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No. 7. June, 1867.

THE

JOURNAL OF EDUCATION.

FOR THE PROVINCE OF NOVA SCOTIA.

COUNTY DISTRIBUTION, MAY 1867.

THE present Number contains the distribution of the Fund raised by County Assessment in all the counties except Cumberland. In the next No. we shall give the conclusion of these lists, with a general summary and digest of the whole.

The number of pupils attending school in each Section is also inserted. Though the Fund is distributed on the basis of daily attendance, yet there are reasons why the registered number of pupils should be given. The amount received from the Fund will indicate in each case the regularity with which the pupils attended.

PRESIDENT HILL ON THE STUDY OF LANGUAGES.

AT a meeting of the Association of New England Colleges, held in Providence, R. I., October, 1865, the presidents of Yale College and of Brown and Harvard Universities, were requested to prepare a brief statement of the views which, from the the discussions of that meeting and the meeting held in 1864, it was evident that the majority of the Association held concerning the ordinary mode of teaching both ancient and modern languages.

The modes of teaching should undoubtedly vary, *to some extent*, with the age of the pupil, with the nearness of the relationship between the language taught and the pupil's vernacular, and with the object in view in learning.

The objects in view may be classified under two heads, the uses to be made of the knowledge when acquired, and the usefulness of the process of acquisition.

Again, the uses of the knowledge may be classified under three heads, arising first, from the ability to read the language, and interpret the thoughts of those who use it; secondly, from the ability, to speak and write the language and express our thoughts to those who understand it; thirdly, from the light which the grammar and vocabulary of the language may throw upon our vernacular, *or upon some other tongue* which we may be studying, or upon the history of the nation using it. It is evident that for the second use a much greater familiarity with the tongue is required than for the first or third.

Still further, the uses of the process of acquisition may be classified under various heads, in the cultivation of memory, of the ear, of judgment and reasoning power,—and if the writings studied be classical, in the cultivation of taste and imagination, and in increased power to use our own language with elegance and force.

The processes of acquisition involve seven different kinds of labor, and each of these seven kinds is divisible into two degrees of nicety, the one for those who would simply learn to read, the other for those who would learn to speak the language. For the ordinary purposes of liberal education, the first degree is sufficient. These seven kinds are as follows:

First. Orthoëpy; in which the degrees are the correct and the elegant pronunciation of the vowels and consonants in combination. For example, a sufficient reading knowledge of German may be obtained without the ability to give the softened vowels in an elegant and easy manner, but not without knowing their approximate value.

Secondly. Prosody and the laws of accent, first as they affect the pronunciation of prose, afterwards as they affect the melody of verse. For examples of the first degree, compare the English words holy and wholly, boot and foot, stone, as pronounced in New England and as pronounced in New York.

Thirdly. The inflections of declinable words, first of the regular and the frequently-recurring irregular words, afterwards of the rarer anomalies.

Fourthly. The vocabulary, first of the current words, afterwards of those more rarely met with.

Fifthly. The derivation of words and the laws of etymologic changes, first in the most general and extensive laws, afterwards in the more anomalous cases.

Sixthly. The syntax in its ordinary laws and usages, afterwards in the rarer idioms.

Seventhly. The genius of the tongue and the spirit of its literature.

The tools or instruments used in learning a language are usually a manual of grammar, a book of exercises in reading and writing, a dictionary, and a work written in the tongue. These works are put into the learner's hands in the order in which they are here named, but this is almost a complete inversion of the true order of study. Grammar is an analysis of the usages of a language and cannot be profitably and intelligently studied without some previous familiarity with those usages. Reading *ought therefore* to precede the study of grammar, and the study of grammar be entered upon gradually, only as fast as the needs of the reading require it. The boy fitting for college should learn only so much of the grammar as may be required to enable him to construe intelligently the books on which he is to be examined; and this can be comprised in a very few pages of paradigms and rules. It would be hard to overstate the mischief wrought by forcing children to commit to memory several hundred pages of Greek and Latin grammar before they can read the simplest books written in those tongues. A thorough analysis of the syntactical arrangement and etymological forms of words actually found in reading is of vastly more intellectual value to the beginner, than the committing of rules to memory can be; and of more permanent value, as the grammatical principles developed in studying a passage in which the pupil is interested are fastened in his memory by a natural mnemonic aid.

In regard to a dictionary, there is an apparent saving of time in using a brief vocabulary prepared for the special book which the student is reading,—but the apparent gain will be a loss if the meanings given to each word are not full and various, and arrayed in the natural order of their development.

The learner should be taught to free himself as much as possible from dependence on the lexicon. Reading by its aid is like swimming with bladders, or like reading with an interlinear translation. The meaning found in a dictionary slips from your memory to-morrow, but the meaning discovered by a patient consideration of the context is never forgotten. The more remote the tongue which we are studying is from our vernacular, the more we must depend upon our lexicon. But let a student master Latin, and know one Teutonic tongue, and he can learn any language of western or central Europe almost without dictionary or grammar. Thus, German, English, Danish, Swedish, Italian, French and Spanish people, can learn each others' languages, from classic writers almost without the aid of grammarians or lexicographers, by simply reading incessantly and attentively standard works in the tongue which they wish to learn.

Of course this habit of reading does not absolutely dispense with the need of referring occasionally to a lexicon, nor with the need of studying text-books on grammar, but it prepares the pupil for such a subject, renders it easy, and can alone render it profitable.

One very marked advantage in larger reading and less extensive grammatical drill at the beginning of the course, is that of making the pupil most familiar with what is of most frequent occurrence, and thus giving due perspective to the facts and principles of the language,—a perspective which cannot be correctly given by the artificial mode of using two sizes of type in the grammar. We say less *extensive* drill—but in *intensity* of drill on the *constantly* recurring forms and idioms met with in reading there should be no abatement; the ordinary paradigms should be made as familiar as the alphabet.

Another very marked error in the modern mode of teaching both modern and ancient language lies in assigning too much time and too early a time to the writing of exercises. The absurdity of writing sentences in a tongue before attaining a familiarity, by reading or hearing native authors, with its usages and idioms, is curiously illustrated in a recent serious attempt to give the Portuguese in Brazil "a new guide to English;" the English having been written by Portuguese, and being much less intelligible to an Englishman than Portuguese itself. Writing exercises in a tongue should be postponed until the student is familiar with the style of several native authors, has learned something of the grammar, and has committed to memory many passages in both poetry and prose. No preparation for writing Latin and Greek can be so good as the reading of Cicero and Xenophon; and this is true, not only with reference to the study of the classic authors, but it holds also of a more temporary preparation. That is to say, if a student is compelled to write an exercise, and has a reasonable time allowed in which to write it, he will find it to his advantage to spend the first half of that time in the rapid, cursory reading of a classic author in the language writing upon some similar topic.

These views are not new; they have been frequently urged by the best writers upon education. "The only way," says Professor Conant, "to impress upon the mind of a pupil the genius of a foreign tongue, is to impress upon it the phraseology of native speakers and writers. The habit of conception in conformity with the models thus furnished will follow of itself. The practice of expressing English conceptions in the words of a foreign language for the purpose of learning it, is not only useless, but positively injurious." Yet this positively injurious method has been of late years made a prominent feature in the teaching both of ancient and modern tongues, to the great detriment of English and American learning.

The natural mode of learning a new language by a direct attack upon the works of native authors, committing poems, and finer passages of prose, to memory, and endeavoring by incessant comparisons with the context, to elucidate the meaning without the aid of the lexicon, not only gives the pupil the ability to read the new tongue in much less time than the grammar and exercise book manner, but it furnishes a vastly better gymnastic for the mind, stimulates the pupil to more original thought, and gives him greater confidence and freedom.

We trust that a reaction has already begun, and that we may soon see the day return when classic writers of Latin, Greek, German and French literature will occupy more of the pupil's time while studying those languages, than he shall give to English or American writers on grammar; all the processes of learning will then be easier and all the uses of the knowledge more speedily obtained.

THOMAS HILL.

The subscribers, members of the Committee, finding President Hill's paper to be full of useful and timely suggestions, recommend its publication.

THEODORE D. WOOLSEY.
B. SEARS.

—*Massachusetts Teacher.*

SCHOOLS WITHOUT THE ROD.

THE following letter, written at the request of the President of the Philadelphia School Board, by Mr. W. H. Lauderbach, Principal of one of the graded Grammar Schools of that city, will be read with interest. All may not be able to sympathise with every statement made, but the experience detailed is valuable. The statement that corporal punishment is degrading to teacher and pupil appears rather broad. We admit there may be degradation to both in a majority of cases; but there certainly are times when the infliction of corporal punishment becomes a duty. We have no houses of correction to which we can send refractory pupils. Even were such the case, it would be better that most of such pupils be retained at school by a judicious exercise of the power to punish. But corporal punishment should be the teacher's "strange work." Probably many teachers use it too much. Other things being equal, "the minimum of punishment is the maximum of discipline." We have no doubt that there are many schools in Nova Scotia, schools of the first order, where corporal punishment is very rare or even unknown.

DEAR SIR,—In response to your request that I should give you my views in regard to the practicability and expediency of the abolishment of corporal punishment in schools, I have endeavored, as well as my limited time has allowed, to submit to you some deductions and opinions, based upon an experience of the past fourteen years, during which time I have dispensed entirely with the use of such punishment in the schools under my charge.

Having formed the opinion that the use of the rod, as a means of enforcing discipline and industry, was neither necessary nor desirable, and that the best results could be obtained by other and milder measures, I broached the subject to my Committee, and, having obtained plenary powers in regard to the substitutes which I was to adopt in the place of the abandoned weapon, I commenced the trial of an experiment which I have never since had occasion to regret.

Though the proposition met with the entire approbation of the Committee, yet it was considered a hazardous one, and likely, in its execution, to be fraught with much trouble to them, in the multitudinous cases of discipline which, they feared, would be brought before them at their weekly meetings; so that while I was left untrammelled in respect to the means I should adopt, it was recommended that the change should be a gradual one, and that no immediate notification of it should be given to the pupils. Having formed an entirely different view of the subject, I announced my intention, in a brief address to the pupils, in which I asked their aid in carrying out my design.

With respect to the large majority of the boys, I had no apprehension whatever, as to trouble, but as there were many in attendance who had been accustomed, at home, to no other argument than that conveyed by the rod, I anticipated some difficulty at first with them. I trusted however almost entirely to reasoning and persuasion, and rarely failed to convince a boy that his interest and happiness in the school depended upon a faithful observance of its rules.

In a school consisting of nearly three hundred pupils, coming from every grade in society, from the highest to the lowest, there must necessarily be many apparently naturally intractable boys, but I soon found that it was with just such boys that the good effects of the change were most plainly visible; and the experience of a few weeks srtisfied me that in the case of many such seemingly incorrigible offenders the fault was not so much in them as in the unwise treatment and unfavorable influences to which they were subjected at home. In every such case, when persuasion and admonition failed to effect a reform, I made use of the power vested in me by the Committee, and suspended the boy, until an interview could be obtained with his parent or guardian, whose co-operation I endeavored to secure.

At the sacrifice of some time outside of school hours in receiving visits, or calling myself upon such as were prevented by circumstances from coming to the school, I became more or less personally acquainted with the parents, and soon found that acquaintance to be of great advantage in maintaining discipline in the school-room and industry in study both there and at home.

I would earnestly recommend every teacher to try the plan of making the acquaintance of the parents of his pupils, more particularly in the case of those who are inclined to be troublesome. It may at first be somewhat burdensome, and require additional sacrifices of time and labor in a profession the duties of which are admitted to be already sufficiently onerous; but he will find it of so much benefit in removing almost every cause of misunderstanding and want of proper co-operation, that he will not regret the half hour per day required to accomplish this object.

In my own case, I devote a certain time each day, towards the close of the morning session (at which time the boys under my immediate charge are engaged in work which does not require any aid from me), to the reception of visitors who desire to see me in regard to the progress and standing of their children. This includes, not merely cases of suspension; as all parents who have any misgivings in regard to the conduct of their children, or who are dissatisfied with their treatment in school, are cordially invited to visit us; and in no case is a courteous explanation of the real facts

unattended by good feeling between parent and teacher, and the subsequent co-operation of the former.

In these visits from parents I would frequently discover, as I have already remarked, that the misconduct and idleness of a boy had its origin in neglect, or in unwise and, often, unnecessarily harsh treatment at home, and I would unhesitatingly take the liberty to advise another course; urging the parent to offer every incentive to an honorable ambition on the part of his son; and, while deprecating any undue severity, I would recommend him to show decidedly to the child, that upon the report of his teacher must depend his reward or punishment at home.

For the purpose of enabling us to retain the aid of parents in this manner, the Sectional School Board of Directors caused to be prepared blanks for a weekly report, so simple in its character as to be easily understood by any parent able to read. This report is now in use in most of the schools of our city, and I believe answers well the purposes for which it was intended. It occupies very little time in its preparation, as it can be copied directly from the roll by any intelligent boy in the class, and it shows at a glance the conduct of a pupil, his lessons, attendance, punctuality, etc., during the previous week. In its effect this report was found to possess far greater influence in stimulating the child to increased industry and good conduct than the fear of the rod ever did under the old dispensation.

The frequent consultations with parents, and the use of the weekly report, together with an occasional exhortation or lecture to the boys, when time and opportunity offered, constituted my chief substitutes for the abandoned instrument of torture; and with their aid I have no desire ever to resume it.

It may, however, be asked: "Are there not some few who are still invulnerable against argument and persuasion; who are naturally so depraved as to be entirely beyond such influences?" I answer that I have found none such, among thousands of children of every condition in life and every variety of disposition. I do not undertake to say that there are no incorrigible children at all, but I do say that if a child is so depraved as to be entirely beyond the reach of kindness and forbearance then the school-room is not the place for him, but another institution, a house of correction, is needed. There is no reason why a mode of punishment alike degrading to both teacher and pupil should be maintained in the schools, because, perhaps, one child in a hundred may be naturally so bad, or under such evil influences at home, as to be inaccessible to any other kind of discipline.

In addition to the gratification of being able to dispense with so disagreeable a mode of punishment, I found such excellent results from the substitutes which I had adopted, that I was enabled to modify in a great degree another kind, which I had always ought was a greater infliction upon the teacher than upon the pupil; I mean detention after the regular school hours. Before the weekly report was brought into use, it was not uncommon to detain the idle or disorderly during a whole noon-time, and seldom less than one hour, depriving a boy of the rest and recreation absolutely necessary for a proper discharge of his duties in the afternoon, to say nothing of the injury to his health.

Within a few years I have diminished the time allowed for detention, so that it is now limited to half an hour per day; and, as most cases of the kind are on account of failures in lessons, I endeavor to have the detention considered not so much as a punishment as an opportunity for the pupil to make himself more thorough in a lesson, which, though he may have studied it diligently, he has had the misfortune not to know perfectly, and a complete knowledge of which may afterwards be requisite to insure his promotion. As pupils who have studied their lessons most diligently are frequently detained by accidental failures, it does no harm to assume that they have all done so, and I invariably find this mode of treatment more efficacious than harshness and scolding.

Among the good results growing out of the abolishment of corporal punishment is the absence of all turmoil and trouble with the parents. The father of a pupil, instead of coming to the school greatly exasperated on account of the punishment inflicted upon his son, will have, in nearly every case, a perfectly amicable understanding with the teacher, and go home determined to do all in his power to aid in accomplishing the object which concerns him so much, the proper education of his child.

Another particularly gratifying result which I have experienced is, the almost total avoidance of cases of discipline requiring the interposition of the School Committee. The Committee that first empowered me to try the experiment found, contrary to their anticipations, but to their decided gratification, that their occupation in that line was almost gone; and six months after the plan was adopted in the Grammar School, the Board of directors of the Third Section, then (before the consolidation of the city) comprising the whole of Southwark, ordered the abolishment of every kind of corporal punishment in all the schools of the Section. The same result has been accomplished in the Tenth Section, in which my present school is located, and it is a source of no little satisfaction to the directors and teachers of the school that during a period of more than five years, but one case of discipline has been brought before the Committee.

But one of the best results may be seen in the cordial and affectionate feeling manifested by all the pupils towards their teachers. This is not confined to the select few who are always correct in their deportment, but it is shown in an equal degree by the most thoughtless and troublesome boys in the school; a feeling that could not have existed, when it was customary for the teacher to report her pupils to the principal, to be subjected to a cruel and degrading punishment.

It may, however, be contended that although this mode of discipline *may be adapted to the temperament and capacity of some* teachers, it will not answer for others. This depends entirely upon the spirit in which the teacher will enter upon the responsible profession which he has adopted, and the industry, forbearance and self-command that he can bring into action in discharging its duties. To carry out successfully a discipline based upon moral suasion, a teacher should endeavor to feel for every one of his pupils the same interest that he would for a son or a brother. He must make an earnest effort to convince all that are under his charge that the reproof or punishment he administers is for their own good. He *should endeavor to implant* in their minds a love of truth and integrity, and show them how closely their future prosperity must depend upon the habits formed in school, and the reputation they will there leave behind them. He should thus try to elevate them in their own estimation, and having accomplished this, then show that he can place confidence in them, instead of continually making them subjects for watchfulness and suspicion. The most powerful aid that I have experienced in maintaining good order, is the feeling, which I have to a great extent succeeded in producing, that a falsehood is the most dishonorable crime that can be committed in the school-room, and I am satisfied that no boy in the division under my own immediate charge will deliberately tell an untruth, either to screen himself from punishment or to obtain a reward to which he is not entitled. Were any boy to do this, he would be sent to Coventry by every one of his classmates, and I could read the evidence of his falsehood in the faces of every one cognizant of it.

Now this mode of treatment does away with all motives for misconduct. If a boy feels bound in honour and by the public sentiment in his class to tell the truth on all occasions, whether it be to his own detriment or not, he certainly can have no inducement deliberately to commit an offence. In consequence of this feeling, I can leave my class entirely to themselves for half an hour or more, and feel perfectly confident that no breach of discipline has been committed, during my absence, or that if any rule has been violated through thoughtlessness, I can know all about it at once on asking for the offender who is himself bound in honour to report it.

This may seem to some a very utopian state of affairs, and so I should have thought it myself some years ago, but it is nevertheless, a fixed fact, which I have tested in every possible way; but it is one that could never have been brought about by harshness and severity.

I have endeavoured, as well as my brief time has permitted, to give you my experience under the application of a system in which not only corporal punishment has been abolished, but also every other bordering on severity. In doing so, I have been compelled to speak rather more of my own success, than is agreeable to me, but I trust that your request to be explicit upon that point, will relieve me from any charge of egotism.

ORAL LESSONS ON COLOUR.

THE following jottings will suggest to teachers some hints for oral lessons on Colour. They are extracted from Sheldon's "Elementary Instruction":—

In the First Step the teacher exercises the Perceptive Faculties in distinguishing the nine Colours, also Black and White. The Memory is exercised in learning the names attached to these, Order and Taste in arranging them.

In the Second Step the Conceptive Faculty is exercised, also a more minute Perception.

The first of these, in recalling the ideas of Colours previously seen. The second, in distinguishing the Tints and Shades of the nine Colours. Names learned as before.

In the Fourth Step, Imagination is exercised, with the Powers of Analogy and Generalization.

FIRST STEP.

DISTINGUISHING PROMINENT COLOURS.

1. *Lesson given to the Class. Distinguishing Blue and Yellow.*

I.—1. Point to the yellow pattern on the board. Let a child pick up a card or flower like it; compare the yellow, placing the card beside the pattern. Let all the children present decide whether a correct choice has been made.

2. Select a yellow card; call on a child to find the corresponding colour amongst all those exhibited on the board. The other children judge and decide as before

3 and 4. Proceed with blue as with yellow.

II.—1. *Exercises.*—Select two yellow and two blue wafers; arrange them thus: B. Y. B. Y. Let a child place other blue and yellow wafers in corresponding positions.

2. Place the wafers Y.B. / B.Y. . A child to imitate as before.

3. Thread five large beads thus—B. Y. B. Y. B. A child to imitate. (As many children as possible are employed in this, and all the rest as judges whether the actions are correctly performed.)

2. *Lesson on naming principal Colours.*

1. Show a red card or flower. Let a child select one that is similar. "This is red." This is to be repeated by the children simultaneously while looking at the card. Let another child select all the red cards that are to be found.

2 and 3. Proceed in the same way with yellow and with blue.

4. Point rapidly to the blue, red, and yellow patterns, requesting the children to give the names as pointed to.

5. Bid a child place a yellow card on the table, a red one on the desk, and a *blue* one on the chair.

6. Select 3 children; one to find examples of blue, one of red, one of yellow; red on the furniture of the room, or the dress of any one present.

7. Let a child place the colours on a line, according to direction, as blue, yellow, red, yellow, blue.

3. *Lesson on arrangement of Yellow, Red, and Blue.*

1. Let the children select all the yellow, blue, and red cards.

2. Form them into patterns thus:

Y. / R. B. R. / Y.	or	Y. / B. R. / R. B. / Y.	&c.	&c.

3. Let the children imitate these patterns; when they can do so readily, encourage them to invent new ones, selecting the colours for them, so as to cultivate the eye to harmonious combinations.

4. *Lessons given to develope the Perception of the most obvious Harmonies of Colour.*

1. Let the children who have been accustomed to combine colours, select those they wish to place side by side. After their previous practice in arrangement, the children as a class will make good combinations. Should an individual child choose, say a green and blue, take a similar blue, and put it beside an orange. Let all decide whether blue and green or blue and orange look better together.

Even when good combinations are made, as purple and green, it is sometimes well to resort to the plan of putting a red with the purple, that all may see how much better the green looks.

2. Colours which look well together, to be placed in order before the children, who commit to memory the results of their observations and comparisons, as facts, and without reference to rules.

Colours arranged thus—

Yellow and Purple.
Red and Green.
Blue and Orange.
Orange and Purple.
Green and Purple.
Purple and Green.

SECOND STEP.

I. REMEMBERING PRINCIPAL COLOURS.

1. *Lesson on the Colour Blue.*

1. To make sure that the children have a clear idea of the colour, let the youngest child select all the pieces of card that are blue, while the rest are employed in finding any objects of a blue colour in the room.

2. Lead the children to compare these blues with their recollections of the colour in objects not just now visible. What they see overhead is blue. Whether the sky is always blue. What other colours they have seen it show. When it is bluest. At what season of the year, &c.

3. Let the children name flowers that are blue, as harebells, speedwell, forget-me-not. Where these flourish; whether in meadows and gardens, or on heaths or roadsides.

4. Let children name fruits that are blue; as the blueberry and plum. Whether these are blue, as the pattern is blue. They are rather blue. "Things rather blue are said to be bluish."(S R.*)

5. Let children name animals that have any part blue.
   (*a*) *Birds*: Peacock, kingfisher, duck, swallow, jay.
   (*b*) *Insects*: Some beetles, dragon fly, house fly. These, why called bluebottles; children to say what parts are blue.

6. Any other natural objects that are blue or bluish, as steel, starch, some slates.

Summary.—Children name from memory: Things that have life and are blue. Things (natural) not having life that are blue.

2. *Lesson on the Colour Yellow.*

1. Introduce this lesson as that on blue.
2. Lead children to name any natural objects of a yellow colour. Write all the names on the board, and help children to classify.
   (*a*) What birds with any part yellow? Canaries, yellow-hammer; also the crest of the cockatoo is yellow.
   (*b*) What insects are in part yellow? Some butterflies, caterpillars, wasps.
   (*c*) What flowers contain yellow? Buttercups, daisies, sunflowers, &c. What part of each is yellow? When leaves are yellow.
   (*d*) What fruits? Lemons, some gooseberries, green gages, apricots, apples. Whether these are yellow as the card is yellow. They are yellowish.
   (*e*) Other natural objects; as, sulphur, gold, brass, sand, straw, ochre, butter, yelk of eggs, sometimes the sky; when.
3. *Summary.*—Children say what animal, vegetable, and mineral substances are wholly or in part yellow.

3. *General Lesson on Colour.*

1. Bring before the children a variety of pebbles, black, white, and coloured. Let them select those they like best. Question on the principle of selection, and lead them to discover that they find pleasure in looking at coloured things.

2. Let them say what colour they can see by looking upward; sky, blue; clouds, white, black, or gray; sun, and stars, yellowish. The rainbow, red, orange, yellow, green, blue, purple.

What colours they can see in the fields; grass which is green. Trees with green, red, or yellow leaves, and brown stems. Flowers, which? Let each name a flower of a different colour, to show that these are of all colours. What they see when they stand on the shore. Yellow sand; white, green, or black rocks; greenish sea.

What living things show the brightest colours? Tigers, leopard, redbreast, bullfinch, peacock, macaw, kingfisher, butterflies, ladybirds, &c. What parts of themselves are coloured? Hair, eyes, cheeks, lips. We see colours wherever we look—the earth is full of them.

3. Lead the children to imagine the trees, flowers, and objects in general, all of one hue, as white, drab, gray. Let them trace the effect of such a state of things on their minds. It would make people feel dull. Bright colours make us feel cheerful. (S. R.) Suppose a gray rosebush, trained against the wall of a gray house, springing from a gray soil, under a gray sky, all the surrounding objects being gray. Were they sent to gather it, how near must they come before they see it? "Colour helps us to distinguish objects." (S.R.)

Draw a similar picture, representing every object as red; how painfully exciting! as blue; how cold and forbidding! Refer to the effect of green; soothing, cheerful, refreshing. Whether it would be better if everything out of doors were green, and why not.

Who has furnished this earth with such a variety of colours? Who has formed us to enjoy them? What we learn of God.

This lesson requires no summary. Itself is a summary of the previous lessons.

II. DISTINGUISHING AND NAMING TINTS AND SHADES.

Minute and accurate perception and power of comparison are cultivated. Vocabulary extended.

1. *Lesson on Tints and Shades of Blue.*

1 Let the children decide on the Colour that shall be the subject of this lesson. Suppose them to say blue. Produce varieties of this. Let them recognize each as blue. Let a child select the bluest of the blues. When ultramarine is found, compare other blue or bluish objects with it. Children will find nothing bluer. Tell them that because in judging of the blueness of objects we go by this, it is called standard blue. "The bluest blue is called standard blue." (S. R.)

2. Direct attention to the remaining varieties. Children to decide which of these look more like the night, which more like the day. Get the terms *light* and *dark*. Give the terms *tint* and *shade*. (S. R.) "The lighter blues are called tints, and the darker blues are called shades."

3. *Exercises.*
   (*a*) Let the children place the blues in order, from tint to shade and from shade to tint.
   (*b*) Let a child find the darkest shade and the lightest tint.
   (*c*) Let a child find the tint and shade nearest to the standard.
   (*d*) Give the children the names of the tints and shades.

4. Show how convenient it would be if instead of calling for the darkest shade, or the tint nearest to the standard, we had names for the varieties. Who would like to learn their names.

2. *Lessons on Tints and Shades of Red.*

3. *Lessons on Tints and Shades of Yellow.*

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* Simultaneous Repetition by whole school.

THIRD STEP.

DISTINGUISHING COLOURS AS PRIMARY, SECONDARY, AND TERTIARY. ALSO HUES OF COLOUR.

1. *Lesson on Production of Secondary Colours.*

1. Produce the colours yellow, red and blue. Desire the children to name other colours, as purple and orange. Show orange, and let the children say whether it most resembles yellow, red, or blue. (Yellow.) Show purple. Children will decide whether this most resembles red or blue. Tell the children that all colours bear some resemblance to yellow red or blue; because all other colours are derived from these. These are the first or primary colours. (S. R.) "Yellow, red, and blue are the primary colours."

2. Mix chrome yellow and prussian blue. Let the children note the operation and the result. (S. R.) "Green is a mixture of yellow and blue." Proceed in the same way with yellow and red (carmine), producing orange; and with blue and red, producing purple. By reference to the term primary, draw from the children the name that will characterize this second set of colours, viz., secondary. (S.R.) "Orange, green, and purple are secondary colours."

3. Write on the board the names of the secondary colours, as dictated by the children.

Yellow + Blue = Green.
Yellow + Red = Orange.
Blue + Red = Purple.

S. R., till committed to memory.

2. *Lesson on Hues of Colour.*

1. Take yellow and blue pigments. Before mixing, call attention to the proportions of yellow and blue—about half as much yellow as blue. Tell children that were these substances perfectly free from earthy particles, we should take exactly 3 parts of yellow to 8 of blue.

S. R. "Yellow is to blue as 3 is to 8."

2. Let children say how this proportion might be varied: we would take more yellow and less blue. Let them judge of the effect this would have in the product. The green produced would be yellowish green. Perform the experiment, conforming to or correcting their judgements.

Tell them that this green is called, not a tint, nor a shade, but a hue of green.

How else the proportions might be altered: we might take more blue and less yellow than at first. The effect this would have on the product, inferred, and the experiment tried as before. We have now bluish green, another hue.

Take yellow and red, directing attention to the proportions, which are as 3 to 5. Additional red will produce red orange, and additional yellow pale orange. Children should first see if they can infer the results, and then find them by experiment.

Take red and blue, proportion 5 to 8. Proceed as before.

3. Children led to explain how the "Hues of Secondary Colors are formed by an extra proportion of one of the Primaries, which compose the Secondary." (S. R.)

3. *Lesson on Hues of Red.*

1. Produce varieties of red. Let children select and name those that they know. Standard, tints, and shades.

2. Let them proceed to classify the hues of red, putting them into two groups. They will at once separate the yellowish reds from the bluish reds. Let them try to account for the difference in hue. Should they fail in doing this, produce an orange card. Let them point out the set of reds which come nearest to it, and account for the resemblance. These reds have yellow in them. Children to judge of the color which tinges the remaining set of reds. These reds have blue in them. "Some hues of red are tinged with yellow, and some with blue." (S. R.)

3. Children arrange the yellow reds in order, and learn their names. The deepest scarlet; the next vermilion; something the third is like: the flesh of salmon. It is called salmon color, or salmonine.

Children arrange the blues. The darkest and bluest of the reds is called crimson. The next magenta, from a battle which was fought about the time this particular hue came into fashion. The last peachine. Why? It is the color of a peach blossom.

4. Children find examples of any of the hues; are exercised on the names. They define tint, shade, a hue, thus:

A tint of Red is Red lighter than the standard.
A shade " " darker than the standard
A hue. " " tinctured with some other color.

4. *Lesson given on Hues of Black.*

1. Bring before the children several black objects; a piece of jet, a worn blackboard, some burnt steel, a piece of black silk which has been worn, and some ink.

Let them select the standard black in the piece of jet. Give the term *jettine.*

Let them examine the other objects, and pronounce what hues of black they exemplify. The blackboard is bluish black; the burnt steel is purplish black; the silk is rusty or brownish black; the writing fluid is greenish black.

Write on the board—

Jettine or standard Black.
Hue of greenish Black.
" purplish Black.
" bluish Black.
" brownish Black.

2. Children mention black objects, and define their hue.

Note the difference between jet black hair and raven hair.

Summary.—From the board.

5 *Lesson on White and Black, as representing Light and Darkness.*

1. Ask the children to tell the color of light. "It has no color; light is colorless." (S. R.) What colour will best represent it? (S. R.) "White is the representative of light."

2. Present a prism, and direct attention to the yellow, red, and blue rays. Explain, in the simplest language, that this instrument is able to divide the compound colorless rays, and show the primary colored rays that compose them. Children to say what colored rays each colorless ray must contain. (S. R.) "Light is produced by the blending of red, yellow and blue rays."

3. Children to judge of the probable result of mixing red, yellow, and blue pigments; say in what proportion they should be mixed.

Perform the experiment, and let them state the result. Get or give the reason. (S. R.) "The mixture of red, yellow, and blue pigments will not produce white, on account of the opaque and earthy substances all pigments contain."

4. Children to say what is caused by the absence of light—darkness. How they would represent it. (S. R.) "Black represents darkness."

5. Lead the children to see that "as light (or white) is the blending of all colors, so darkness (or black) is the presence of no color." (S. R.)

Summary.—Repetition of S. R.'s.

6. *Give Lesson on the Rainbow under the following heads.*

I.—Appearance, form, colours; their arrangement. Why the secondary colours alternate with the primary.

II.—Formation of the Rainbow.

III.—The rainbow as the sign of a covenant.

FOURTH STEP.

1. *Consideration of Colours as Emblematic.*

The children are exercised in drawing analogies.

I.—Speak of spring. By reference to the cold winter season past, and to the bright long days, the summer flowers, and the harvest we expect, lead the children to look on spring as the time of promise. Refer to the young grass—the budding leaves; contrast the delicate green of these with the sere brown of winter. How we hope to see the trees, the fields look. Tell the children, that because light green is the spring color, people have taken it for an emblem of Hope.

II.—Refer to the sky—its appearance at different times; sometimes cloudy. What the children would see were the clouds dispersed. Always beyond these is the bright, changeless blue. Refer to the pain and sorrow which we all must endure, and to that better place where tears shall be wiped away. When we think of Heaven, at what object do we like to look? Because blue puts us in mind of Heaven, it is taken as an emblem of Faith.

Write on the board the different colours. Children to give their ideas of the attributes these colors will best represent. Supply deficiencies and correct errors, till the writing on the board appears thus:

Green—Hope.
Blue—Faith.
White—Innocence and candor.
Black—sorrow or mourning.
Yellow—desolation, despair.
Red—Military glory, anger.
Purple, or Crimson, } Royal state.

Children to find reasons why the colour should be taken as an emblem of the attribute. For white, refer to the snow. How beautiful—how easily soiled, yet how plainly showing the least stain!

For black, when people wear it. Why they prefer black to colours. Of what it puts us in mind.

For yellow, when the landscape looks yellow, with what feelings we view it. Why? So proceed with the other colours.

Children must be told that purple is taken as an emblem of dignity, from its association with the dress of kings. At first it was worn by the Greek magnates only, on account of the rarity of the mollusk that produced the dye. Then it became an emblem of State.

It might also be explained, that in China the royal and noble color is yellow; and why? viz., the sun appears of a yellow color, and the court of Pekin is supposed to be modelled on the plan of the court of Heaven.

III. *Summary.*—Teacher names the colors; children say what they emblematize. The same thing reversed.

2. *Lesson on White as an Emblem.*

I.—Children to mention objects of the purest whiteness; as snow, a lily, ivory, white marble, swan's down.

Exercise the conceptive faculty. How dazzling the new fallen snow; how different from the same snow when the thaw commences, and it shows black footsteps! How fair and regal the fresh white lily; how different it looks when it displays faded and yellowish petals! Refer in the same way to the plumage of the swan when wild; to ivory and marble when stained. In which condition are these objects most pleasing to the eye? Thus develop the idea of the beauty of these objects, as consisting in their hue.

II.—Tell the children that there are some things more beautiful than any snow, lilies, or ivory. That these are not outward, but inward things.

Draw the picture of a child always gentle in his manners to the young, and respectful to his elders; kind in his actions, always ready to help and oblige; honest in his dealings with his playfellows, faithful in his duties at school and at home. How lovely a character! To what natural object or quality can we compare this? White. What if the child in question one day commit a manifest fault; what if he be found in a lie, or even in a violent passion? If we compare the former character to whiteness, to what may we compare his fault? To a dark stain, sullying the pure whiteness. (W. B.*) "White is the emblem of Innocence."

III.—Children to say at what times people usually like to wear white. At weddings, on holidays, Sundays. How people feel on holidays. How they ought to feel on Sundays. The Lord's day is a festival—not a common, but a sacred one. Refer to Eccles. ix. 8, explaining that in ancient times men as well women wore white garments.

Tell them that the ancient Greeks not only dressed for feasts in this way, but were in the habit of marking days of joy or triumph on their almanack with a white stone, doubtless of the nature of chalk. (Rev. ii. 17.) Children to name the second thing that white is the emblem of—Festivity. (W. B.)

IV.—Refer to flags of different nations; the use of flags; the colours

* Write on Blackboard.

seen in them. Red, white and blue in the stars and stripes, in the tricolour of France, and the Union Jack. The Italians have chosen a tricolour of red, green, and white. Other of the European nations have yellow and black. The Turks hoist a green flag. The standard of each nation floats on its own territory, and in time of war on others' territory; but when, in such a case, armies want to communicate peacefully one with another, they lay the national flag aside, and take a white flag, called a *flag of truce*. Explain truce. A soldier carrying such a flag as this may go into the centre of the enemy's camp; the flag shows that he comes with a peaceful message, none will harm him. "White is the emblem of Peace." (W. B.)

V.—White emblematizes one thing more. The Bible tells us that the inhabitants of Heaven are clothed in white. It speaks of heavenly armies riding on white horses. (Rev. vii. 9, and xix. 8 and 14.) What kind of place is Heaven? What kind of people its inmates? When these are described as being clothed in white, of what is white the emblem? "Of Purity, or Holiness. (W. B.)

The Bible tells us of the high priest of the Jews, the type of Christ. once a year he went into the most holy place to make intercession for the people; and then he wore white garments only—he represented a holy advocate. The Bible tells of a great white throne, set for the judgment where the dead, small and great, shall stand before God. The throne is a holy throne.

Summary.—From the board:

White is the emblem of Innocence.
White is the emblem of Festivity.
White is the emblem of Peace.
White is the emblem of Purity and Holness.

1. Lessons may be given on Black:
   As emblematic of Sorrow.
   As emblematic of Despair.
   As emblematic of Guilt.
   As emblematic of Death.

2. On emblematic Mourning:
   The Chinese wear White. Why?
   The Turks wear Blue or Violet. Why?
   English and Americans wear Black. Why?

3. On Railway Signals:
   White means Safety. Why?
   Green means Caution. Why?
   Red means Danger. Why?

4. On common Flowers as Symbols:
   Rose, Lily, Violet, Harebell, Forget-me-not, } Showing how much their symbolical meaning depends on their color.

5. On Colour as indicating Flavour. According to Linnæus, red indicates an acid or sour taste. As example—cranberries, barberries, currants, mulberries; herbs that turn red towards autumn, as sorrel and bloodydock.

Green indicates an alkaline taste. As examples—leaves and unripe fruit.

Yellow a bitter taste; as gentian, aloes, celandine.

White indicates a sweet taste, as white currants, white cherries, apples, sugar, &c.

Black indicates a nauseous, disagreeable taste; as deadly nightshade, sumac.

On Colours as Sacred Emblems:

In the tabernacle: In the garments of the high priest.

A CRATER IN THE MOON.

BY J. BIRMINGHAM.

NOT among the countless phenomena that we see around us, and the myriad wonders of the distant sky, is there one that bears witness to creative design more forcibly than the airless moon; and in the naked form of our satellite appears, I think, the most obvious objection to what is called the Nebular Hypothesis, at least as it is held in a spirit of unbelief. A tendency among gases to intermingle is a well-known natural law; and if, without intelligent interference, a vapoury chaos became concentrated into a world of orbs, it has never been shown how certain elements which are abundant in the principal bodies of a system, could be absent in the only secondary which we are enabled closely to examine. The polar snows of Mars, the changeable nature of the markings on his disk, and other unmistakeable signs, show him to possess seas and clouds, like the earth, and the spectroscope has detected aqueous vapour in the remoter planets. How is it, then, that the moon also, in the gathering of its mass, did not include the constituents of air and water? Many varieties of constitution appear, indeed, in the spectrum analysis of the stars. For instance, the *element hydrogen, which* we know, on the eminent authority of Mr. Huggins, to be widely diffused through nature, is not recognized in some of them, such as *Betelguese* and *Beta Pegasi*; and if we grant that all matter originally existed in a gaseous state, it may be maintained, generally, that any difference in the composition of the bodies of the universe points to an interference and a fiat opposed to any natural law that can be surmised by the nebular cosmogonists. However, the differences between distant suns are not, of course, so striking as those that are exhibited by bodies closely allied to each other, like the earth and the moon. It may be worthy of remark, also, that the exception to a common arrangement in our system should be found in a *satellite*—a fact that seems to indicate (as we may say with all reverence) a special object in creative plan, enabling the moon, devoid of ocean or atmosphere, to give us precisely and unalterably the degree of light that is most beneficial conjointly with the circumstances of size, *mass, and distance, which* are connected with essential qualities other than light-giving; and we may regard the nature of the lunar surface as contributing to the same effect.

In this surface, as we may fairly speculate, are only the crystalline rocks, as fresh as they were left by the producing fires. No moisture within to break them up in the swelling frost, no rain, no storm, no air, to waste them away by chemical or mechanical forces. In the brighter parts are, probably, the glistening planes of the felspar, the glassy sheets of the mica, the fretted lustre of the quartz, and the varied glitter of countless minerals unworn and undimmed, and covered by aqueous strata or vegetation. Many a metal in unoxydized brilliancy may there be doing a service that we little consider. So, also, in wide formations, may the stones esteemed the rarest and most precious on earth; and jewels, such as based the structure revealed at Patmos, and far removed from the cupidity of man, may be shining for his real benefit in the distant satellite. But the moon is not all thus bright. There are large shadowy areas, whose extent serves, no doubt, to attemper her light to a designed amount. The rock products of fire are often of sombre aspect; and the dusky tracts which constitute the flat portions of the lunar surface, are, it may be, vast overflows of trap. Those wide districts are by no means of uniform shading as they appear to the naked eye. The telescope proves them of different tints, in which red, blue, and green predominate, and the colours that were at one time ascribed to vegetation, are, more likely due to the various rocks. Greenstones and porphyries of many hues, and other minerals, may assist in dimly variegating the broad level, and the black columns of the basalt, with a development compared to which the wonders of Antrim or Staffa would dwindle into specks, may *rise above the plain undistinguishable by any optic power* that we possess.

To prove indisputably the volcanic nature of the moon's surface, nothing appeared to be wanting since the invention of the telescope but the sight of an actual eruption; and, though there are a few other instances on record of appearances significative of such an occurrence, yet none seem to have been near so striking or so well observed as the recent obscuration of a crater situated in the dark plain known as the *Mare Serenitatis*. An event of this kind makes the friends of science doubly rejoice that the moon has no cloud-bearing envelope. If she had, our acquaintance with her surface would be slight indeed; and we should, in a great degree be debarred from some of the most interesting branches of astronomical inquiry. It is generally considered that in the case of primary planets, with the exception of *Mars*, we see only the light reflected from their clouds; and it seems certain that if the clouds in a lunar atmosphere did not completely shut out the disk from our view, they would at least prevent any close examination, such as could lead to a discovery like the obscuration of the crater above referred to.

This crater, called LINNÉ after the great Swedish naturalist of that name, which has been classically corrupted into Linnæus, was first observed by Riccioli in 1653; and since that time its features have been recorded by various other observers. It is described as a deep cavity some 5½ miles in diameter, and an easy object for the telescope. Even at the time of full moon, when the shadows that give prominence to lunar details are lost in the general illumination, Linné was not difficult to detect; and it was, therefore, with no little surprise that the distinguished observer Schmidt, of the Athens observatory, perceived, in October last, only an appearance like a white luminous cloud in place of the deep, shadowy crater.

It is on the line of sunrise or sunset on the moon—technically called the *terminator*—that the structure of her surface is best observed. Here *it is, when the direct sudden shafts of day strike full on each bristling* peak, and while still an ebon-black and impenetrable night fills the intermediate valleys, that the difference of feature and the contrast of height and hollow are most distinctly visible. This boundary between night and day, with a sharpness unmodified by any twilight, presents a jagged outline more remarkable than the edges of a piece of lead suddenly cooled from a melted state by immersion in water. The bright and the dark indents of a hundred shapes and sizes are continually changing as the sunlight advances; and slender filaments, seemingly as fragile as if they ought to yield to the brush of a feather, may be seen curving brightly into the lunar night, and gradually gathering up their proportions from the darkness until they shine out in complete development as "ring mountains."

It was under these circumstances, when the crater in question ought to be best defined, that Schmidt made the discovery of its obscuration. But Linné seems to have been obscured before. Schröter saw it in November 1788, as a small ill-defined patch on the moon's surface Since then, however, and up to October, 1866, it appeared as a crater with distinct outlines and walls of considerable brightness.

The configuration of the lunar surface is, indeed, considered by some philosophers not to show any greater igneous action than what might be betrayed by the earth itself were its covering of sedimentary strata removed. In a most instructive and eloquent paper on "the Lesser Light" by Mr. Carpenter, of the Royal Greenwich Observatory [see *Once a Week*, December 10, 1864], he says, speaking of the earth, "Suppose the alluvial deposits, the shelly sedimentary strata, the surface soils and detritus of all kinds cleansed away so as to lay bare the original igneous crust, that crust, so far as geological reasoning can picture to us, would present an appearance similar to the moon."* Yet, although it may be quite true that the moon has never been more subject to volcanic disturbance than the earth, it still seems reasonable to suppose that she was, at least, equally so; and we are *not led by analogy*

* There are various places on the earth where the character of lunar scenery is considered to be tolerably well represented,—such as the Phlegræan Fields of Naples, the district of the Puy-de-Dome, the Caldera of Palma, in the Canary Islands, &c., but it strikes me that one of the nearest approaches to a *ring mountain*, with central hill and crater, is described in Atkinson's "Travels in Siberia and Chinese Tartary," p. 401. The ring, however, like many in the moon, is broken. Atkinson says,—"To the south rose *half a mountain* in a precipice of not less than 2,500 feet above the lakes, while, on the north side, at a distance of about 900 yards, are cliffs corresponding in outline to those opposite. Between these precipices, at the head of the valley, a vast dome-like form rises. . . . It was a most singular place—a complete chaos of granite, slate, jasper, and porphyry, heaped up in the utmost confusion. . . . After scrambling over large blocks we stood on what appeared to be the outward rim of a vast circle formed by a confused mass of rocks thrown together in the wildest manner, about twenty yards broad, from which the stones sloped down to a great bowl or crater from 300 to 400 yards in diameter, and about 60 feet deep. This was covered with blocks of stone of every size from a cube of 12 inches to a mass weighing 50 tons. Standing on the brim, I examined the precipices on either side, and could not help concluding that the mountain had been burst asunder by this mass of matter when heaved up." Apart from any theory of formation, the resemblance between this and a crater in the moon seems very remarkable.

to consider as extinct in her the forces that are persistently manifested in our own planet. To prove that the moon also retains them has been, therefore, the eager ambition of modern astronomers. If they have given up, even from the days of Hudibras, the hope of ever becoming acquainted with those beings, who, according to the satirist,

> "—— live in caverns underground,
> Of eight miles deep and eighty round."

they yet never despaired of detecting, in modifications of lunar features, the obvious proofs of recent volcanic action. Superficial changes, such as many that have occurred on the earth within a brief period might be easily noticed on the moon. Lava streams of forty or fifty miles in length, and ten or fifteen in breadth, like those that flowed from the Skaptá Jokul in 1783, would form very striking objects indeed; and, still more remarkable, with its lights and shadows, would be the elevation of a mountain like Jorullo, which rose sixteen hundred feet from the plain in 1759. But there has been no discovery of any such additions to the great lunar landscape, although, as already remarked, the disappearances of Linné are not the only observed phenomena of their kind; and, in a place previously hidden by a white cloud, Mr. Knotti discovered two small craters in December, 1864. It is probable, however, that the present obscuration will turn out the most important that has hitherto been noticed, and the most instructive in the investigation of lunar physics.

In a letter published in the *Intellectual Observer*, January, 1867, Herr Schmidt describes the phenomenon as follows:—"For some time past, I find that a lunar crater situated in the *Mare Serenitatis* has been invisible. It is the crater which Mädler named Linné, and is in the fourth section of Lohrman under the sign A. I have known this crater since 1841, and even at the full it has not been difficult to see. In October and November, 1866, at its epoch of maximum visibility—*i. e.*, about the time of the rising of the sun on its horizon—this deep crater, whose diameter is 5·6 English miles, has completely disappeared, and in its place there was only a little whitish luminous cloud." In a letter appearing in the *Astronomical Register*, March, 1867, he says that "not only is a crater never visible, but there appears in good light, and with magnifying powers from 300 to 600 at most, a very delicate hill of 300 toises diameter (1,918·4 English feet), and 5 or 6 toises (between 30 and 40 English feet) in height. As a *crater*, Linné has entirely disappeared. "The *light spot* is always visible, but the crater-form has never been visible from October until the present time.

"January 25.—*No* crater, and the light cloud visible. In it (as on December 26) a very fine black point; to the west of it a fine white summit."

In a letter to the *Astronomische Nachrichten* (see translation in the *Astronomical Register*, May, 1867, by W. T. Lynn, Esq., B.A., F.R.A.S.), Schmidt says:—"At the time of the labours of Lohrman and Mädler, 1822-32, Linné was a deep crater more than 5,000 toises (6 English miles) broad, and very deep, distinctly visible as a crater; when near the phase, it was more or less overshadowed. . . . . At least since 1866, October 16, the crater-form of Linné, at the time of oblique illumination, *cannot at all be seen*. The Athens refractor shows in the interior of its figure at times a fine black point 300 toises (1,918·4 English feet) in diameter."

It must be said that all this is not very clear, for it seems easier to consider the black point a depression than an elevation. In a letter from the Roman astronomer, Father Secchi, to the French Academy, he says:—"On the evening of the 10th (February) between nine and ten o'clock, the crater Linné entered into the sun's light, and close by the limiting circle a small prominent point was seen with a little shadow, and round this point an irregular circular corona very flattened. On the 11th, a very small crater was distinctly seen, surrounded by a brilliant white aureole, which glistered against the dark ground of the *Mare Serenitatis*. The size of the orifice of the crater was at most one-third of a second, and the aureole was a little larger than *Sulpicius Gallus*. I insist on this comparison because it shows that Beer and Mädler could never have figured a crater as big and as well-marked as that which they assigned to Linné for the white spot which at present exists. In fact, *Sulpicius Gallus* is much larger than the little crater which forms the centre of the spot. It cannot be doubted that a change has taken place, and it seems probable that an eruption has filled the ancient crater with a material white enough to look bright against the dark ground of the sea."

Neither is this description very distinct; but, on the whole, it would seem that the black spot, which Schmidt considers a hill, appears to Secchi as a crater, and Secchi's "small prominent point with a shadow," may possibly be the fine white summit west of the black point noticed by Schmidt.

Without further observations, it would be premature to speculate with any confidence on the probable conditions of the eruption. It would appear, according to Secchi's view, that the outbreak has already ceased, after filling up the greater part of the old crater, and leaving quite an inconsiderable one in its place, so that there is now, in fact, no obscuration in the proper sense of the term. If, on the other hand, there is no sign of any crater whatever, the eruption may still be going on, and the crater may be filled with an over-boiling mass of bright matter which is flowing away from it on all sides; or it may be really obscured by a vapour. Schmidt does not think that there is a vapour, as appears in a letter translated from the *Cologne Gazette* for the *Intellectual Observer* (April, 1867) by Mr. Lynn. Schmidt says:—"An eruption of vapour or ashes is not probable, because a shadow of that which covered the crater would be thrown at sunrise and sunset; but this is never the case. Had the crater sunk below, in its place a great shadow would be visible during the phase. Had the ring-mountain been destroyed, the fragments would throw shadows; which also is not the case. Had the crater been filled up by an eruption of fluid or powdery matter without overflowing, the interior black shadow at sunrise and sunset would indeed disappear, but there would remain a hill throwing a shadow on the outside. This was the appearance seen by Schroter in 1790 in the central part of Posidonius, and by Julius Schmidt in the same object in February, 1849. But such a mass of matter may also have flowed out over the outside banks, and covered the surrounding declivity with a very gradually sloping inclination. This would prevent the casting of a shadow outside at the phase. Such an event would explain all the phenomena presented by Linné, and it is the kind of event which, in the mud volcano in the peninsula of Taman, so closely described by Abich, has so striking an analogue on our earth. The spreading of the overflowing bright mass over the dark plain gives occasion to the origin of broad formations similar to a halo, which are seen frequently upon the moon, especially in the so-called *Mare*."

But there seems to be no reason why a condensing vapour should not assume the same shadowless slope, and, considering that the ejected matter may have appeared in a vaporous, a fluid, or a solid state, or in different states, it is evident that great caution should be used, for the present, at least, in offering any decided opinion as to its condition. It may be noticed as a striking fact, that the obscuration in Schroter's time passed away; and it might be expected that the present would also come to an end without any permanent filling up of the crater. However, the two "obscurations" seem very different in character, as the first was a darkening, while brightness and absence of shadow distinguish the recent phenomenon; and the final effects of both may be very different also.

If the body that obscures the old form of Linné is really a vapour, it would afford an independent proof of the airless condition of the moon in showing the absence of winds over her surface. If winds were there, it should certainly display their action, and could not persistently maintain its circular shape. But its outline has remained unchanged. The white cloud, if cloud it is, betrays no yielding to any superficial force, and its solemn pall hangs motionless over the awful vault.

But here still would be only a confirmation of what is otherwise established; and it may not be inapt to notice one of its peculiar effects in connection with the eruption of Linné, supposing the moon to be inhabited by sentient beings. If, then, our satellite contains a form of life suitable to the conditions that obtain there—and we cannot know whether it does or not—it is plain that, unless, indeed, the vibrations of the ground serve with adapted organs for the purpose of hearing, the eruption of Linné, however great it may be, and frightful to the sight, can yield no sound. The whole land may heave with a force unknown in our most dreadful earthquakes; a hundred chasms may yawn wide and breathe forth their breath of flame; the lofty peak may cleave asunder before the issuing lightning; the sun may darken behind the volleyed rocks, or the lofty shroud of vapour; and the encircling cliff for miles may fall down in the uttermost confusion—still there are no smothered rumblings in the deep abyss—no thunder among the hills—no roaring in the red throat of the fire mountain; for even Ruin, wielding her greatest terrors, can have no voice in the airless space; and were all the volcanoes of the moon in eruption together they would be as noiseless, to human ears, as the cushioned feet of a butterfly lighting on a flower.

I will not here discuss how an atmosphere of some kind might be expected to result from the discharges of gas from volcanoes, if from no other source. A perfectly transparent, and, at the same time, sound-transmitting air-covering might exist if only the absence of oxygen or hydrogen forbid the formation of water and its consequent phenomena of evaporation, rain and mist. However, the moon affords no proof of an envelope even such as this; and any subject relating to her is rightly treated under the assumption that she possesses none.

Now, proceeding with the supposition that the ejected matter which is visible to us might, possibly, be the vapour of minerals in that powdery state which seems transitional between a fluid and a gas, it may be interesting to consider how a vapour would behave at the surface of the moon.

For this it will be sufficient to recollect that the rising of a light body is, properly speaking, caused by the weight of that in which it is immersed, where the heavier particles tend to gravitate into its place, and push it upwards. It is plain, therefore, that this vapour could not rise on account of its lightness where there is no upbearing medium; and its total elevation would, consequently, be due to gaseous elasticity and impulsive force. Even if there was an atmosphere of greater specific gravity than the highly heated vapour, still the latter, after its ejection, should begin so quickly to lower in temperature that its expansion to any considerable extent would be impossible; and the result, in any case, would be, probably, what might be called a rain of recondensing minerals.

In point of fact the white cloud might be a condensing vapour; or it might be a solid or fluid outpour; or it might be the resulting formation of matter ejected in any shape. But, be this as it may, it seems established on a high authority—and this is the point of paramount importance—that the moon betrays the continued existence of those forces which, in the operations of countless ages, have impressed her surface with a character so strange, so void, and so forlorn, that if such scenes were discovered in some hitherto unexplored region of the earth, they would freeze with awe the blood of the beholder.

It may be regretted that the phenomenon did not occur in a crater more remarkable and generally known than Linné, for there is, probably, not a person living, besides Schmidt himself, whose acquaintance with the place, derived from his own observations of twenty-five years, would enable him to pronounce decidedly on a change in its appearance. An alteration of feature in any one of a number of other craters might be proved by a host of witnesses; but at the same time it must be remembered that the distinguished observer who presides over the Athens observatory, is, indeed, equal to a host in himself.

Having referred to Linné as bearing testimony to the absence of a lunar atmosphere, which, again, I believe to be a strong evidence of creative design, I think it not out of place to state that, on the other hand, our satellite was considered by an eminent philosopher as affording a proof that the world was not formed by an omnipotent intelligence. Laplace says that the moon is not situated to the best advantage for giving light, as she does not always shine in the absence of the sun. To attain the object for which the partizans of final causes imagine her to be intended, it would have been sufficient at the beginning to place her in opposition to the sun in the plane of the ecliptic, and at a hundredth part of the distance of the sun from the earth, at the same time giving her a motion by which the opposition would ever be maintained. The distance would secure her against eclipse, and there would thus be a continual full moon rising regularly at sunset.

But it may be proved mathematically that the moon could not retain that position with respect to the earth; and, even if she could, the at-

vantages suggested by Laplace would be more than doubtful. In the tides we see clearly that it is not her light-giving properties alone that mark her usefulness, and her attractive force, which is shown by various other phenomena of less obvious, though, perhaps, not less real importance—such as precession and nutation—would be vastly modified by her removal to near four times her present distance. In her relatively unchanging position she would be far from serving, as she does now, for the closest determination of the longitude. By the non occurrence of eclipses we should be deprived of most admirable and instructive phenomena. We should never watch in wonder the veiling of the lunar disc, nor mark the earth's roundness in her coppery shadow. We should never, and with still more solicitude, observe the sun himself varying, like a mystic day-moon in rapid phase, up to the awe-inspiring moment when he vanishes among the kindling stars; nor should we ever await in astonishment that most enrapturing of celestial sights when, in the annular eclipse, the thin sun-streams flow round on the central darkness, and encircle the pitchy space like a bright setting that lost its gem. Supposing still that the moon could be maintained in the position favored by Laplace, her disc would appear near sixteen times smaller than at present, and her illuminating and other influence would be in the same degree less, I am not aware that the philosopher, to meet these objections, suggested any increase of size; and it might be said that the moon of eminent physical and scientific value would not, according to his plan, exist—neither would the moon of poetry. The ever-round and ever-diminutive-looking satellite would furnish no striking theme for description or romance, nor suggest to genius some of its grandest conceptions. Milton could not have told of the sun *looking from behind* the eclipsing orb in a simile with which no other of any other writer can be compared for an instant; nor, again, could he have thrilled us with the description of the arch-fiend's shield, whose—

"Broad circumference,
Hung on his shoulders like the moon."

In a scientific point of view, it will be easily understood that if the distant and nightly appearing satellite had still the power of giving any effective light to the earth, in place of being an object of high interest, it would be a positive nuisance to the astronomer. How few of its great wonders would the heavenly space have revealed to us through the veil of an eternal moonlight! The most beautiful systems of the double and multiple stars, with their different lights and motions would be scarcely noticed. We should never receive delight from the exquisite charms of the many-hued cluster, dappled with coloured fires, like the flashings of the diamond, the sapphire and the ruby; nor should we know of the far-remote cloud-worlds, with all their surprising shapes of the ring, the sphere, the spindle, the spiral, and a thousand indescribable forms, many of which are already proved by the spectroscope to be no other than what they appear to be—luminous vapour.

And if these mystic glories of the sky would remain unseen, so, also, would the wonders of its darkness. We should have no speculations about the rayless regions, such as stain the brightness of the *Milky Way*, or set off the splendours of the *Southern Cross*. The deep gulf in the great nebula of Orion would be as unseen as the marvellous promontories that it divides; and, undiscovered among the brilliant tracts of *Scorpio*, would remain the dreary aperture of an Avernian blackness, through which we can perceive, as it were, the eternal night of outermost space, whose secrets no telescope has ever penetrated. Our acquaintance with the moon's own appearance would be vastly circumscribed. At such a distance we should have little pleasure in contemplating the great landscape of half a planet. Thousands of details now plainly enough visible would be only imperfectly seen or totally unseen; and it is probable that we should never be attracted by such sights as the obscuration of Linné.

EDUCATIONAL INTELLIGENCE.

AT HOME.

ACADIA COLLEGE ANNIVERSARY.—We extract the following from the *Christian Messenger*:—

The first week of June in each year is surrounded with deep interest to the friends of Acadia College and its students. The institutions of learning on the hill at Wolfville, at that time, assume an appearance of activity somewhat differing from that of any other week in the year. After spending the preceding days, and weeks, and months in digging in the mines of knowledge, the several classes bring forth the treasures they have gained, and have them submitted to the test of rigid examination.

Horton Academy.—First in order comes the Academy, which has done its preparatory work for near half a century, and has taken no small share of the honor as well as the labor of raising this province to its present respectable position, and of supplying a number of useful and valuable men to the neighbouring provinces.

The examinations of the Academy were held on Monday and Tuesday, 3rd and 4th inst.

On Tuesday afternoon an exceedingly interesting portion of the celebrations took place in the Academy Hall. Four young ladies, having completed their course of three years at the Seminary, and proved by a searching examination their proficiency in the various branches of higher instruction given at the institution, were each requested to read an essay, which they had prepared for the occasion. They were as follows:—

"The object of Study," by Miss Blackadar.
"Imagination," by Miss Bigelow.
"Open Secrets," by Miss Woodworth.
"Valedictory," by Miss Eaton.

The diplomas were given by Rev. Dr. Crawley, who addressed the recipients in his usual mild, fatherly, and affectionate manner. His counsels will doubtless be long remembered by all.

The examinations were most satisfactory, and reflected the highest credit alike on the young ladies themselves, and the ladies and gentlemen in charge of the Seminary. The essays were of the first order.

A prize was given to Mr. E. P. Bowles as the victor in a spirited contest of several hours in orthography.

The Hall was filled by friends of the institution, who manifested the highest satisfaction in the exercises.

The Cricket Match.—On Wednesday the Academy and College Students were on the cricket ground, contending for the $20 prize offered by Lewis Y. Payzant, Esq., who had observed the injurious consequences of students taking too little physical exercise, and sought by this means, and the conditions attached, to infuse more active exertion among them.

To the great surprise of all parties, the Academy Club were the successful competiters by 92 runs.

The Associated Alumni.—On Wednesday afternoon the Alumni Association held its Annual Meeting. The evening was occupied by the Annual Oration, dellyered by Rev. W. S. McKenzie. Subject: "The College Graduate." For an hour and a half the attention of a large audience was rivetted. All were delighted with many well-drawn delineations of character, and the experiences of student life under different circumstances.

The College Anniversary.—On Thursday morning the Faculty, Governors, Students and Graduates of the College, and Academy students, assembled under the folds of the Royal Standard, and, after being marshalled into order, walked in procession to the Baptist Church, where a large congregation had assembled to witness the anniversary celebrations. On arriving at the Meeting-house, the long procession formed into open column, and the Faculty passed on, receiving the respectful salutations of the Academy students. Professor Saffery, who presided at the organ, struck up a Voluntary, and continued till all were in their places.

The following were the subjects of the orations:—
"Cause," by J. F. L. Parsons, of Liverpool.
"Circumstances," by W. N. Graham, of Antigonish.
"Nugæ," (trifles), by Wilbert D. Dimock, of Truro,
"Results," by Jas. W. Manning, of Bridgewater.

One could not but observe the strong marks of individuality each oration bore, and the fund of original thought they developed. The order in which they were delivered, and the appropriateness of each in its place to produce a combined oneness of idea, was a most pleasing feature of these masterly productions. The mental capacity, breadth of thought, striking illustration, and apt quotation, showed that the training received had not failed to call forth and strengthen the powers, with which they were severally endowed, and we shall be disappointed if they do not all take a position of influence and respectability at no distant day.

The Degree of Bachelor in Arts was then conferred on the above, and of Master in Arts on Mr. H. Harding Bligh of Halifax, who was present to receive it, and the honorary degree of M. A., on Edward Young, Esq., formerly of Falmouth, now in the Treasury Department at Washington—a pupil of Horton Academy in 1829 and 30.

After the President, Rev. J. M. Cramp, D.D., had delivered an admirable address to the graduating class, it was announced that several of the students had distinguished themselves by undertaking and successfully pursuing extra studies, to whom Honor Certificates would be presented as follows:—

IN CLASSICS.

Senior Classs—J. W. Manning.
Junior Class—J. McDonald, E. C. Spinney, J. F. Tufts, W. A. Mackinlay.
Sophomore Class—Neil McLeod, C. R. Daniels, R. Sanford.
Freshman Class—R. W. Ells.

IN MATHEMATICS.

Freshman Class—R. W. Ells.

IN BELLES LETTRES.

Senior Class—J. F. L. Parsons.
Junior Class—J. McDonald.
Sophomore Class—Neil McLeod, C. R. Daniels, R. Sanford.

The Alumni Prizes.—As the remainder of the exercises were in connection with the Alumni Association, Rev. Dr. Cramp asked the President of that Society, T. H. Rand, Esq. Superintendent of Education, to take charge and make the necessary announcements.

Mr Rand stated that the Committee of the Alumni Association had offered a prize of $40 for the best Essay on "The claims of the Natural Sciences to occupy a prominent place in the Curriculum of a College." The Esssays to be subjected to the judgment of three gentlemen of the first standing, for their decision. Four essays had been received, and a unanimous opinion had been expressed, that the one accompanied by a sealed envelope directed "On," was entitled to the prize. A letter was read to this effect, signed by the three adjudicators, Hon. Judge Johnstone, His Worship the Mayor of Halifax, and Professor Lawson.

On opening the envelope it was found that the writer of the Essay was Mr. Jonathan F. L. Parsons, who was then called upon to read it; and we doubt not that all who heard it were fully convinced of the correctness of the remarks made by the judges on its character.

The other Prizes offered by a number of gentlemen through the Alumni Association were then presented:

First.—For the best Scholarship in each year's class of Students.
1. Freshman Class, $20, to Robert W. Ells of Cornwallis.
2. Sophomore Class, $20, to Neil McLeod of Uigg, P. E. I.
3. Junior Class, $20, to John McDonald, of Uigg, P. E. I.
4. Senior Class, $20, to J. W. Manning, of Bridgewater.

Second.—The Avard Longley Prize, $20, to the best Elocutionist, —awarded to James W. Johnston and William A. Newcomb, one-half to each.

Third.—The H. N. Paint Prize, $25, to the Student who had prepared the best series of monthly Essays during the College year, to Wm. A. Mackinlay of Charlottetown, P. E. I.

Fourth.—The Lewis Payzant Prize, $20, to the member of the College or Academy Cricket Clubs making the highest score in two matches; to L. Cohoon of Port Medway. Fifth—A Consolation Prize of $10, to the best player on the losing side; to E. C Spinney of Wilmot.

After the College exercises were brought to a close, the Alumni and their friends assembled in the Wolfville Gymnasium, and sat down to an excellent dinner.

COUNTY FUND

In aid of Public Schools, appropriated to Trustees of School Sections, for the Term ended April 30th, 1867.

NAME.	No. of Pupils Registered.	Amount paid to Trust. of Sect'n from Co. Fund.
COUNTY OF PICTOU.		
Pictou Town	573	$562.07
Cariboo River	54	35.42
Toney River	67	28.44
Cape John [4]	45	17.37
Cape John [5]	39	18.77
Cape John, S. Shore	62	48.91
Holm's Road, River John	48	23.32
River John	216	179.32
W. B. River John [18]	47	25.75
W. R. River John	33	22.03
W. B. River John [20]	45	20.19
Mt. Dalhousie	78	64.79
South Mt. Dalhousie	63	37.72
Mt. Dalh, South Side	70	50.24
Black Brook	33	24.73
Back Meadows	40	25.62
Roger's Hill Church	73	58.77
Hard Wood Hill	45	26.11
Roger's Hill Forks	49	22.93
Roger's Hill	64	48.71
Six Mile Brook	52	30.05
Eight Mile Brook	62	35.53
Salt Springs	50	24.00
Mt. Thom Old Road	43	20.07
Mt. Thom Lower	46	34.64
Watervale, [36]	61	37.03
New Guirloch	34	30.24
New Lairg Upper	48	29.72
Pleasant Valley	53	50.22
Mid. Set. W. River	44	28.55
Green Hill Upper	50	37.01
Lime Rock W. R.	40	36.14
Wesk. 10 miles	55	45.79
Durham	57	27.80
Lyon's Brook	69	53.24
Scotch Hill W. End	31	16.05
Scotch Hill Gordon's	24	15.17
Fisher's Grant	49	17.12
Central Cariboo	36	28.28
Sandy Cove Cariboo	41	25.07
Three Brooks Cariboo	46	28.50
Pictou Island	54	37.15
*R. John Underwoods	24	18.60
*Mountain Road R. Jno.	26	32.03
*Johnston's Road	24	19.76
*Welsford Bridge R. J.	37	29.61
*College Grant R. J.	32	15.00
*Cariboo Island	30	24.44
New Glasgow	432	422.85
Alma	66	35.83
Mid. River [3]	44	32.31
White Hill, M.R.	50	24.07
Marsh W.B.E.R.	41	21.16
Forks Middle River	63	40.94
Big Brook, W.B.E.R.	56	31.60
Hopewell, Lower	33	15.35
Fishpools, W.B.	30	10.02
Island, W.B.E.R.	46	33.95
Acadia Mines	98	70.97
Albion Mines	341	223.21
Springville	61	36.34
Bridgeville E.R.	65	14.75
Elmsville, E.R.	75	42.54
Upper Set E. River	77	36.13
Suthd. R. Blanchd. Rd.	54	34.75
Moose River	31	22.16
Sutherland R.	36	24.19
Marsh, McLenns Int.	49	32.25
McLenns B. Frasr. Mills	51	34.87
Frasr. Mt. South Side	36	28.60
McLenns Brook, Cooks	55	24.44
Churchville	39	17.00
Loading Ground	58	47.92
Little Harbour	69	32.41
Pine Tree Gut	34	8.96
Suthd. R. Bridge	47	40.22
West Merigomish	55	46.83
Mid. Su. Merigomish	73	28.58
Middle Barny's River	47	29.08
Lower Barny's River	62	44.97
Baly's Brook, Lower	78	66.03
Barny's R. Smithville	54	47.98
Marsh Hd. of Barny's R.	43	37.25
Barny's River W. McKs.	33	18.96
French River West	42	21.08
Wents. Grt. Suthd. R.	42	30.87
French River East	45	38.12
W.B.E.R. Chisholms	38	13.56
Middle River, Colley's	48	40.28
Hopewell, Upper	37	13.38
*Marsh, Up. Sett. E.R.	25	21.60
*Blue Mount	46	36.22
*St. Mary's Upper	28	28.65
*St. Mary's Lower	53	45.40
*Big Gut, Fishr. Grt.	35	24.62
*New Lairg Lower	24	36.36
*Went'hs. Grt. McI. M.	18	26.28
	6025	$4317.21
COUNTY OF GUYSBOROUGH.		
SESSIONAL DISTRICT OF GUYSBOROUGH.		
Guysboro'	205	$334.18
River Side	34	31.69
Intervale	88	70.64
Roman Valley	54	30.78
Cooks Cove	58	66.43
Canada	32	23.83
Salmon River Bridge	44	38.60
Salmon River Lakes	48	28.88
Cape Canso	138	146.99
Torbay (French)	55	66.93
Manchester	69	58.67
Goose Harbor	41	48.93
Tracadie, French	37	39.20
Cape Porcupine	35	20 07
Port Mulgrave	80	97.64
Steep Creek	40	37.03
Sand Point	43	38.21
Country Harbor	34	31.89
Isaacs Harbor, West	72	55.82
Isaacs Harbor, East	32	35.61
BORDER SECTION.		
Argyle	21	16.09
	1260	$1318.11
SESSIONAL DISTRICT OF ST. MARY'S.		
Sherbrooke	108	$106.74
Still Water	45	34.39
Lower Caledonia, [4]	34	31.68
Lower Caledonia, [5]	20	8.41
Wallace Bridge, W.R.	44	32.00
Melrose	57	46.76
Upper Cross Roads	41	39.87
East River	41	22.98
Liscombs	35	26.36
Indian Harbor	71	50.28
St. Mary's River	40	35.44
Goshen	28	13.62
Beckerton	20	21.54
BORDER SECTION.		
Argyle	20	11.48
	604	$481.55
COUNTY OF COLCHESTER.		
Maccan Road,	56	$25.90
North River,	62	16.62½
East River,	120	65.65
Western Economy,	51	38.85
Central "	92	50.09
Upper "	84	45.68
Bass River,	66	29.76
Portipique,	87	43.78½
Highland Village,	56	28.67
Great Village,	149	102.59½
Cumberland Road, South,	49	33.80
" " North,	40	20.00
Acadia Mines,	100	72.94
Folly Mountain, W.	52	26.11
East Village;	52	34.37½
Folly,	80	51.97½
DeBert,	34	21.60
Masstown,	50	18 99
DeBert River,	95	58.59
Chignois,	72	28.24½
Lower Onslow,	62	41.26½
Central "	53	40.55
Upper "	58	50.84½
North Mountain,	33	16.01
North River,	49	24.23
Lower Pictou Road,	42	13.07½
East Mountain,	75	58.96
Truro,	321	239.90½
Bible Hill,	64	54.55
Lower Village,	50	39.51
Old Barns,	46	8.18½
Black Rock,	49	28.50
Beaver Brook,	55	35.77
Princeport,	51	28.28
Green's Creek, [47 A]	40	24.19½
Pleasant Valley,	44	19.71
Fort Ellis,	26	19.59
L. Stewiacke, West,	52	28.69
" East,	67	18.73
Shubenacadie,	57	30.97
Gay's River,	38	26.92
Gay's River, Upper,	29	13.06
Middle Stewiacke S.	21	15.31½
South Branch,	46	18.37½
Cross Roads,	70	47.58
Newton Mills,	44	39.87½
Eastville,	50	22.49
Pembroke,	56	35.15½
Upper Stewiacke V.	51	50.49
Otter Brook,	53	29.87
Middle Stewiacke,	40	27.61
Brookfield,	79	49.06
Clarkeville,	47	30.29
Meadowvale,	40	35.66
DeBert River, [73]	31	20.74
Tatamagouche,	105	60.19
Barrasois,	65	27.43
Waugh River,	61	40.47½
River John Road,	51	13.58
French River,	46	22.21
Head of the Bay,	70	27.33
Murphy's,	80	50.01
Mill Brook,	53	37.31½
Oliver's Bridge,	41	25.27½
West New Annand,	65	34.05½
Byers' Mills,	62	28.50
Wilson's,	60	35.01½
Hingley's Mills,	62	39.69
G. Henderson's,	47	24.60
A. McKay's Mills,	39	21.07
Earltown Village,	59	29.53
Point Brulé,	61	39.33
G. Sutherland's,	42	32.31½
Barrechan,	34	15.17½
North Earltown,	42	21.41½
*Pleasant Hills,	33	20.85
*Folly Mountain,	30	25.56
*West Branch N. River,	28	23.37½
*Upper " "	23	16.33
*South " "	46	23.29
*Upper Pictou Road,	28	20.98
*Greenfield,	24	[Not apprvd.]
*Sibley Settlement,	19	12.47
*Forest Glen,	20	17.59
*Upper Brookfield,	30	31.17½
*Earltown Road,	34	24.64½
*Glade,	47	33.04½
*Truro Road,	45	38.00
BORDER SECTION.		
Glenmore,	7	3.38
	4995	$3007.44
COUNTY OF ANTIGONISH.		
Antigonish	230	$209.06
Antigonish Harbour	53	58.98
Morristown	32	13.56
Morristown Lakes	54	27.75
S. Side Cape George	39	39.66
Cape George Point	42	20.30
N. Side Cape George	44	40.22
Georgeville	39	34.92
Malignant Cove	57	49.38
Arisaig	53	43.11
McAra's Brook	46	45.18
Summerville	42	37.72
Pleasant Valley	27	16.78
Yankee Grant	32	25.29
William's Point	41	36.22
Lower South River	43	33.44
Monkshead	31	29.79
Middle Pomquette	37	21.03
Upper Pomquette	27	33.01
Pomquette Forks	46	21.65
Bayfield	19	12.81
Little River	40	16.31
Tracadie Cross Roads	83	68.12
Tracadie	65	75.96
Little Tracadie	40	30 48
Harbour Au Bouche	123	85.91
Back Lands Tracadie	34	23.16
Black River	42	29.01
Caledonia Mills	45	49.74
Manchester Road	40	35.86
St. Andrews	86	74.53
Big Brook	63	45.57
Fraser's Mills	75	59.65
South River Lake	64	64.74
Lower Lochaber E. Side	54	41.79
Head of Lochaber Lake	70	55.98
Upper Glen Road	67	48.85
Lower Glen Road	46	27.50
Salt Springs	42	24.59
Beaver Meadow	55	61.14
Pinkie Town	53	37.92
Middle West River	60	43.64
B S. Brily Brook	27	28.25
Pitchers Farm	25	13.37

NAME.	No. of Pupils Registered.	Amount paid to Trust. of Sect'n from Co. Fund.
Springfield	40	24.80
Lower North Grant	46	42.39
Hallowel Grant [64]	18	7.78
Hallowel Grant [65]	43	22.80
Malignant Brook	18	13.49
Goshen	26	33.04
*B. S. Cape George	35	20.67
*Brown's Mountain	16	24.71
*Stewarts Mills	27	16.13
*Keppoch	31	33.86
*Big Clearing	31	23.14
*Brily Brook	30	28.52
*Old Gulf Road	33	26.93
*Hallowel Grant [66]	35	20.82
	2762	$2231.05

COUNTY OF QUEENS.

S. W. Port Mouton	49	$23.68½
N. Port Mouton	70	38.84
Hunt's Point	67	41.59
White Point	36	15.98
Moose Harbor	51	52.21½
Liverpool	365	334.34
Milton	247	232.06
Blueberry	55	41.23½
Port Medway	155	61.68½
Mill Village	154	131.86½
*East Port Medway	38	40.51½
*Port Mouton Island	22	28.90
South Brookfield	60	62.07
Arbordale	63	59.24
Pleasant River	43	30.30
Caledonia	61	54.15½
W. Caledonia	40	22.02½
Kempt	43	43.46
*Middlefield	15	22.79½
*Westfield	35	25.43
*Devonshire	27	17.57
*Grafton	21	15.74
BORDER SECTION.		
Albany, New	13	9.31
	1730	$1405.00½

COUNTY OF HANTS.

SESSIONAL DISTRICT OF EAST HANTS.		
Rawdon Church	57	$54.44
South Rawdon	60	21.07
West Gore	38	31.03
East Gore	54	29.69
East Rawdon	75	49.87
Upper Nine Mile River	44	21.19½
West Indian Road	46	31.25
Nine Mile River	26	14.10½
Belnan	22	16.61
Hardwoodland	23	21.74
Mount Pleasant	32	29.64
Welsford	65	66.73
Mill Village	45	42.23
North Salem	42	19.37
Plaster Creek	40	31.60
Maitland	118	141.41
Upper Selma	107	95.80
Lower Selma	32	5.84
Shad Creek	31	29.57
East Noel	40	34.64
West Noel	61	51.17
Barneoat	27	14.30
Moosebrook	45	21.14
Head Kennetcook	43	32.84
Barny Brook	26	17.96
*Pleasant Valley	33	25.41
*Uniacke	17	22.51
*East Indian Road	33	22.81
*Noel Road	22	4.30
*South Noel Road	49	39.11
*New Dublin	21	19.32½
BORDER SECTIONS.		
Newport and Douglas	10	5.03
Enfield	38	36.20
Walton	62	48.15
Hillsdale	19	16.91
	1503	$1165.00
SESSIONAL DISTRICT OF WEST HANTS.		
Windsor	345	$354.67
Curry Corner	42	40.10
Martock	39	38 23
Forks	16	13.70
Falmouth Village	36	17.68
Avondale	83	98.80
Belmont	32	32.53
Brooklyn	108	89.37
Kennetcook G. Dyke	17	12.45
Lower Kennetcook	66	34.71
Kempt	36	67.10
Cheverie	72	53.88
Scotch Village	62	46.95
McKay	22	18.78
St. Croix	60	39 21
Ellerhause	58	46.90
*Three Mile Plain	65	75.67
*Vaughan	22	23.51
*Cambridge	31	26.38
*Pembroke	35	42.97
*Greenhill	21	21.94
*Lakeland	36	45.55
*Five Mile Plain	22	9.05
BORDER SECTIONS.		
Hantsport	145	144.02
Walton	30	21.20
Newport and Douglas	35	27.65
*Hillsdale	18	11.00
	1577	$1454.00

COUNTY OF RICHMOND.

Acadiaville,	266	$254.26
Grand Russeau,	51	49.91
Arichat,	303	284.40
Lochside,	16	19.30
Petit DeGrat,	59	50 04
D'Escouse,	59	57.29
Carriboo Cove,	62	56.00
Kempt Road,	42	40.43
Points,	35	25.29
St. George's Channel,	27	22.60
South Mountain,	47	41.43
L'Ardoise,	43	47.52
Point Micheau,	59	66.10
Grand River,	71	48.61
L'Archeveque,	45	36.08
N. Side Loch Lomond,	26	13.45
R. Bourgeois, East,	29	37.49
R. Bourgeois, West,	35	37.53
Grand River Road,	39	34.40
Rocky Bay,	12	10.89
Orange,	62	67.41
Cape AuGuet,	35	44.44
Marache,	44	11.35
R. Bourgeois, French,	24	19.29
*Janvrin Island,	32	34.22
*Poulement,	43	49.94
*Martinique,	46	85.85
*Cape LeRonde,	32	62.65
*Grandique,	17	22.60
*Sporting Mountain,	18	29.87
*St. Peter's Island,	41	41.28
*St. Esprit,	36	25.72
*Fourché,	32	32.56
*Hay Cove,	43	45.88
*Framboise,	43	34.63
*Highland,	25	18.37
BORDER SECTION.		
River Inhabitants	26	13.04
	1925	$1872.12

CAPE BRETON.

Sydney	205	$170.11½
South Bar	65	57.41
Low Point	66	46.44
Lingan	98	84.29
Little Glace Bay	197	113.51
Big Glace Bay	113	59.41
Gowrie Mines	124	98.46½
False Bay Beach	84	22.42
Marian Bridge	61	46.98
Salmon River	19	21.63½
Morleys Road	44	43.59
Coxheath	71	37.66
North West Arm	58	32.10
Ball's Bridge	45	27.56½
Ball's Creek	34	23.28
Leitches Creek	40	21.25½
Upper North Sydney	96	68.77½
North Bar	185	151.88
Sydney Mines	229	208.98½
Little Bras D'Or, West	45	27.94½
Georges River	38	18.60
Boularderie Centre	50	29.35½
Boularderie East	76	21.57
Mainadieu [A]	39	38.93½
Mainadieu [B]	34	31.31
Little Lorraine	39	45.99
Gabarus	48	21.43
Lewis Bay, North	31	23.66
Big Pond Chapel	50	23.15½
Gillis's Lake	51	53.44½
East Bay, North	49	31.38
North Side East Bay	35	48.01½
Benacadie	32	19.67
Pipers Cove	51	34.16½
Grand Narrows	35	14.47½
Boisdale	39	26.32
French Vale	55	55.95½
Upper Leitches Creek	50	14.54½
*Muggah's Creek	24	32.13
*Low Point Barrasois	25	26.99
*Kilkenny Lake	37	42.85
*Grand Lake	27	17.01
*Lingan Bay	55	68.04
*Southern Head	23	23.60
*Mira Gut	31	28.62
*Hills' Road Forks	22	21.56
*Cariboo Marsh	38	47.74
*Morleys Road	40	38.97
*Rear of Balls Creek	35	26.02
*Long Island	40	48.76
*Near Mainadeau	52	38.80
*North Shore	23	23.73
*New Boston	15	6.35
*Bengal	36	46.38
*Big Ridge	22	17.49
*French Road	30	36.64
*Gabarus Lake	31	48.18
*Canoe Lake	24	19.49
*Upper Grand Mira	18	15.29
*Lewis Bay	27	25.49
*Upper Salmon River	16	15.61
*Head of East Bay	32	37.96
*Head of East Bay S.	31	35.68
*Rory Brack's Brook	33	46.76
*Huntingdons Mountain	56	46.38½
*North Loch Lomond	38	42.34½
*South Loch Lomond	31	31.04
*McAdam's Lake	34	48.25
*Big Beach	54	35.76
*Sunacadie	38	39.64
*Beaver Cove	39	32.71
*Rear of Indian Island	23	32.38½
*Rear of Beaver Cove	37	38.97
	3818	$3091.31

COUNTY OF DIGBY.

SESSIONAL DISTRICT OF DIGBY.		
Bear River	163	$99.82
Hillsburgh	44	25.39
Smith's Cove	68	39 77
The Ridge	38	26.17
North Range	53	33.35
St. Mary's Bay	113	77.75
The Barrens	80	55.08
Weymouth	85	60.68
Weymouth Bridge	118	104.83
Digby	183	136.50
Digby Neck Road	39	31.25
Rossway	72	37.69
Waterford	32	24.12
Centreville	54	26.08
Lakeside	37	17.00
Sandy Cove	77	66.78
Tiverton, L. I.	82	70.70
Freeport, L. I.	176	134.93
Westport, L. I.	198	164.18
*Milford Corner	43	51.66
*Hill Grove	36	27.53
*South Range	41	30.53
*Wagoner Settlement	92	34.32
*Broad Cove	46	40.84
BORDER SECTION.		
Duck Pond	39	22.05
	1979	$1439.00
SESSIONAL DISTRICT OF CLARE.		
Belliveau's Cove	100	$96.96
Comeauville	90	77.58
Saulnierville	89	105.92
Meteghan River	75	80.11
Meteghan	129	134.88
Cape Cove	56	56.84
Ohio	59	57.33
Therian Section	36	22.73
*Seconde Concesion	25	32.57
BORDER SECTIONS.		
Beaver River	83	69.77
*Cedar Lake	31	26.10
*Duck Pond	17	13.21
	790	$774.00

NAME.	No. of Pupils Registered.	Amount paid to Trust. of Sect'n from Co. Fund.
COUNTY OF KINGS.		
Greenwood Square	58	$50.11
Jackson	39	28.37½
Waterville, (Aylesford)	26	24.14
Sand Hill	36	38.15
Dempsy Corner	38	34.36
Brooklyn, (Aylesford)	47	44.69½
Piedmont	46	43.07
Morden	52	39.81
Long Point	57	22.48
Weston	59	41.36
Welsford	45	45.36
Somerset	87	97.43
Berwick	73	81.02
South Berwick	49	32.97
Waterville, (Cs.)	60	30.48
Kinsman Corner	117	86.22
Harborville	81	60.84
Chipman Brook	66	28.32
West Halls Harbor	54	35.21½
East Halls Harbor	63	37.41
Billtown	46	55.16
Brooklyn, (Cs.)	39	29.34
Cambridge	48	33.41
Cold Brook	40	20.14
Canaan	39	16.96
Kentville	93	91.54
Steam Mill	48	31.74
Centreville	55	28.84
Sheffield Mills	80	84.51
South Scots Bay	52	26.50
Lower Pero	44	40.40
Upper Pero	45	24.86
Medford	53	30 30
Woodside	58	41.60
Randville	45	51.35
Upper Canard	93	85.31
Lower Canard	109	129.55
Town Plat	45	45.78½
Church Street	62	52.22
Upper Church Street	63	68.44½
New Minas	57	43.12
Greenwich	86	54.36
Wolfville	146	139.35
Black River	50	32.25
Davison Settlement	37	18.76
Gaspereaux	48	35.34
Lower Horton	58	55.59
Avonport	56	49.16
Lockartville	86	53.88
Bloomfield	52	44.64
North Scots Bay	36	15 84
Middle Pero	50	44.82
West Cornwallis Mt.	27	13.30
*Black Rock & Givan Mt.	51	35.78
*Blue Mountain	30	34.04
*Baxter Harbour	50	50.92
*Greenfield	33	36.87
*Pine Woods	45	47.57
BORDER SECTIONS.		
Kingston	51	52.80
Dalhousie	37	29.07
Aldersville	1	0.67
Hantsport	27	20.82
Sherbrooke, West	13	11.15
	3425	$2509.65
COUNTY OF HALIFAX.		
Kent's Island	48	$23.06
Musquodoboit Har. (A.)	70	50.13
Upper Jeddore, W.	48	41.48
Lower Jeddore, W.	52	29.47
Lower Jeddore, E.	41	26.27
Ship Harbour	73	50.00
Murphy's Cove	75	35.12
Shoal Bay	60	37.83
Pope's Harbour	42	23.80
Spry Harbour	58	52.14
Spry Bay	46	30,27
Salmon River	28	28.63
Newdy Quoddy	77	63.49
Kirker's	76	53.40
*Musquodoboit Harbour	47	33.05
*Clam Harbour	43	48.77
*Jerrard's Island	42	57.37
*Taylor's Head	23	30.19
*Lochaber	13	11.73
*Soker Island	27	37.55
Landoll Section	62	45.22
Cook's "	32	12.61
Nuttal's "	29	13.64
Meagher's Grant	65	50.29
Gladwin Section	59	54.99
North School	50	54.40
Taylor Section	48	25.72
Reid "	47	35.26
Huggins "	46	22.04
Sedgewick "	53	39.77
Archibald "	44	30.00
Hutchinson"	57	36.44
Henry "	35	6.22
Dean "	47	32.39
*Dutch Village	51	62.58
*Kerr's Section	21	12.37
*Sybley "	29	13 56
Hubbard's Cove	99	54.20
St. James	54	25.51
Victoria	58	47.48
Albert	57	44.02
Lower Ward	90	75.41
Haggets' Cove	67	65.60
Indian Harbour	83	75.33
Upper Prospect	187	154.98
Pennant	41	21.58
Sambro	63	58.23
Spryfield	28	14.67
Ketch Harbour	97	45.35
Herring Cove	52	7.06
Ferguson's Cove	65	26.55
Cunard	59	30.27
Bedford	80	26.08
Hammond's Plains	67	22.42
Middle Sackville	32	17.59
Upper Sackville	45	21.87
Dartmouth	410	381.46
Waverley	168	127.96
Fall River	45	32.14
Preston Road	33	21.99
Eastern Passage	47	18.16
South E. Passage	53	36.65
Cow Bay	46	46.70
Laurencetown	38	36.70
Chezzetcook	261	172.11
*Head Harbour	55	48.40
*West Dover	41	50.38
*Goodwood	18	26.74
*Brookside	16	13.76
*Lower Prospect	49	62.91
*Turn's Bay	42	55.66
*Harrietsfield	24	13.71
*Portugese Cove	57	68.25
*Beaver Bank	33	41.96
*Goffe's	14	12.35
*Preston	82	56.82
*Foot Porter's Lake	35	37.91
*West S. Porter's Lake	32	32.08
BORDER SECTIONS.		
Three Mile House	30	$18.01
*Glenmore, No. 12	22	21.74
Enfield	8	4.54
	4750	$3584.24
COUNTY OF INVERNESS.		
Hawkesbury	51	$25.21
Plaister Cove	38	46.19
Low Point	33	26 79
Creignish	31	25.34
Long Point	36	28.97
Banks Judique	47	33.71
Judique	62	62.05
Interval Judique	41	32.53
Red Banks	54	33.94
Port Hood	81	49.25
Little Mabou	51	27.34
Hayes' Farm	31	23.20
S. W. Bridge	44	29.48
S. W. Ridge	33	34.57
Mabon Bridge	58	48.88
Mouth Mabou	43	38.43
Coal Mines	43	37.26
Light Point	50	42.67
Broad Cove Banks	34	29.48
Broad Cove Interval	60	64.08
Black Glen	27	29.77
Black River	41	35.92
Smithville	23	19.85
Walker	38	46.13
Tulloch	40	29.92
Hillsborough	70	57.34
Mount Young	42	32.49
Mull River	39	26.13
Turk	32	29.46
Brigain	58	52.76
Brook Village	33	21.17
Sky Glen	51	34.46
Indian Rear	56	59.31
Red Bridge	62	43.93
Boyds	33	28.59
West Bay Road	46	23.12
Ross's Mill	45	37.67
Dallas's Brook	35	0.00
North Mount	43	44.62
Big Harbor	51	37.05
Malagawatcht	54	59.68
Blues Mill	38	41.20
Cross Roads, Riv. Den.	59	65.28
McPhersons Brook	38	31.19
Cariboo	32	28.82
Portage	20	2.99
Blues Cove	34	33.91
Boom	27	12.19
R. Inhbts. Ridge	41	30.36
Rear Long Point	32	23.10
R. Dennis Chapel	38	34.44
Top Cape, (South)	52	43.35
Top Cape, (North)	32	21.60
Port Hood Island	20	16.10
Scotch Hill	46	55.05
Cheticamp Chapel	27	24.06
Plateau	37	20.48
Friar's Head	50	53.61
E. Side Marg. Harb.	57	27.81
Forks	70	56.46
Munro	64	60.60
Ledbetter	64	37.42
N. W. Big Interval	43	33.14
Ingraham's Brook	78	69.16
N. E. Chapel	58	40.76
Big Brook	50	43.64
Scotch Settlement	29	24.19
Captain Allan's	69	55.45
McFarlane's Bridge	53	37.93
Outlet	45	25.25
McMillins Mill	81	51.39
Ainslie Glen	68	62.04
Lewis Mount	20	17.56
Narrows	53	63.72
Whycocomagh	37	37.19
Cody Settlement	31	19.59
Chimney Corner	24	18.76
Broad Cove Pond	37	21.42
Broad Cove Marsh	60	38.50
Broad Cove Chapel	40	34.49
Big River	32	22.63
Loch Bain	42	45.24
S.W. Egypt	34	24.27
	3722	$2995.10
COUNTY OF ANNAPOLIS.		
Melvern Square	64	$54.44
Forest Glen	37	17 80
Margaretville	118	125.23
Albert	48	23.18
Victoria	65	52.22
Port George	70	69.36
Port Williams	67	44.52
Arlington	73	49.30
Hampton	50	26.76
Clarence West	44	44.47
Clarence Centre	37	38.78
Clarence East	33	34.14
Brooklyn West	48	30.68
Salem	20	15.93
Farmington	53	44.13
Middleton	34	29.99
Palmer	9	9.79
Paradise	70	56.42
Meadowvale	39	24.76
Torbrook	59	40.11
Cataract	47	39.60
Cleveland	22	16.70
Nictaux	54	50.49
Williamston	56	46.87
Kentville	29	21.83
Inglisville	51	39.56
Allany, North	32	34.43
Allany, South	35	33.89
Sanders	47	56.95
Springfield	31	22.73
*Bloomington	43	38.84
*Dalhousie Centre	34	36.39
*Lake Pleasant	25	24.23
*Falkland	20	22.75
*Stoddart	11	18.94
Leitchfield	44	30.46
Karsdale	66	72.68
Winchester	32	18.33
Hall	36	23.03
Rectory	48	57.76
Willett	71	63.21
Gesner	30	27.60
Chesley	32	28.10
Moschelle	62	75.20
Annapolis	197	120.67
Clements West	64	53.49
Bridgeport	96	100.08
Hessian West	64	53.56
Clementsvale	61	52.25

NAME.	No. of Pupils Registered.	Amount paid to Trust. of Sect'n from Co. Fund.
Wright	30	21.79
Maitland	48	26 62
Lake LaRose	31	24.61
Lequille	40	29.70
*Phinney Mountain	44	38.93
*Youngs Mountain	61	64.93
*Leonard	44	31.36
*Fundy	15	10.39
*Victoria Beach	40	38.00
*Princeville	21	15.16
*Brichtown	18	24.23
*Graywood	27	16.82
*Milford	29	32.28
BORDER SECTIONS.		
Sherbrooke	8	6.84
Albany, New	20	12.17
Kingston	16	16.13
	2970	$2513.54

COUNTY OF LUNENBURG.

SESSIONAL DISTRICT OF LUNENBURG AND NEW DUBLIN.

Lunenburg	294	$265.34
1st Peninsula	44	24.76
Upper Centre	32	31.77
Garden Lots	55	24.52
Heckman's Island	38	25.06
Lower South	84	77.08
Upper South	61	50.54
Felz South	47	23.05
Upper Rosebay	39	26.93
Lower Rosebay	21	19.85
Upper Kingsburg	26	24.85
Lower Kingsburg	44	45.26
Ritcey's Cove	62	62.62
Lower LaHave	54	33.39
Lower Middle LaHave	24	16.86
Ferry, LaHave	57	30.44
Upper Middle LaHave	34	30.13
Snyders, LaHave	41	38.52
North West Range	68	63.27
Mader's Cove	74	73.88
Mahone Bay	162	127.10
Indian Point	46	40.97
Blockhouse	67	74.51
Upper Cornwall	57	32.98
New Germany [36]	40	30.67
New Germany [37]	52	55.50
Sambourne, N.G.	34	24.97
New Germany [39]	50	42.77
Western Northfield	40	32.29
Bridgewater East	54	63.59
New Canada	38	28.63
Ohio	45	41.01
Upper Branch	36	31.73
2nd Peninsula	45	31.34
Clearland	49	30.57
*Blue Rocks	65	33.22
*Riversdale	19	24.51
*Lower Northfield	37	30.23
Bridgewater	170	92.82
Conquerall Bank	54	65.29
Corkum's	59	52.66
Frelig's	41	20.05
West Dublin	87	59.21
Petite Reviere	74	62.34
Broad Cove	41	17.85
Conquerall	37	41.93
Baker's	39	28.55
Lower Chelsea	53	34.42
Upper Chelsea	41	28.67
Lapland	45	25.56
Waterloo	28	21.36
West Conquerall	32	12.09
	2936	$2328.46

SESSIONAL DISTRICT OF CHESTER.

Chester	206	$151.19
East Chester	54	38.35
Marriet's Cove	112	87.93
Chester Basin	56	33.55
Windsor Road	38	18.58
Chester Grant	31	21.57
Mill Road	36	20.55
Aaldersville	33	22.87
Cross	41	29.06
Gonlds River	99	78.22
Martin's Point	62	49.74
Indian Point	22	20.00
Bayswater	37	31.39
BORDER SECTION.		
Dalhousie	13	9.51
	840	$612.51

NAME.	No. of Pupils Registered.	Amount paid to Trust. of Sect'n from Co. Fund.
COUNTY OF YARMOUTH.		
SESSIONAL DISTRICT OF YARMOUTH.		
Lower Town	272	$176.09
Central	331	226.74
Milton	225	154.87
Overton	46	30.77
Sanford	75	37.45
Maitland	121	76.77
Norwood	54	44.80
Richmond	58	36.67
Ohio	104	63.85
Wellington	57	44.79
Hebron	135	80.23
Pleasant Valley	70	45.48
Carlton	62	40.21
Salem	72	48.57
Brooklyn	72	44.20
Sand Beach	56	33.88
Burnside	61	35.42
*Lower T'n [prelim. dpt.]	57	33.29
*Canaan	36	14.76
*Pinknay's Point	15	13.21
*North Kemptville	16	11.13
*Salmon River	40	17.12
BORDER SECTIONS.		
Little River	68	45.43
Beaver River	32	13.50
Cedar Lake	9	4.97
	2118	$1374.00
SESSIONAL DISTRICT OF ARGYLE.		
U. E. Pubnico	59	$57.54
Pubnico Head	58	37.87
U. W. Pubnico	41	42.83
L. W. Pubnico	40	28.49
Strawberry P.	52	36 52
Argyle Proper	69	45.90
Roberts' Island	69	41.57
Argyle Head	72	67.60
Eel Lake	63	50.59
Central Kemptville	51	58 57
Eel Brook	46	29.96
Tusket	102	23.55
Plymouth	40	33.80
Upper Wedge	52	89.16
Middle Wedge	60	83.57
Rockingham	38	36.66
*Lower Argyle	44	52.33
*Forks	45	45.01
*Abram's River	46	62.64
BORDER SECTION.		
Little River	15	18 54
	1062	$943.00

COUNTY OF VICTORIA.

Upper Baddeck	43	$28.53
Tairbert	42	34.82
G.S. Boularderie	26	12.10
Grand Narrows	45	54.50
Gairloch Mt.	38	33.20
Little Narrows	34	30.83
S. Side Boularderie	20	4.28
Southern Ingonish	61	22.29
Lower Washabukt	41	27.25
Lower Bridge M. River	40	0.00
Low. Sett, Mid. River	20	18.04
Gillis Point	57	62.54
New Glen Bdk.	40	24.27
Baddeck Bay	26	35.82
Big Bras D'Or	25	11.90
Big Bank, (B.)	58	33.14
Point Clear, (B.)	23	12.00
Big Intervale, (C.N.)	36	22.10
Big Harbor	39	24.94
E. Side Baddeck River	26	19.33
Kempt Head	37	22.80
Rear Lands, Baddeck	47	31.46
North Harbor C. North	40	23.49
Inlet	19	20.48
Galanders Mt.	40	5.76
North Ingonish	39	24.46
Plaister, (Red Head)	30	21.09
Boularderie	62	54.05
Shipyard	34	22.00
Red Head	61	38.22
Big Hill, St. Anns	38	26.97
Hunters Mt.	40	39.73
Bridge M. River	36	50.65
Eel Cove, North Shore	49	30.67
Wreck Cove	47	57.10
French River	32	26.98
English Town	33	28.68
Upper Sett, Baddeck	30	18.90
Baddeck	87	77.80
Mid Harbor, C. North	57	23.75
South Gut, St. Anns	66	76.46
*Crowdis Mt.	41	52.93
*Upper Sett. N. River	33	22.92
*Mill Brook, Baddeck	31	20.74
*Cain's Mountain	21	22.82
*Smith Mountain	51	31.29
*Middle River	41	39.75
*Black Head	30	22.17
	1912	$1446.00

COUNTY OF SHELBURNE.

SESSIONAL DISTRICT OF SHELBURNE.

Little Harbor	34	$19.44
E. Side R. Island Bay	50	44 61
Head R. Island Bay	69	52.35
Locke's Island	63	62.95
Jordan Falls	29	22.13
Jordan Ferry W. Side	46	22.08
Jordan Bay	66	72.57
Lower Sand Point	50	61.25
Shelburne	255	195.41
Gunning Cone	32	16.25
Rosewny	54	58.76
Black Point	80	87.62
North East Harbor	56	33.58
Church Over	62	25.45
BORDER SECTION.		
Clyde River	26	18.55
	972	$793.00
SESSIONAL DISTRICT OF BARRINGTON.		
Cape Negro Island,	29	$17.37
Lower Port LaTour,	60	54.29
Baccaro,	62	42.68
Hibbert's Brook,	52	44.38
Passage,	119	98.48
Bear Point,	46	55.43
Shag Harbour,	74	66.84
Lower Wood's Harbour,	90	73.48
Upper " "	53	57.32
McGray Section,	62	46.54
Newell "	82	62.26
South Side,	75	46.92
Stony Island,	62	39.13
Head,	77	54.90
*Hill or Solid Rock,	31	20.31
*W. Side Wood's Har.,	22	22.16
BORDER SECTION.		
Clyde River	9	5.42
	1005	$803.00

HALIFAX CITY.—The next semi-annual examinations of the city schools take place as follows:—July 8, Inglis School; July 9, Colonial School, Campbell Road School; July 10, Acadian School, girls' and boys' departments; July 11th, St. Mary's, boys' departments, Poor House School; July 12, St. John's School, boys' and girls' depart's.; July 15, Three Mile School; July 16, National School, boys' and girls' departments; July 17, St. Luke's School, boys' and girls' departments, St. Patrick's School, boys' and girls' departments; July 18, St. Mary's School, girls' department; July 19, Zion School.

COLCHESTER CO.—North River Section, Five Islands, has a new school house of the first class, occupied by a 1st class female teacher. A large number of pupils are in attendance. For years this section presented a dreary educational waste.

KINGS CO.—The Inspector reports:—"During the first part of the last month, I made a few visits to schools in competition for the Superior Grant, of which there are six, and find them in some respects more efficient than hitherto. Grand Pré Section is one. The attendance there is large and the school room the best in the county, although of course the building, which cost $2000, is inferior to that at Lower Canard. Recently I have extended my visits so that 18 have received my attention

I am happy to be able to report a considerably larger number of schools in operation this term than at any time hitherto. I think there will be 80 or more, as there are now 77, and arrangements are being made in some other sections for a part of the term."

MR. EDITOR.

Dear Sir,—The inhabitants of the *Still Water* and *Curry Corner* school sections, wish through the pages of the Journal to express their thanks to Hon. Benj. Wier, for his great kindness and liberality in presenting them with the land on which their school houses have been respectively commenced. In the former section one acre was given, and in the latter half an acre. The value of the land in the Curry Corner section may be estimated at from $200. to $300. The house now in process of erection on this site is 26 × 60, and will be finished in good style, and furnished with the patent desks and seats. It is hoped that Mr. Wier's example will stimulate others to do likewise.

The attendance at the schools so far this term shows an improvement over the corresponding period of last year.

D. M. WELTON,
Inspector Hants Co.

[Several instances of similar liberality on the part of the friends of Public Education, have come to our notice. Christopher Jost, Esq., of Guysboro', presented to the Trustees of that section the beautiful site and playground appropriated to the new County Academy. We cannot call to mind the names of others, but we shall be pleased if inspectors will furnish us with the same.—*Ed. J. E.*]

Dr. COLLIER, celebrated as one of the most successful and graphic writers of school histories, has revised his school history of the British Empire for general use in public schools. A supply of the revised edition has been received.

THE AMERICAN EDUCATIONAL MONTHLY, published in New York, in noticing the *Chemistry of Common Things*, (one of the prescribed text-books of the "Nova Scotia School Series") says:

"The author has a happy faculty of presenting scientific facts in a familiar manner. His explanations of the phenomena of animal and vegetable life are excellent, and his chapter on the products of plants is especially to be commended for conciseness and perspicuity. The chemical characteristics of the constituents of the atmosphere are well illustrated by a few simple experiments and practical observations upon phenomena of ordinary occurrence. The second part of the book contains a popular discussion of dynamic geology, and gives some information respecting the food of plants and animals, of which we can ill afford to be ignorant. In the third and fourth parts, Dr. Macadam enforces the necessity of observing hygienic laws.

We know of no work of the kind so well fitted as this for use in schools. It is pointed, practical, and full of common sense. It is printed on heavy tinted paper, and contains a number of well executed engravings. English publishers set an example which Americans would do well to follow. School-books should be as neatly printed as other books. Teachers are bound to cultivate good taste in their pupils, but they cannot do it while text-books are printed so shabbily, and illustrated with such wretched caricatures as at present in this country. It is no wonder that school-boys think their books are made only to be destroyed."

ERRATUM.—*Journal of Education*, p. 88, County of Pictou, First Grade, DAN MCINTOSH, for 94 days, $47.40, read 107 days, $53.95. The error occurred in the Inspector's duplicate sheet.

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. 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.

II. 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 Teacher.)*
(Name of Witness.) *(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.

III. 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.*

IV. 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.

2. The union shall take effect on the day fixed by law for the next Annual School Meeting thereafter, notice of which meeting shall be issued by a County Inspector; and such meeting shall elect a board of Trustees for the new section.

3. The Council of Public Instruction shall be empowered to appoint four qualified persons to constitute a Provincial Board of Examiners, to examine and report upon the written exercises of all candidates for license to teach in the Public Schools of this Province. The Council shall also have power to prescribe the mode in which examinations shall be conducted, to designate the times and places at which candidates shall present themselves for examination, and to make such further arrangements as may be necessary, in order to ensure the uniform classification and licensing of teachers. The Examiners so appointed shall be paid at the rate of five cents for each paper submitted for their judgment, provided the said payment shall not exceed an average of seventy-five cents per candidate for licenses of the several grades, and the person appointed to conduct the examination in each county shall be paid a sum not exceeding three dollars per diem while actually engaged in the duty. The foregoing provisions shall be in lieu of those contained in the "Act for the better encouragement of Education," respecting Provincial and District Examiners.

4. In cases where the number of rate-payers in any School Section exceeds twelve, the Clerk of the Peace shall be entitled to receive twenty-five cents for affixing to the Trustees' list the amount of real and personal property, for which the rate-payers of the section are assessed in the County rate roll.

CITY OF HALIFAX.

5. Every male person of full age, having been resident in the City six months or upwards immediately previous to the levying of the assessment in any year, not being assessed to the amount of one dollar for the support of Public Schools in respect of real or personal property, shall be assessed in the sum of one dollar for the support of such schools during the year; but the City Council shall have power to exempt from the payment of such assessment any person whom they may deem unable to pay the same; and upon the production to the presiding officer of the receipt for such payment the holder thereof shall be entitled to vote for Mayor and Aldermen at any election in the Ward wherein such party resides, for the year wherein such payment shall have been made.

6. The words "real and personal property within the County, of the residents of the section," in the third clause of the Act of 1866, to amend the Act for the better encouragement of Education, applies, and shall be understood to apply, to property lying in the City of Halifax, the owner whereof resides in Dartmouth or other School Section in the County; and the words "to be levied and collected from the inhabitants thereof," in clause 19 (4) of the said Act, applies, and shall be understood to apply, to property lying within the County, the owner whereof resides in the City; and on the payment of the required fee, the City Assessor shall furnish to the Trustees of Dartmouth, or other School Section, and the Clerk of the Peace for the County shall furnish to the City Assessor, the information necessary, in order to give effect to this provision. Any person who may have been assessed both in the City and in Dartmouth, or other School Section, in respect of the same property, shall be entitled to receive back the amount paid by him either in the city or in Dartmouth, or other school section, as the case may be, in accordance with the foregoing construction of the law.

7. The Superintendent of Education shall be empowered to pay quarterly, to the Board of Commissioners, the grants provided by law for Teachers and Assistants employed in the City.

8. The Board of Commissioners for the City shall be empowered to dispose of debentures authorized under the Act hereby amended, at current rates.

9. The Board of Commissioners for the City shall be entitled to receive a sum, in no case to exceed a thousand dollars annually, as remuneration for their services; such remuneration to be apportioned according to the promptness and regularity of the attendance of the members of the Board, and the amount of labour performed by each, as the Board may decide.

On page 20 of the "Law concerning Public Schools," now in the hands of Trustees, the following general act, passed in 1866, will be found:—

AN ACT TO AUTHORIZE THE SALE OF SCHOOL HOUSES IN CERTAIN CASES.

Be it enacted by the Governor, Council, and Assembly, as follows:

In all cases wherein a school house has been built within any section, and is owned in shares, it shall be competent for the majority in interest of the owners of shares to sell and dispose of the same to the section at any meeting duly held after ten days' notice of the object thereof, at such price as this meeting shall determine, or as may be realized at a public sale thereof duly advertized, and the proceeds of sale shall be divided among the proprietors in proportion to their shares in interest in the property.

During the late sesion of Parliament the following amendment to this Act was made:

AN ACT TO AMEND THE ACT TO AUTHORIZE THE SALE OF SCHOOL HOUSES IN CERTAIN CASES.

Be it enacted by the Governor, Council and Assembly as follows:

Where the land on which any School House is situate, belongs to the same parties who own the house, the land as well as the House may be sold under the provisions of the Act hereby amended.

May, 1867.

V. Additional Text-Books.

The Council of Public Instruction has directed that White's Junior Scholar's Latin-English Dictionary, Liddell & Scott's Greek-English Lexicon (abridged), Yonge's English-Greek Lexicon, and Contanseau's French-English and English-French Dictionary, be added to the list of Prescribed Text-Books.

May, 1867.

VI. The procuring of Books and Apparatus.

1. WHEREAS, by the 20th Section of the Amended School Law, the rate-payers of each school section are empowered to assess themselves for the purchase of prescribed School Books, Maps, and Apparatus; and WHEREAS, by the 15th subdivision of the 6th section of the said law, an annual Provincial Grant is provided to enable the Superintendent of Education to furnish the above articles at half their cost, to School Trustees,—

NOTICE IS HEREBY GIVEN,

That the Superintendent of Education will furnish, as below, School Books, Maps, and Apparatus, to the extent of the Provincial Grant in aid of the same.

2. Trustees must carefully comply with the following Regulations:—

Reg. 1.—Applications must be made in the following form, and addressed to Messrs. A. & W. MACKINLAY, HALIFAX, who have been duly authorized to attend to all orders.

(FORM OF APPLICATION.)

(Date)

Messrs. A. & W. Mackinlay,
Halifax.

SIRS,—We enclose (*or forward by* ——) the sum of $———, for which you will please send us the following articles provided by the Superintendent of Education for use in the public schools. The parcel is to be addressed———(*here give the address in full*) and forwarded by———(*here state the name of the person, express company, or vessel; and, if by vessel, direct the parcel to be insured, if so desired.*)

LIST OF ARTICLES.

(*Here specify distinctly the Books, Maps, &c., required, and the quantity of each sort.*)

We certify that each and all of the articles named in the above list are required for use in the Public School (or Schools) under our control, and for no other purpose whatsoever; and we engage strictly to carry out the Regulations of the Council of Public Instruction for the management and preservation of school books and apparatus.

(Signed) ——— } *Trustees of———School Section,*
——— } *in the County of———*
———

Reg. 2.—Any application not accompanied with the money will not be attended to.

Reg. 3.—All costs and risk of transportation of parcels must be borne by Trustees, (*i. e.* by the Sections on behalf of which they act, and not by the Educational Department.)

☞ If Trustees so direct in their application, goods (except Globes,) transported by *water* will be insured for the amount paid for the same by them, at the following rates:—

Parcels shipped during the First Term of the School year, 2½ per ct.
" " Second Term " " 1½ per ct.

Trustees must forward with their application the amount required to effect the insurance, otherwise parcels will not be insured. No charge will be made for policies.

Reg. 4.—Applications will, as far as the articles in stock and the annual grant permit, receive attention in the order of their receipt.

3. The following are the regulations of the Council of Public Instruction with reference to all Books, Maps, and Apparatus furnished to Trustees, under the operation of Sec. 6 (15) of the law concerning Public Schools:—

Reg. 1.—They shall be the property of the School Section, and not of private individuals (except as specified in Reg. 5.)

Reg. 2.—Any pupil shall be entitled, free of charge, to the use of such school books as the teacher may deem necessary.

Reg. 3.—Any pupil shall have the privilege of taking home with him any books, &c., which, in the opinion of the teacher, may be required for study or use out of school.

Reg. 4.—Pupils, or their parents or guardians, shall be responsible for any damage done to books beyond reasonable wear and tear.

Reg. 5.—Any pupil desiring it, may be allowed to purchase from the trustees the books required by him, provided the same be done without prejudice to the claims of other pupils; the price to be, in all cases, the same as advertised in the official notice published from time to time in the *Journal of Education*. No pupil who has been allowed to purchase a book shall have any claim on the trustees for the free use of another of the same kind.

Reg. 6.—Any section neglecting to provide a sufficient supply of books, maps, and apparatus, may be deprived of the public grants.

Reg. 7.—Trustees shall make such further regulations, agreeably to law, as may be necessary to ensure the careful use and preservation of books, maps, and apparatus belonging to the section.

Any section infringing in any way upon the above regulations will forfeit the privilege of purchasing books, &c., at half cost.

4. LIST OF TEXT-BOOKS, MAPS AND APPARATUS.

☞ The following list of Books will be extended, and other articles of apparatus included as the fund at the disposal of the Superintendent permits. The Wall-Maps (including one of the United States) now in course of preparation, under the supervision of the Educational Department, will be added to the list as soon as published.

THE NOVA SCOTIA SERIES OF READING BOOKS.

Book No. 1	$0.22½ doz.	Book No. 6	$0.17 ea.
" 2	0 50 "	" 7	0.23 "
" 3	0.06 each.	The art of Teaching Reading	0.07½" Or,
" 4	0.10 "	Bailey's Brief Treatise on Elocution	0.05 "
" 5	0.11 "		

SPELLING BOOK.

The Spelling Book Superseded, (Rev. Ed.) 8½ cents each.

GRAMMAR AND COMPOSITION.

English Grammar.*
Morell's Analysis, 5 cents each.
Reid's Rudiments of Composition, 20 cents each.
Bain's Rhetoric, 40 cents each.

MATHEMATICS.

Arithmetic.—Nova Scotia Elementary Arithmetic, ... 10 cents each.
Nova Scotia (advanced) Arithmetic.....15 " "
Nova Scotia Arithmetical Table Book.....19 " doz.

Algebra.—Chambers' Algebra, (as far as Quadratics).....20 " each.
Do. Do. (complete).....30 " "
Plane Geometry.—Chambers' Euclid, (including Plane Trigonometry).....15 " "
Practical Mathematics.—Chambers', (including Land-surveying, a brief treatise on Navigation, &c.).....45 " "
Solid and Spherical Geometry.—Chambers', (including Spherical Trigonometry, Conic Sections, &c.).....15 " "
Mathematical Tables.—Chambers'.....30 " "
Navigation.—Norie's, (an extended treatise).....$1.60 " "
Ball Frames.....70 " "
Slate Wipers, (to be used *without* water).....18 " doz.

Slates.—Common Slates, (beveled frames) 6½ in. by 8½ in....37 " "
" " 8 in. by 10 in....40 " "
" " 9 in. by 13 in....60 " "
Prepared Slates, 5 in. by 7 in.....1 " each.
" 8 in. by 12 in.....3 " "
Blackboard Chalks, 20 cents per box, (1 gross); Slate Pencils, 7 cents per box, (100).

☞ The Prepared Slates are ruled for writing, and for separate columns of figures, units, tens, hundreds, &c. They are folded once (like a sheet of writing paper), are very light, and will not break by falling. These slates are suitable for *beginners* only.

WRITING.

STAPLES' PROGRESSIVE SERIES OF COPY BOOKS:

For both girls and boys.	Book No. 1, 2½ cts. each.	For girls only.	Book No. 6, 2½ cts. ea.
	" No. 2, " "		" No. 8, "
	" No. 3, " "		" No. 7, "
	" No. 4, " "	For boys only.	" No. 9, "
	" No. 5, " "		

Ruled Card to accompany copy books, 6 cts. per doz.
Penholders, 20 cents per gross.
Staples' Circular Pointed School Pens, 24 cents a box (1 gross).
Inkpowders, 38 cents per doz.
Rulers, 12 in. (for pupils' use,) 20 for 12½ cents.
Lead Pencils, 8 cents per doz.
India Rubber Erasers, 12 cents per doz.
Pink Blotting Paper, 15 cents per quire.

DRAWING.

BARTHOLOMEW'S SCHOOL SERIES OF PROGRESSIVE DRAWING LESSONS.

For beginners.	Set of 72 Model Cards, Nos. 1 to 6	42 cents per set.
For advanced lessons.	Sketch Book (models only), Nos. 1 to 5	$1.00 per set.

Packages (12 slips) of blank drawing paper, for model cards, 3 cts. per pack.
Blank drawing books, for model cards, 8½ cts. each.
Blank drawing paper, for Sketch Books, or model cards, 28 cts. per quire.
Drawing Pencils, F, 23 cts. per doz.
" B, " "
" BB, " "
" HB, " "
" H, " "
India Rubber Erasers, 12 cts. per doz.

DIAGRAMS.

For purposes of illustration, and "Oral Lessons."

Forest Trees (12)	$0.30 per set.
Natural Phenomena (30)	0.60 "
Botanical Prints (roots, stalks, leaves, &c., 26)	1.00 "
Notes of Lessons on do. do. do.	0.06 "
Poison Plants (44)	0.60 "
Wild Flowers (96)	2.00 "
Geometrical Figures (2 sheets)	0.06 "
Mechanical Forces (6, on cloth) with exp. sheets.	1.00 "
Patterson's Plates of Animals (set of 10, mounted and varnished)	11.00 "

GEOGRAPHY.

Calkin's Geography and History of Nova Scotia, 8½ cts. each.
" School Geography of the World.*

Series of Wall Maps.—		Scotland	$1.35 each.
Nova Scotia	$0.55 each.	Ireland	1.35 "
North America	1.35 "	British Isles (in relation to the Cont. of Europe)	1.35 "
Western Hemisphere	1.35 "	Europe	1.35 "
Eastern Hemisphere	1.35 "	Palestine	1.35 "
England	1.35 "	Gen'l Map of Bible Lands	1.35 "

Globes.—The Terrestrial Globe (12 in. diameter, bronze meridian and Quadrant).....$4.50
The Celestial Globe.....4.50

Classical Wall Maps.—		Græcia Antiqua	$1.20 each.
Orbis Veteribus Notus	$1.20 each.	Asia Minor Antiqua	1.20 "
Italia Antiqua	1.20 "	Orbis Romanus	1.20 "

HISTORY.

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FIRST TERM begins on the second Wednesday in November, and closes on the last Thursday in March.
SECOND TERM begins on the second Wednesday in May, and closes on the last Thursday in September.
*** Students cannot be admitted after the first week in each term, except by the consent of the Principal.

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Junior do. " MISS A. LEAKE.
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Extracts from the Regulations of Council of Public Instruction.—"Before being enrolled a Student at the Normal School, every pupil-teacher shall make the following declaration, and subscribe his or her name thereto: '*I hereby declare that my object in attending the Provincial Normal School, is to qualify myself for the business of teaching; and that my intention is to teach, for a period not less than three years, in the Province of Nova Scotia, —if adjudged a Certificate by the Examiners.*' In consideration of this declaration, instruction, stationery, and the use of text books (except Classical) shall be furnished pupil-teachers, free of charge."

"Candidates for admission to the Normal School shall attend one of the regular semi-annual examinations conducted by the District Examiners in October and April in each year, and if they pass a satisfactory examination on the third-class syllabus,* they shall, if found worthy of the same, receive a certificate of 'character, ability, and scholarship.' This certificate shall give the holder admission to the Normal School, and upon presenting said certificate to the Superintendent, the holder shall receive an allowance of five cents per mile, towards travelling expenses. In the case of those who hold licenses, granted since October, 1864, it shall be sufficient to make application to the Chairman of the District Examiners, who shall forward the requisite certificates to applicants. No person shall be admitted to this Institution as a pupil-teacher, without the above-named certificate.

Persons wishing to enrol as Candidates for High School or Academy certificates must, in addition to a good knowledge of English, be thoroughly familiar with the Latin and Greek Grammars, and be able to parse with ease any passage in some elementary work in each language. In mathematics, they must be competent to solve any example in the advanced Nova Scotia Arithmetic, to work quadratic equations in Algebra, and to demonstrate any proposition in the first four books of Euclid."

"*If qualified, they may be examined on the second, or first-class syllabus, omitting the practical questions at the end."

VIII. Bond of Secretary to Trustees.

"The Secretary of the Trustees shall give a bond to Her Majesty, with two sureties, in a sum at least equal to that to be raised by the section during the year, for the faithful performance of the duties of his office; and the

same shall be lodged by the Trustees with the Clerk of the Peace for the county or district."—*School Law of* 1860, *Sect.* 42.

This bond is to be given annually, or whenever a Secretary is appointed, and Trustees should not fail to forward it by mail or otherwise, to the Clerk of the Peace, immediately after they have appointed their Secretary. The following is a proper form of bond.—

PROVINCE OF NOVA SCOTIA.

KNOW ALL MEN BY THESE PRESENTS, THAT WE, *(name of Secretary)* as principal, and *(names of sureties)* as sureties, are held and firmly bound unto our Sovereign Lady VICTORIA, by the Grace of God, of the 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 if 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, moneys, 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 in the presence of [*Name of Witness.*] [*Name of Secretary.*] (*Seal*) [*Names of Sureties.*] (*Seals*)

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. 186 [*Names of Magistrates.*]

IX. *List of Inspectors.*

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Printed by JAMES BARNES, Corner of Sackville and Granville-sts., Halifax.