and the pupils have made very fair progress."

Before leaving to attend the Synod in June, I inspected the Academy, and found a registered attendance in the Head Master's department of 42—in the intermediate of 80, and in the primary of 80, making a total of 202 at the beginning of the term. To me every thing seemed to indicate a prosperous session,—the third large school room nearly completed, good furniture, fair apparatus, a large attendance of interested scholars, and teachers anxious to go forward in their important work; but before my return from Synod what a change. Death had for a season closed the doors of the institution. The diligent and energetic Head Master became suddenly ill on the last Wednesday of June. On that morning he attempted to attend to his academic duties, but was compelled to return to his lodgings, and soon became seriously ill. Towards the close of the week there was hopes that he might recover, but early on Monday morning, 1st July, he breathed his last. I have been informed by eye-witnesses that his remains were followed to their last resting place by a large concourse of people, composed of the members of the Temperance organizations, cricket club, citizens, the academy scholars, (many of them weeping as if their hearts would break.) teachers, trustees of the academy, &c.

I have pleasure in publicly testifying that the late Mr. McLeod was a very superior teacher. He was systematic and orderly in all his movements in the academy, had very considerable skill in imparting knowledge, and that peculiar and valuable qualification of making himself loved and feared by the pupils. The Rev. Mr. Wainwright now occupies his position as Principal of the academy.

Throughout the county there are about 40 schools in successful operation. Those of them which I have visited are efficiently conducted, and respectable progress is being made by the pupils. The general complaint by the teachers is the irregularity of the attendance. A number of suitable new school-houses is in different stages of progress throughout the county, and the people are manifesting an increasing interest in the education of their children."

J. A. McDONALD, Esq., Treasurer of the District of St. Mary's, has this year been the first of the several County and District Treasurers to refund the amount advanced by the Education Office, and used to meet the disbursement of the county assessment for schools in May last. Mr. McDonald was the first last year. The Treasurer of the District of Argyle did not need the amount advanced in May last, there being sufficient funds in the District Treasury. The Treasurer, therefore, immediately returned the funds to the Education Office. Argyle would seem to be a model of management in this matter.

For the Journal of Education.

MR. EDITOR.—Will you please insert in the columns of the Journal the following report:—

TEMPERANCE HALL, GORE, June 14th, 1867.

A number of teachers from different parts of East Hants met here to-day for the purpose of organizing a teacher's association. Mr. Patterson of Maitland was called to the chair, and after calling the meeting to order and stating its object, was nominated and unanimously elected President of the Society. It was then moved and seconded that J. C. Meek be Secretary, which also was unanimously carried. A literary committee was then appointed, viz., Messrs. Patterson, Meek and Harvey. A number present volunteered to prepare essays on different branches of education, such as "Reading a Science," "School Discipline," "The proper method of Teaching," &c. After some further remarks the meeting adjourned, to meet again at or near the Presbyterian meeting house at the mouth of Noel road, on the third Friday of August, 1867, at 3 o'clock, p. m.

J. C. MEEK, Secretary.

P. S.—Owing to the limited number of teachers present, very little business was done. It is to be hoped that at the next meeting there will be a larger attendance. It is evident that a number of teachers cannot possibly meet for social consultation without mutual advantage to each.

J. C. M.

For the Journal of Education.

BRIDGETOWNS, June 28th, 1867.

A considerable number of the teachers of Annapolis County met in the new school house at Bridgetown, on Saturday the 22nd inst., for the purpose of forming a Teachers' Association. Rev. Mr. Armstrong, Inspector of schools for the County, being present, was elected chairman of the meeting. The "Draft Constitution for Local Associations," inserted in the March No. of the Journal,

was adopted with slight modifications. Officers of the Association were elected, and the time and place of next meeting agreed upon. Several of the teachers present spoke with high appreciation of the vigorous and noble efforts of our legislators in behalf of popular education, of the improved position of the teachers; and they said it now remained with teachers to do their part to make themselves worthy of that position, to occupy it well, to elevate and adorn it. All present seemed to feel desirous of organization, united efforts, interchange of ideas, stimulating each other in their work, and of cultivating a professional spirit. After passing a vote of thanks to the chairman and secretary, the meeting adjourned, to meet at the same place, on the first Saturday of August, 2 o'clock, p. m.

ARCHIBALD MACKINNON, Secretary.



OFFICIAL NOTICES.

EXTRACT FROM THE MINUTES OF THE COUNCIL OF PUBLIC INSTRUCTION, JULY 7TH, 1866.—“ Provision being made by the School Law for the publication of a *Journal of Education*, the Council of Public Instruction directs that the said *Journal* be made the medium of official notices in connexion with the Educational Department.”

T. H. RAND,  
Sec'y to C. P. I.

I. *Holidays and Vacations.*

Notice is hereby given to Trustees of Schools and others, that CHAPTER XI of the COMMENTS AND REGULATIONS OF THE COUNCIL OF PUBLIC INSTRUCTION. “Of Time in Session, Holidays, and Vacations” has been revised as follows:

HOLIDAYS.

The following Regulations have been added to SECTION 3, of the Chapter above named.

a. When for any cause the Trustees of a school shall deem it desirable that any prescribed Teaching Day should be given as a Holiday, the school or schools may be kept in session on the Saturday of the week in which such Holiday has been given, and such Saturday shall be held to be in all respects a legal Teaching Day.

b. When, owing to illness, or for any other just cause, a teacher loses any number of prescribed teaching days, such teacher shall have the privilege of making up for such lost days, to the extent of SIX during any Term, by teaching on Saturdays; But

c. No school shall be kept in session more than five days per week for any two consecutive weeks;

d. Nor shall any Teacher teach more than FIVE DAYS PER WEEK on the average (vacations not being counted) during the period of his engagement in any term.

The Anniversary of the QUEEN'S BIRTHDAY shall be a Holiday in all the Public Schools, as heretofore.

VACATIONS.

The following Regulations have been made in lieu of SECTION 4, of the Chapter above named:—

1. The TRIMESTRAL VACATION shall remain as heretofore, the “eight days” being held to mean week-days other than Saturdays.

2. Instead of two vacations during the summer term (a week at seed time and a fortnight at harvest) as heretofore, THREE WEEKS (15 week-days other than Saturdays,) shall hereafter be given as vacation during the summer term, at such time or times as the Trustees shall decide. Nevertheless

3. In order that the due Inspection of Schools as required by law, may not be interfered with, each Inspector shall have power, notwithstanding anything in the foregoing Regulation, to give notice of the day or days on which he proposes to visit any school or schools in his county for the purposes of Inspection, and to require that on the day or days so named such school or schools shall be kept in session.  
July, 1867.

II. *To Teachers not supplied with Registers.*

As a much larger number of schools are in operation this term, than was anticipated, the edition of Registers is insufficient to supply a copy for each teacher engaged. All teachers who have been unable to procure a Register are notified that till the close of the present term, (Oct. 31st, a careful record of the daily attendance of pupils will be accepted as a compliance with the requirements of the school law with respect to registration. In every such case, before signing the certificate contained in the TRUSTEES' RETURN, the teacher is authorized to erase the words “the prescribed Register,” and insert in their stead, “a record of the daily attendance of the pupils.”  
May, 1867.

III. *Teachers' Agreements.*

The attention of Teachers and Trustees is again called to the necessity of complying with the provision of the Law in relation to the disposal of the County Fund. It appears from the School Returns of the past Term that some teachers have in their agreements with Trustees in respect to salary, assumed all risk as to the amount to be received from the County Fund. Such proceeding is contrary to the provisions of the law and directly subversive of a most important principle of the school system, since the pecuniary penalty imposed upon the inhabitants of the section by the absence and irregular attendance of pupils is thereby inflicted upon the teacher, while

the pecuniary rewards consequent upon a large and regular attendance of pupils at school is diverted from the people to the teacher. These results clearly tend to prevent the growth and development of a sentiment of responsibility and interest among all the inhabitants of each section, and thus measurably defeat the object of the whole system—the education of every child in the province.

The Superintendent of Education, therefore, calls the attention of Teachers and Trustees to the following

NOTICE

1. The COUNTY FUND is paid to the TRUSTEES of the section. The amount depends upon the number of pupils, the regularity of their attendance, and the number of prescribed teaching days on which school is open in any section during the term.

2. Teachers must engage with Trustees at a definite sum or rate. The Provincial grant is paid to teachers in addition to such specified sum.

3. The following form of agreement is in accordance with the law:

(Form of Agreement.)

Memorandum of Agreement made and entered into the — day of — A.D. 186 —, between (name of teacher) a duly licensed teacher of the — class of the one part, and (names of trustees) Trustees of School Section No. — in the District of — of the second part.

The said (name of teacher) on his (or her) part, in consideration of the below mentioned agreements by the parties of the second part, hereby covenants and agrees with the said (names of Trustees) Trustees as aforesaid and their successors in office, diligently and faithfully to teach a public school in the said section, under the authority of the said Trustees and their successors in office, during the School Year (or Term) ending on the thirty-first day of October next, (or the thirtieth day of April, as the case may be).

And the said Trustees and their successors in office on their part covenant and agree with the said (name of teacher) Teacher as aforesaid, to pay the said (name of teacher) out of the School Funds under their control, at the rate of — dollars for the School Year (or Term).

And it is hereby further mutually agreed that both parties to this agreement shall be in all respects subject to the provisions of the School Law and the Regulations made under its authority by the Council of Public Instruction.

In Witness whereof the parties to these presents have hereto subscribed their names on the day and year first above written.

Witness, (Name of Witness.) (Name of Teacher.) (Names of Trustees.)

4. Each Inspector is instructed to report every case of illegal stipulation on the part of teachers, in reference to the County Fund.  
May, 1867.

IV. *To Trustees of Public Schools.*

1. “A relation being established between the trustees and the teacher, it becomes the duty of the former, on behalf of the people, to see that the scholars are making sure progress, that there is life in the school both intellectual and moral, — in short, that the great ends sought by the education of the young are being realized in the section over which they preside. All may not be able to form a nice judgment upon its intellectual aspect, but none can fail to estimate correctly its social and moral tone. While the law does not sanction the teaching in our public schools of the peculiar views which characterize the different denominations of Christians, it does instruct the teacher “to inculcate by precept and example a respect for religion and the principles of Christian morality.” To the trustees the people must look to see their desires in this respect, so far as is consonant with the spirit of the law, carried into effect by the teacher.”—“Comments and Regulations” of Council of Public Instruction, p. 51, reg. 5.

2. Whereas it has been represented to the Council of Public Instruction that Trustees of Public Schools have, in certain cases, required pupils, on pain of forfeiting school privileges, to be present during devotional exercises not approved of by their parents; and whereas such proceeding is contrary to the principles of the School Law, the following additional Regulation is made for the direction of Trustees, the better to ensure the carrying out of the spirit of the Law in this behalf:—

ORDERED, That in cases where the parents or guardians of children in actual attendance on any public school (or department) signify in writing to the Trustees their conscientious objection to any portion of such devotional exercises as may be conducted therein under the sanction of the Trustees, such devotional exercises shall either be so modified as not to offend the religious feelings of those so objecting, or shall be held immediately before the time fixed for the opening or after the time fixed for the close of the daily work of the school; and no children, whose parents or guardians signify conscientious objections thereto, shall be required to be present during such devotional exercises.  
March, 1867.

3. “The hours of teaching shall not exceed six each day, exclusive of the hour allowed at noon for recreation. Trustees, however, may determine upon a less number of hours. A short recess should be allowed about the middle of both the morning and afternoon session. In elementary departments, especially, Trustees should exercise special care that the children are not confined in the school room too long.”—“Comments and Regulations” of Council of Public Instruction, p. 43, reg. 2.

V. *Amendments to the School Law.*

The following Act to amend the general law of the Province concerning public schools, passed during the late session of parliament, is published for the information of school officers and the people generally:—

AN ACT FURTHER TO AMEND THE ACT FOR THE BETTER ENCOURAGEMENT OF EDUCATION.

Be it enacted by the Governor, Council and Assembly, as follows:  
1. The several Boards of Commissioners shall have power at the semi-annual meeting in May of each year, by vote of at least two-thirds present thereat, to unite two or more School Sections into one School Section, on a petition addressed to the Board of Commissioners by a majority of the rate-payers of each of the sections, setting forth that they have agreed among themselves on the terms on which the existing liabilities shall be borne by the rate-payers in the several sections.







United Kingdom of Great Britain and Ireland, Queen, &c., in the sum of                      of lawful money of Nova Scotia, to be paid to our said Lady the Queen, her heirs and successors, for the true payment whereof, we bind ourselves, and each of us by himself, for the whole and every part thereof, and the heirs, executors and administrators of us and each of us, firmly by these presents, sealed with our Seals, and dated this            day of            in the year of our Lord one thousand eight hundred and            and in the            year of Her Majesty's reign.

WHEREAS the said                      has this day been duly appointed to be Secretary to the Board of Trustees of            School Section, No.            in the District of           

NOW THE CONDITION OF THIS OBLIGATION IS SUCH, That if the said                      (name of Secretary) do and shall from time to time, and at all times hereafter, during his continuance in the said Office, well and faithfully perform all such acts and duties as do or may hereafter appertain to the said Office, by virtue of any Law of this Province, in relation to the said Office of Secretary to Trustees, and shall in all respects conform to and observe all such rules, orders and regulations as now are or may be from time to time established for or in respect of the said Office, and shall well and faithfully keep all such accounts, books, and papers, as are or may be required to be kept by him in his said Office, and shall in all respects well and faithfully perform and execute the duties of the said Office; and it on ceasing to hold the said Office, he shall forthwith, on demand, hand over to the Trustees of the said School Section, or to his successor in office, all books, papers, monies, accounts, and other property in his possession by virtue of his said Office of Secretary—then the said obligation to be void—otherwise to be and continue in full force and virtue.

Signed, sealed, and delivered } [Name of Secretary.] (Seal)  
in the presence of } [Names of Sureties.] (Seals)  
[Name of Witness.]

WE, THE SUBSCRIBERS, two of Her Majesty's Justices of the Peace for the County of                      do certify our approbation of                      (names of Sureties,) within named, as Sureties for the within named                      (name of Secretary,) and that they are to the best of our knowledge and belief persons of estate and property within the said County of                      and of good character and credit, and sufficiently able to pay, if required, the penalty of the within bond. Given under our hands this            day of            A. D. 18           [Names of Magistrates.]

**X. List of Inspectors.**

- J. R. Miller.....Halifax.
- Rev. D. M. Welton, M. A.....Windsor.
- William Eaton.....Kentville.
- Rev. G. Armstrong, M. A.....Bridgetown.
- Rev. P. J. Fillet, B. A.....Weymouth.
- G. J. Farish, M. D.....Yarmouth.
- Rev. G. M. Clark.....Shelburne.
- Rev. D. O. Parker.....Arbordale, Queens Co
- W. M. B. Lawson.....Lunenburg.
- H. C. Upham.....Great Village.
- Rev. James Christie.....Amherst.
- M. T. Smith.....Pictou.
- Rodk. McDonald.....Antigonish.
- S. R. Russell.....Guysboro'.
- James Macdonell.....Port Hood.
- C. R. Macdonald.....Baddeck.
- Edmund Outram, M. A.....Sydney.
- W. R. Couter.....Ariclat.

**ADVERTISEMENTS.**

**SCHOOL HOUSES CONDEMNED.**

**ANNAPOLIS EAST.**

On the presentation of the Inspector's Report on the state of the School Houses, to the Board of Commissioners for Schools in the District of Annapolis East, at its meeting, May 10th, the said Board condemned, as unfit for use, the School Houses or buildings used as such, in the following Sections: Inglisville, Salem, Carleton, Williamston, Palmer, Albany North, Port Williams, Port George. On motion it was further resolved—That the Clerk notify said Sections that unless suitable School Houses are provided within a year from this date, all public school monies will be withheld from schools taught in said Sections. **GEORGE ARMSTRONG, Clerk.**

**ANNAPOLIS WEST.**

The Board of Commissioners for Schools in the District of Annapolis West, at their meeting, May 16th, condemned, as unfit for use, the School Houses or buildings used as such, in the following Sections: New Caledonia, Leonard, Lake Rose, Maitland, Lake May, Hessian West, Waldeck East, Birchtown, Fundy. The Board resolved—That unless before or at the annual meeting, measures be adopted to provide suitable School Houses in said Sections, all public school monies will be withheld from schools taught in these Sections. **GEORGE ARMSTRONG, Clerk.**

**ASSISTANT FEMALE TEACHERS WANTED.**

THE Board of School Commissioners for the City of Halifax will receive applications up to the 26th AUGUST, for several Assistant Female Teachers, required for some of the principal schools of the city. Applicants will state their class of license and experience. By order of the Board, **JOHN R. WILLIS, Secretary.**

**NOVA SCOTIA SCHOOL SERIES.**

**JUST PUBLISHED:**

**THE NOVA-SCOTIA  
ELEMENTARY ARITHMETIC,**

By **W. R. MULHOLLAND.**

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**TO PUBLISHERS.**

**A School Geography of the World,**

Designed especially for the use of Public Schools in the British Provinces, has been prepared by the undersigned at the request of the Council of Public Instruction, and has been approved by them and prescribed for use in the Public Schools of this Province.

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		Height of side next to Pupil.	Length.	Width.	Space between desks for chairs.		
5 to 6 years.	11 inches.	21 inches.	36 inches.	12 inches.	14 inches.	\$4.00	
6 to 8 "	12 "	22 "	39 "	13 "	15 "	4.25	
8 to 10 "	13 "	23 "	42 "	13 1/2 "	15 1/2 "	4.50	
10 to 12 "	14 "	24 "	44 "	14 "	16 "	4.75	
12 to 14 "	15 "	26 "	46 "	14 1/2 "	16 1/2 "	5.00	
14 to 17 "	16 "	27 "	48 "	15 "	17 "	5.25	
17 "	17 "	29 "	48 "	16 "	17 "	5.50	

\* \* \* Single Desks (i. e. desks accommodating one pupil each) will be manufactured if required.

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