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No. 16. March, 1868.

THE JOURNAL OF EDUCATION.

FOR THE PROVINCE OF NOVA SCOTIA.

POSTAGE.

TRUSTEES and Teachers will bear in mind that by the new postage law the JOURNAL OF EDUCATION passes through the mails FREE of postage till December 31st, 1868.

RESULTS OF EXAMINATION.

ALL candidates examined at the March Examination will receive, by post, a full report of the estimates placed upon their papers by the Provincial Examiners. All such memoranda and all Licenses will be mailed to the P. O. address given by candidates at the Examination. If any candidates wish the above forwarded to any other address, they must apply to the proper Post Office. The Education Department cannot undertake to send to any other address than that given in the Deputy Examiner's Report. Teachers already employed, who shall receive licenses of a grade in advance of that previously held, will be entitled to the increased Provincial Grant from May 1st,—the beginning of the new Term.

WE have received $8 from Mr. A. McKinnon, teacher of the public school at Belleisle, Granville, in aid of the distressed fishermen; also from Mr. Greenough, teacher of Renfrew school, $6. The above sums were the proceeds of very interesting entertainments given by the schools.

THERE are 121 teaching days in the School Term ending April 30th.

THE TEACHER'S TEXT-BOOK.

THE following notice of the Rev. Dr. Forrester's work is from the London *Weekly Review*:—

"It is really gratifying to mark the energy with which the friends of educational improvement are prosecuting their work in Nova Scotia. They have for some years commanded the attention of educationists in this country. While we have been allowing our Normal colleges to struggle with difficulties which have seriously impared their efficiency, no pains have been spared to make this central institution in Nova Scotia worthy of the colony.

The "Teachers' Text-book," a large volume of more than six hundred pages, in which all that is of greatest practical value is discussed with remarkable enthusiasm and ability,is, of itself, an indirect yet satisfactory evidence of the earnestness with which the mental, moral, and social elevation of the people is promoted. This text-book is the fruit of lectures delivered to the Normal students, and is intended to guide those who have not attended training classes. It is divided into three books. The *first* discusses the Nature of Education; the *second* the Science of Education; and the *third*, the Art of Education. The volume is most interesting and instructive. It will, doubtless, be welcomed not only by teachers, but by those also who seek by sound legislation to increase our national security.

It is no slight testimony which this volume bears to the importance of the *training system* of David Stow. "We have already expressed our obligation to Stow, the great pioneer of all modern improvements in the inner life of education. Within these ten years we have visited the most celebrated Normal Schools in the United States of America, in Canada, Britain, and on the Continent of Europe, as the best exponents of method, and yet, notwithstanding the reluctance of a few to give honour to whom honour is due, nowhere have we met anything, in theory or practice, the germ of which is not embedded in Mr. Stow's training system, and that simply, we apprehend, because that gentleman received all his lessons in the school of experience, and sat a close and humble student at the foot alike of nature and revelation." And Dr. Forrester adds, what our own experience confirms, that he has "seen but few schools indeed, professedly conducted on the training system, where anything like justice is done to that system in its leading peculiarities, as laid down by its distinguished founder." The principles of Mr. Stow he has "endeavoured to systematise and elaborate, both in their theoretical and practical bearing." "This has been our aim," he says, "and if we have succeeded in reducing these views to a more systematic form, or in adapting them to the external circumstances of these times, and thereby commending them to the calm and earnest consideration of our fellow-labourers in the educational field, we have our reward."

While the author has kept this object generally in view, he has very carefully discussed collateral topics—there is, indeed, scarcely a question of any practical value which does not pass under thoughtful review, and there is no one interested in the progress of public instruction who will not find in the volume some invaluable expositions of the history, theory, or applications of physical, intellectual and moral training.

Although the esteemed author has entered, we think, too minutely into some sections of the "Science of Education"—as, for example, in the physiology of the human body, and in that, also, of the human mind, and has discussed with too elaborate fulness the "Art of Education," this may be necessary to a country in which teachers cannot be supposed to have such easy access to professional books as in Britain. The work is, on the whole, the most vigorously-written and most instructive which has recently appeared, and should be in the library of every one who desires to promote national education in its highest and most effective forms."

From the Scottish American Journal.

"For the last ten odd years—since the author's appointment as Chief Superintendent of Schools for Nova Scotia—he has grappled with education in all its phases and bearings, and in the fine treatise before us we have the results. We have gone over the whole ground with him and are free to say that we never felt ourselves in safer hands. Dr. Forrester is certainly no sciolist, but has made the whole field his own by the most minute, laborious and conscientious study. He does not halt where so many stop, in merely developing the body and whetting the intellect; but holds that the whole complex nature of the child, body, soul and spirit, should be educated so as best to do the work of the passing hour to God and man. This is the chief feature of the book. We could name several writers who have treated special departments with greater ability; but here we have all that is best in the best writers wrought up into one whole by a masterly plastic hand. We congratulate the teachers in Nova Scotia in having such a wise counsellor and able friend in Dr. Forrester. We were well acquainted with the state of schools in that province at the time Principal Dawson undertook to organize a school system there—a most arduous task. But it was reserved for the author of this work to complete what was begun by Principal Dawson in the establishment of a Normal School at Truro and the better organization of schools in the several counties. Scotsmen may well be proud when we state that the interests of education in the Dominion have been entrusted to such men as Rev. George Young, Dr. Ormiston, and Dr. Forrester. Were we reviewing at length we certainly would take exception to a few things. Yet we know no work on education we would so heartily put into the hands of the young teach We are sorry its circulation will be limited, for some time at le. t, from the fact of its having been brought out in the Dominion. We find it next to impossible now-a-days to get a book from Canada."

You have been bred in a land abounding with men, able in arts, learning, and knowledge, manifold, this man in one, that in another, few in many, none in all. But there is one art of which every man should be master, *the art of reflection*. If you are not a thinking man, to what purpose are you a man at all? In like manner, there is one knowledge, which it is every man's interest and duty to acquire, namely, *self-knowledge:* or to what end was man alone, of all animals, endued by the Creator with the faculty of self-consciousness? Truly, said the Pagan Moralist,

e cœlo descendit, Gnothi seauton.

But you are likewise born in a Christian land, and Revelation has provided for you new subjects for reflection, and new treasures of knowledge, never to be unlocked by him who remains self-ignorant. Self-knowledge is the key to this casket, and by reflection alone can it be attained. Reflect on your own thoughts, actions, circumstances, and—which will be of special aid to you in forming a habit of reflection,—accustom yourself to reflect on the words you use, hear, or read, their birth, derivation and history. For if words are not things, they are living powers, by which the things of most importance to mankind are actuated, combined, and humanized.—*S. T. Coleridge.*

TRIGONOMETRICAL THEOREMS.

BY PROFESSOR MACLEOD, KING'S COLLEGE.

THE formulæ for the sine and cosine of the sum or difference of two angles in terms of the sines and cosines of those angles are the most important in analytical trigonometry. They are to that branch of mathematics what Taylor's theorem is to the differential calculus or the parallelogram of forces to abstract dynamics, but yet they are rarely or never discussed with rigour or generality. Usually a geometric proof is given of the formula $\sin(A+B) = \sin A \cos B + \cos A \sin B$, when A and B are both acute; and then B is made to become $(-B)$ which gives the following modification:—

$$\begin{aligned}\text{Sin}\{A+(-B)\} &= \sin A \cos(-B) + \cos A \sin(-B)\\ &= \sin A \cos B - \cos A \sin B\\ &= \sin(A-B)\end{aligned}$$

Now it appears to me that an illegitimate assumption is made here, viz., that when the formula is proved to hold for a geometric sum, it is also true for an analytic sum. This is the more inexcusable, because the formula for the sine of the sum being admitted, that for the sine of the difference of two angles may be deduced, without either referring to the geometry or making any supposition to which we are not entitled from the definitions.

$$\begin{aligned}\text{Thus } \cos(A-B) &= \sin\left(\frac{p}{2} - \overline{A-B}\right) \text{ where } p \text{ stands for } 180^\circ\\ &= \sin\left(\frac{p}{2} - \overline{A} + B\right)\\ &= \sin\left(\frac{p}{2} - A\right)\cos B + \cos\left(\frac{p}{2} - A\right)\sin B\\ &= \cos A \cos B + \sin A \sin B.\end{aligned}$$

Again—

$$\begin{aligned}\sin A &= \sin(B + A - B)\\ &= \sin B \cos(A-B) + \cos B \sin(A-B)\\ &= \sin B(\cos A \cos B + \sin A \sin B) + \cos B \sin(A-B)\\ \therefore \sin(A-B) &= \frac{\sin A - \cos A \cos B \sin B - \sin A \sin^2 B}{\cos B}\\ &= \frac{\sin A(1-\sin^2 B) - \cos A \cos B \sin B}{\cos B}\\ &= \frac{\sin A \cos^2 B - \cos A \cos B \sin B}{\cos B}\\ &= \sin A \cos B - \cos A \sin B. \qquad \text{Q. E. D.}\end{aligned}$$

The greatest leap, however, is taken when the theorem being proved only for two acute angles it is assumed to hold universally. I have only seen one proof of it for angles of any magnitude, and that one is by Professor DeMorgan. His demonstration is made by means of the theory of projections, which, after all, is but a kind of reasoning in a circle, as the theory of projections depends upon trigonometry. At all events it seems less philosophical to advance one branch of science by means of another than to make use of the resources of the one itself when these are adequate to the occasion.

The following proof is given for the sine of the difference of two angles of any magnitude, and those for the other three formulæ are easily deducible therefrom. The formula for $\sin(A-B)$ when A and B are both acute being assumed, it is required to prove that $\sin(A'-B') = \sin A' \cos B' - \cos A' \sin B'$ when A' and B' have any magnitude.

In this case we may obviously put $A' = mp \pm A$; $B' = np \pm B$, where m and n are whole numbers, p stands for 180° and A and B are acute angles. We have then

$$\begin{aligned}\sin(A'-B') &= \sin\{mp \pm A - (np \pm B)\}\\ &= \sin\{(m-n)p \pm A \mp B\}\\ &= \pm \sin(\pm A \mp B) \text{ according as } m-n \text{ is even or odd.}\\ &= \pm \sin\{\pm A - (\pm B)\}\end{aligned}$$

Let us first consider the case when $m-n$ is even, which can only be by m and n being either both odd or both even. We have then

$$\begin{aligned}\sin(A'-B') &= \sin\{\pm A - (\pm B)\}\\ &= \sin(\pm A)\cos(\pm B) - \cos(\pm A)\sin(\pm B)\\ &= \sin(\pm A)\cos B - \cos A \sin(\pm B) \ldots\ldots\ldots \text{I.}\end{aligned}$$

Now $\sin A' = \sin(mp \pm A) = \pm \sin(\pm A) \ldots\ldots$ II., according as m is even or odd.

$\cos B' = \cos(np \pm B) = \pm \cos B \ldots\ldots\ldots$ III., according as n is even or odd.

$\cos A' = \cos(mp \pm A) = \pm \cos A \ldots\ldots\ldots$ IV., according as m is even or odd.

$\sin B' = \sin(np \pm B) = \pm \sin \pm B \ldots\ldots\ldots$ V., according as m is even or odd.

We have then from

II. $\sin(\pm A) = \pm \sin A' \ldots\ldots\ldots$ VI.

III. $\cos B = \pm \cos B' \ldots\ldots\ldots\ldots$ VII.

IV. $\cos A = \pm \cos A' \ldots\ldots\ldots\ldots$ VIII

V. $\sin(\pm B) = \pm \sin B' \ldots\ldots\ldots$ IX.

Now, since we are considering the case when $m-n$ is even it is obvious from the previous remark that the same sign must be taken in VI. and VII. and likewise in VIII. and IX.; therefore the product of each pair of equations must be positive, that is,

$$\sin(\pm A)\cos B = \sin A' \cos B'$$
$$\cos A \sin(\pm B) = \cos A' \sin B'$$

Substituting these values in I. we get

$$\sin(A'-B') = \sin A' \cos B' - \cos A' \sin B' \ldots\ldots\ldots \text{X.}$$

Finally, when $m-n$ is odd if m be even n must be odd, and *vice versa*: hence

$$\sin(A'-B') = -\sin(\pm A)\cos B + \cos A \sin(\pm B)$$

Now, $\sin A' = \sin(mp \pm A) = \pm \sin(\pm A)$, according as m is even or odd.

$\cos B' = \cos(np \pm B) = \mp \cos B$ as n is odd or even.

Otherwise $\sin(\pm A) = \pm \sin A'$

$\cos B = \mp \cos B'$

$\therefore \sin(\pm A)\cos B = -\sin A' \cos B'$.

In the same way it may be shown that

$$\cos A \sin(\pm B) = -\sin B' \cos A'$$

Substituting these values in X. we get as before

$$\sin(A'-B') = \sin A' \cos B' - \cos A' \sin B'.$$

NUMBER.

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

VI.

FOURTH STEP.—*(Concluded.)*

FRACTIONS.

Summary of the Exercises.

I.—Exercises on the names and values of Fractions.
II.—To convert whole numbers into Fractions.
III.—To convert Fractions into whole numbers.
IV.—Conversion of Fractions from one denomination to another.
V.—Addition of Fractional numbers.
VI.—To find how much must be added to a Fractional number, to produce a given number.

I.—*On the Names and Values of Fractions.*

Divide this apple into two equal pieces or parts. What is one of these parts called? What the other? And the two parts taken together? What, then, is a half?

A half is one of two equal parts of a whole.

How many half apples are there in one apple?

Then one whole apple is the same as ——.

How did I obtain the half of this apple?

By dividing it into two equal parts, and taking one of these parts.

If, instead of 2 parts, I divide the apple into three, what should I have? 3 equal parts. Say 3 thirds. And each of these parts? 1 third.

What, then, is the third part of a thing?

The two thirds?

To make one apple, how many thirds of an apple are necessary? Then one whole apple is the same as ——.

How did I obtain the third of the apple? How two thirds?

The idea of the *fourth* may be developed as the half and third, or as follows:—

If, after having divided an apple into halves, I divide each half into two equal parts, how many parts shall I have?

Ans. 4.

Each part is called a *quarter* or a *fourth*.

To make one apple, how many quarters or fourths of an apple are required?

OBSERVATION.—It is necessary to familiarize the child with these words, *half, third, fourth*, and to endeavor to give him a precise idea of them, by making him take a certain part of some whole; for example, of a roll of paper, of a piece of wood, &c. The different kinds of unity should be varied as much as possible, in order that the pupil may not regard fractions absolutely, but merely as they relate to the unity employed.

Having taken 3 different objects as units, divide one of them into 2 equal parts, another into 3, and the third into 4; form them into 3 groups, and desire the child to point out *a half, a third, two thirds, a quarter, two quarters, three quarters*. These objects may be apples, small wands, or cubes. Let him also compare these different fractions with reference to size, by asking him which is the larger, a half or a third? a third or a quarter? two thirds or three quarters? &c. The object here is not to teach him to find the difference with great exactness; it is sufficient for him to know that *a half* is more than *a third*, a third more than *a quarter*; for the greater number of parts there are in a unit, the smaller they are; that three quarters are more than *two thirds*, &c., &c.

II.—*Conversion of Whole Numbers into Fractions.*

How many half apples are there in 2 apples?

The same question upon 3, 4, 5, 6 apples, &c.

How many half feet are there in 2, 3, 4, 5, 6 feet?

How many thirds are there in 2, 3, 4, 5, 6 apples?

How many thirds are contained in 2, 3, 4, 5, 6 yards?

The same question may be asked respecting quarters.

How many parts would there be, if each half were divided into 3?

Ask the same question, if they were divided into 4, 5 parts.

How many parts would there be, if each third were divided into 2, 3, 4, 5, 6 equal parts?

Ask the same questions, if each quarter be divided.

OBSERVATION.—The pupils should perform these operations themselves, either upon apples or some other objects. As a great quantity of apples would be necessary for such operations as these, cards may be used, divided into as many parts as are requisite; but it is better not to cut them entirely through, in order that the child may preserve the idea of unity formed by the re-union of the several parts. Lines may now be used; they are more convenient than objects.

Repeat all together.

1 whole is equal to	2 halves.			
2 wholes make	4	"		
3 "	6	"		
4 "	8	"		
5 "	10	"	&c.,	&c.
1 whole is equal to	3 thirds.			
2 wholes make	6	"		
3 "	9	"		
4 "	12	"		
5 "	15	"	&c.,	&c.
1 whole is equal to	4 quarters.			
2 wholes make	8	"		
3 "	12	"		
4 "	16	"		
5 "	20	"	&c.,	&c.
1 whole is equal to	5 fifths.			
2 wholes make	10	"		
3 "	15	"		
4 "	20	"		
5 "	25	"		
6 "	30	"	&c.,	&c.

III.—*Conversion of Fractions into Whole Numbers.*

How many apples are there in 3 half apples?

Ans. 1 apple and a half.

Let the same question be asked respecting 4, 5, 6, 7, 8, 9, 10 halves, &c.

The children will easily perceive that they must find how many times 2 halves are contained in the number of halves of which the wholes are to be formed. This may be done first by allowing them to put two halves together to make a whole, then two more, and so on, until all have been counted. But they must not be told.

They should also be required to find how many wholes there are in a certain number of thirds, of fourths, and of fifths.

Simultaneous repetition.

Halves.			Halves.
2 make	1 whole.	1 whole is equal to	2
3 "	1 " and a half.	1 " and a half make	3
4 "	2 wholes.	2 wholes make	4
5 "	2 " and a half.	2 " and a half make	5
6 "	3 wholes.	3 " make	6
7 "	3 " and a half.	3 " and a half make	7
8 "	4 wholes.	4 " make	8
9 "	4 " and a half.	4 " and a half make	9
10 "	5 wholes.	5 " make	10

Thirds.			Thirds.
3 make	1 whole.	1 whole is equal to	3
4 "	1 " and 1 third.	1 " and 1 third make	4
5 "	1 " and 2 thirds.	1 " and 2 thirds make	5
6 "	2 wholes.	2 wholes make	6
7 "	2 " and 1 third.	2 " and 1 third make	7
8 "	2 " and 2 thirds.	2 " and 2 thirds make	8
9 "	3 wholes.	3 " make	9
10 "	3 " and 1 third.	3 " and 1 third make	10

Quarters.			Quarters.
4 make	1 whole.	1 whole is equal to	4
5 "	1 " and 1 qr.	1 " and 1 qr. make	5
6 "	1 " and 2 qrs.	1 " and 2 qrs. "	6
7 "	1 " and 3 qrs.	1 " and 3 qrs. "	7
8 "	2 wholes.	2 wholes are equal to	8
9 "	2 " and 1 qr.	2 " and 1 qr. make	9
10 "	2 " and 3 qrs.	2 " and 2 qrs. "	10

Fifths.			Fifths.
5 make	1 whole.	1 whole is equal to	5
6 "	1 " and 1 fifth.	1 " and 1 fifth make	6
7 "	1 " and 2 fifths.	1 " and 2 fifths "	7
8 "	1 " and 2 "	1 " and 3 fifths "	8
9 "	1 " and 4 "	1 " and 4 fifths "	9
10 "	2 wholes.	2 wholes are equal to	10

IV.—*Conversion of Fractions from one Denomination to another*

OBSERVATION.—The analysis in the following exercises must be made slowly, by the children themselves, upon objects, under the guidance of the teacher.

How many quarters are there in 3 thirds?

Ans. 3 thirds make 1 whole; 1 whole is equal to 4 quarters.

How many thirds are there in 4 halves?

Ans. 4 halves make 2 wholes; 2 wholes make 6 thirds.

How many quarters are there in 6 halves?

Ans. 6 halves make 3 wholes; 3 wholes make 12 quarters.

How many halves are there in 6 thirds?

Ans. 6 thirds make 2 wholes; two wholes make 4 halves.

How many halves are there in 6 quarters?

Ans. 6 quarters make 1 whole and a half, or 3 halves.

V.—*Addition of Fractional Numbers.*

One apple and a half, and one apple and a half, make how many apples?

2 apples and a half, and 2 apples and a half ——?

3 wholes and a half, more 3 wholes ——?

4 wholes and a half, more 3 wholes and a half?

1 whole and a half, more 1 whole and a half, more 1 whole and a half ——?

2 wholes and a half, more 4 wholes and a half ——?

2 wholes and a half, more 2 wholes and a half, more 2 wholes and a half ——?

3 wholes and 2 thirds, more 2 wholes and 1 third ——?

3 wholes and 1 third, more 2 wholes and 2 thirds, more 2 wholes and 1 third ——?

5 wholes and 2 thirds, more 5 wholes and 2 thirds, more 1 third?

3 wholes and 1 third, more 2 wholes and 2 thirds, more 3 wholes and 1 third?

3 quarters, more 3 quarters?

2 quarters, more 1 whole and 2 quarters?

3 quarters, more 3 quarters, more 3 quarters?
1 whole and 3 quarters, more 1 whole and 1 quarter?
1 whole and 1 quarter, more 1 whole and 3 quarters?
3 wholes and 3 quarters, more 3 wholes and 3 quarters?
5 wholes and 1 quarter, more 3 wholes and 3 quarters, more 1 whole and a half?
3 fifths, more 3 fifths?
2 fifths, more 4 fifths, more 3 fifths?
4 fifths, more 4 fifths?
3 wholes and 2 fifths, more 3 wholes and 3 fifths? &c., &c.

VI.—*To find how much must be added to a Fractional Number in order to produce a Given Number.*

How much must be added to

1 half	to produce	2 wholes?	
3 halves	"	2 "	
3 "	"	3 "	
2 wholes	"	3 "	and 1 half?
3 "	"	4 "	"
2 "	and 1 half to produce	4 "	"
3 "	"	5 wholes?	
5 "	to produce	7 "	and 1 half?
4 "	and 1 half to produce	8 "	
3 halves	to produce	6 "	
5 "	"	5 "	

What must be added to

1 third	to produce	1 whole?	
2 thirds	"	1 "	and 1 third?
1 whole	"	2 wholes	and 1 third?
1 "	"	2 "	and 2 thirds?
1 "	"	3 "	and 1 third?
1 whole and 2 thirds	to produce	3 "	
1 "	2 "	4 "	
1 "	2 "	3 "	and 2 thirds?
2 wholes and 1 third	"	3 "	
2 "	1 "	3 "	and 2 thirds?
3 "	to produce	5 "	and 1 third?
5 "	"	7 "	and 2 thirds?
10 "	and 1 third to produce	12 "	

How much must be added to

1 quarter	to produce	1 whole?	
2, 3 quarters	to produce	1, 2, 3 wholes?	
1 whole	"	2 wholes	and 2 quarters?
1 "	and 3 quarters to produce	2 "	and 1 half?

How much must be added to

2 wholes and 3 quarters	to produce	5 wholes?	
2 " " 1 half	"	4 "	
2 " " 1 quarter	"	6 "	
3 " " 3 quarters	"	7 "	and a half?
4 "	to produce	8 "	" 1 quarter?
5 "	"	10 "	" 3 quarters?
3 quarters	"	10 "	
1 whole and 3 quarters	to produce	10 "	&c.

OBSERVATION.—Other fractions require less attention than halves, thirds, and fourths. It is, however, necessary that the pupil should be slightly exercised upon them, in order that he may have an idea of them—more or less development being given to the subject, according to his age and information. Some exercises, similar to the preceding, should therefore be given upon fifths, sixths, and sevenths.

FINIS.

EDUCATION CONSIDERED AS A SCIENCE.

PAPER PREPARED FOR THE BIRMINGHAM CONGRESS, BY D. KAY, ESQ.

THE present unsatisfactory state of education in this country cannot fail to be matter of deep regret to all who feel an interest in the subject. There are doubtless various causes that tend to this; but there is one that, in our opinion, more particularly lies at the root of the matter,—and that *is*, the want hitherto of anything like a science of education. Till education is raised to the dignity of a science,—till it is placed on something like the same footing as theology, medicine, or law, and made a subject of special study by all who assume the profession of teacher, we fear that it will never be in a very satisfactory state in this country. So long as it remains a profession which any one may take up, for which no special training is required, or no special adaptation considered necessary, in which there is nothing to distinguish the qualified practitioner from the quack, so long will it remain it its present low and backward condition. We have little faith in legislative enactments as a remedy for this state of things. Acts of Parliament won't make good teachers unless there be something behind them by which good teachers are to be produced.

Teaching, as it exists at present, is little else than an unskilled art, an art that may be practised by any one possessing the commonest amount of information without any special training or particular adaptation therefor. The time, we trust, is now well-nigh past when those who were physically or mentally incapable of succeeding in any other occupation, were considered good enough for the important office of teaching the young. Yet, is it not still in a great measure the case, that teachers are selected mainly or solely on account of the amount of general knowledge that they may possess, with little or no regard to their capacity for teaching, or power of communicating knowledge to others? Facility in the acquisition of knowledge, and ability in the communication of it, by no means imply each other; for they depend upon different faculties of the mind, and, indeed, may almost be said to be usually found in an inverse ratio to each other. In the acquisition of knowledge, the individual has regard only to himself; he exercises his own faculties, and makes use of his own stores of knowledge; whereas in the communication of it, the teacher has, as it were, to go out of himself into the mind of his scholar, to employ *his* faculties, and to avail himself of *his* knowledge. The two conditions of mind are very different, the one being subjective, the other objective.

The normal schools have indeed of late done some service in the way of diffusing a more correct knowledge of the practical parts of teaching, and they would do infinitely more if their attention were more strictly confined to their proper work. Their great defect lies in their efforts being chiefly directed to the imparting of knowledge, in place of instructing in the art of teaching. The reason of this is, that those that attend them are usually such as have received but a partial education, and they come there in order to have it completed. These schools are therefore compelled in a measure to do the work of a higher school or college, in place of devoting their attention solely to their proper work, the science of education and the art of teaching. The remedy for this would be to demand the necessary amount of general knowledge from all who enter these institutions, so that the time spent therein might be strictly devoted to its proper object; in like manner as students of theology, medicine, or law, are required to undergo preliminary examinations in the various branches of a liberal education before entering upon the study of their special subjects.

Nor will education ever be raised to its proper position, ever occupy its due place, till we have chairs in our universities specially devoted to it, filled by men raised above the everyday work of teaching, whose duty it shall be to expound its principles, and, at the same time, to improve and advance it as a science. In this way teaching would become a skilled art, and a distinction would be made between the skilled and the unskilled teacher, as great as there is between the regular medical practitioner and the quack. Nor need the skilful teacher be afraid that his labour and time would not be sufficiently remunerated. Skilled labour is always appreciated, and ever remunerative. It is only unskilled labour that is badly paid, and that on account of competition arising from the numbers that are always ready to undertake it. In any contest between skilled and unskilled labour, it is always the latter that must go to the wall.

Education is not inferior in extent or importance to any of the science we have mentioned, that it should occupy a less exalted rank than they. The teacher as well as the theologian has the charge of souls; with the medical man, he has the care of the body; and like the lawyer, he has to study, expound, and apply laws, moral and physical, if not civic. Farther, it is upon the education of our children, that the future of our nation depends. These are they who are to bear our name and sustain our fame in the future, and their doing so with credit will depend upon the education that we impart to them, the examples that we set before them.

We may, however, be here met with such questions as—Is such a thing as a science of education possible? Is the subject itself sufficiently wide or extensive? Is there enough of certainty in it, or enough known about it to warrant us in attempting to form a science? Or is there enough, still dark and unknown, upon which a scientific treatment of the subject would be expected to throw light? In fine, is there enough to be learned or known about it, to warrant one in giving several years specially to its study? And would the knowledge so acquired be worth the time and trouble spent in learning it?

Our object in what follows will be to answer these questions in the affirmative, and that without attempting to build up, or even to sketch out, a science of education; but rather by means of incursions in various directions to indicate the nature and extent of the subject.

A science of education would be expected to embrace everything of importance that is known in connection with it. No one can possibly know a subject thoroughly whose knowledge is simply confined to his own experience, however varied or extensive that may be. He alone can be regarded as master of a subject who, together with his own experience, combines that of others acting

under different and, doubtless in some cases, more favourable circumstances. A science of education, then, would bring before the teacher the labours and experience of others in the same field, —the labours of the greatest minds, the experience of the most skilled in its several departments. The teacher knowing the views of others on the different points of his profession, would thus in each case be able to select that method that would be best suited to the circumstances.* The materials for this are to be found in the vast number of books that have been written upon education. There is probably no subject on which so many books have been written, and there are few, we believe, whose professors are more ignorant of the literature of their profession, or of what has been done in the same field by their predecessors. The theologian is familiar with the history of his church, the medical man draws largely for his knowledge upon the experience of others, the lawyer is guided almost entirely by precedent, yet how few teachers are there that have more than a faint glimmering of the literature of their profession, or of the systems or methods that have been recommended or adapted by some of the greatest names that have adorned it? No attempt has hitherto been made to gather up, systematise, and utilise the vast amount of knowledge that is shut up here. Many a good rule or observation, says Richter, in speaking on this subject, "is lost because it is imprisoned in some monstrous folio, or blown away in some single sheet." In a science of education, then, all that can be found bearing upon the subject in the works of previous writers, would fall to be collected, systematised, explained, and carried out to their legitimate consequences. Also in works of history, biography, natural science, and general literature, will be *found many observations directly bearing upon* education. It is impossible to estimate the amount of light that would be thrown upon the subject in this way. There are many important principles generally recognized that are comparatively worthless from want of being properly understood, many rules that are of little value from want of knowing when or where they are to be applied, and not a few that are taken advantage of in one department, but not in others, where they are equally suitable.

Education is the drawing out or forth of the various powers and faculties of man, each to the highest state of perfection of which it is capable, and at the same time in perfect harmony with all the rest. In order to this, it is necessary to know first of all the nature of these faculties themselves, second, the means by which they are to be cultivated, and third, the end or point up to which they are to be brought. This is exactly in the same way as a sculptor who wishes to form an image in marble, must know first of all the nature of the material upon which he is to work, and its capabilities for the object he has in view; second, he must know how to use the various tools of his art; and third, he must have a distinct idea or impression in his own mind of the image he wishes to form. The material upon which the educator has to practise his art, to exercise his skill, is a young human being,—a being composed of two widely different constituents, a body made up of different parts, limited as to space and time, changeable, destructible; a soul or spirit, destitute of parts unlimited as to time and space, unchangeable, indestructible. With the nature or character of either of these, separately or by itself, the teacher has little or nothing to do.† It is only as they manifest themselves conjointly, in the operations of the body or in the phenomena of the mind that they come within his sphere; and here he must ever bear in mind, that in neither case is he dealing with the one or the other separately or by itself, but ever with both in intimate, in inseparable connection. In mind the teacher has to deal with *incorporated* spirit, in body with *animated* matter. The highest operations of the human mind are material, in so far as they are dependent upon the mind's material organ, the brain; while the most mechanical of our physical actions in like manner partake of the nature of spirit. Physiologists tell us, not a thought, feeling, or motion passes through the mind without causing the destruction of a certain portion of the nerve-matter of the brain. The brain partakes of the same nature as the other parts of the body, being subject to the same laws, and sustained and nourished in the same way. The same arterial blood supplies nourishment to all parts of the system, and is dependent upon the various digestive, respirating, and other functions of the body. Hence it is that soundness of body is necessary to soundness of mind.

A knowledge of the intimate connection subsisting between body and mind is of the utmost importance in education. There are many persons who look upon the body and mind of man as having little or no connection together, while some regard them even as antagonistic, and consider that what they can abstract from the one is so much given to the other. The interests of the two are inseparably connected, and the one cannot suffer without the other suffering with it. How many young men of the greatest promise have fallen victims to the ignorance of teachers and others on this all-important point!

It is from physiology that we obtain a knowledge of the physical constitution of man. Physiology makes us acquainted with the laws of health, and of the conditions of growth and development of the different physical organs, and not only so, but we obtain from it also an explanation of many of the mental phenomena, a knowledge of many of the laws and conditions under which our mental faculties are developed. Our mental as well as our physical powers are developed and strengthened by exercise,—by exercise under the like conditions and limitations. The laws that regulate it, the effects produced by it, the conditions demanded by it are the same in both cases. In the one case as in the other the exercise is at first difficult, can only be performed slowly, and soon produces fatigue. Hence, at first, we ought to proceed by little and little at a time, gradually enlarging and lengthening as the powers acquire strength. The exercise ought neither to be continued too long nor ceased too soon, neither to be conducted too slowly nor yet too fast, neither to be intermitted too long nor resumed too soon. There is a certain rate of acquisition to be observed in each case, in order to obtain the greatest amount of progress with the smallest amount of practice. An organ may receive permanent injury by being overexercised, particularly at first. In physical training, where systematically carried out, as in drilling recruits for the army, the conditions under which certain movements are most speedily and most accurately acquired are understood and acted upon, but how few know or believe that there are similar laws or conditions to be observed in mental training.* And yet, when we come to regard the physical nature of the mind's organ, the brain, it is not unnatural to think that it may be so. We know that the effect of exercise upon a muscle is the destruction of a portion of the material of which it is composed, followed by an increased flow of fresh material to compensate for the loss that has taken place. And not *only so, but there is every reason to believe that* the new material receives in the act of assimilation a particular form or basis from the state of the muscle at the time, which ever after gives it greater dexterity and ease in the like movements. In like manner, we know that the exercise of any of our mental faculties causes the destruction of a portion of the material constituents of the brain; and here, too, there is an increased flow of material matter to make up for the waste that is taking place. May we not here too believe that the new material receives a particular mould or impression from the state of the organ at the time.†

We believe that in this way, from a study of our physical nature, we may come to understand many of the mental phenomena, and learn in many cases how we ought to proceed in education. The rules to be observed and the order to be followed are frequently the same in both cases. In setting a child to any physical exercise, in instructing him in any manual art, we simply and at once put him in the way of practising it without troubling him with any learned disquisitions on the principles or philosophy of it. The practice precedes, does not follow, the knowledge of the principles. Ought not this to also characterise our moral and intellectual teaching to a much greater extent than it does at present? In moral teaching, for instance, in place of telling, lecturing, and explaining so much as we do, would it not be infinitely better simply and quietly to set them to the practice of what is right and proper, and then, if necessary, give them the lectures and explanations afterwards? As Aristotle says, "By doing just things we become just, by doing temperate things temperate, by doing brave things brave." In the same way, in the learning of languages, we believe that the natural and proper way is to begin with the practice or speaking of it, in place of, as is commonly done at present, with rules, and definitions, and exceptions. At least, this system has many able advocates on its side. In the acquiring of a good style, or in the studying of such arts as logic or rhetoric, we are of opinion that the same course ought to be followed, and that in place of rules, examples for imitation should more frequently be placed before the scholar. It has been remarked, that if one would acquire a good English style, he "must give his days and his nights to the study of Addison;" and in like manner, if one would be a skilled logician or rhetorician, he can only become so by studying the works of the chief masters of these arts. Men do not apply rules to everything that they may speak or think, but they speak or think in a particular way because they had been accustomed so to speak or so to think. The child learns to speak its mother's tongue grammatically not from grammar rules, but from hearing it spoken grammatically by those around it. Comparison is a dominant principle in the human mind, and whenever a subject is presented to it, it instinctively refers to something of a similar nature that has previously been before it brings the two together, compares them, and treats the one in the same way that the other had been treated. Not more readily does a man perform a mechanical ope-

* "Method in education ought to be, as far as possible, *eclectic*—a selection not only of the best, but the best for those actually under our care."—*Education Reform*, by Thomas Wyse, M. P.

† *That a disembodied spirit has* consciousness we must indeed believe, at least it is impossible to conceive how spiritual existence can be otherwise manifested; but at the same time it is impossible such consciousness is at all resembling our own, at any rate in the particular phenomena which are conveyed by means of the senses."—*Mansel's Metaphysics.*

* "The readiness with which particular habitudes of thought are formed, varies greatly in different individuals and at different periods of life. As a general rule, it is far greater during the period of growth and development than after the system has come to its full maturity." "Infancy childhood, youth, adolescence, adult age, the period of decline and senili · have all their characteristic phases of psychical as of physical develop .nt, and decline."—*(Carpenter's Human Physiology.)*

† We seem justified in affirming that some change must be effected in the condition of the nervous centres, by every impression of which we become conscious, whereby that impression is *organically* perpetuated in such a manner as to allow of its presenting itself anew to the cognisance of the mind at any future time when it may be excited from a passive to an active condition."—*Carpenter's Human Physiology.*

"*If the* mind partakes truly of an organic character, *though in a higher* region, the laws which apply to the progress of organic life generally ought *mutatis mutandis* to hold good within its own subjective sphere, and the functions of the one ought to throw light upon the several stages of the other."—*(J. D. Morell's Elements of Psychology.)*

ration that he has frequently performed already, than does one who has studied and mastered a particular line of argument refer others of the same kind to it, and follow them out in the same way. The great object of education, then, should be to present a sufficient variety of instances to meet any cases that may occur, so that each may be compared with what it most resembles. This view receives further confirmation from the generally-recognised fact, that the order of discovery is the order that ought to be observed in the teaching of a subject Men made use of language long before rules of grammar were introduced; poems were written before any art of poetry was known; men thought and reasoned before there was any science of logic or dialectic; and so also with agriculture, chemistry, medicine, astronomy, navigation, &c. The art has ever preceded the science, the practice gone before the theory.

Be this, however, as it may, there can be no doubt of the fact that a knowledge of our physical constitution, and of the laws to which it is subject, is of the highest importance to the educator, and that in any science of education, Physiology, at least in so far as it bears upon the subject, must form an important branch. And here we would seek to object to the commonly received division of education, into physical, moral, and intellectual, as being the source of much misunderstanding and error. People have thus been led to confound physical exercise and physical education, mental exercise and mental education, ignorant or heedless of the fact that the body and mind in man so interpenetrate each other, that physical exercise has its mental side, and mental exercise in like manner its physical side If we look upon physical exercise only as imparting strength and vigour to our physical powers, then it is a small matter comparatively in general education; but when we come to know that it has an important bearing likewise upon our mental constitution, that it imparts strength, and force, and vigour to our mental powers as well as to our physical, then it is seen to be of the very highest importance The mind is concerned and is at work in every one of our physical actions. The will, for instance, is brought into play; the attention is kept alive; discrimination is at work * Indeed, the best way of training these powers, particularly at first, is by the bodily organs. The will that can direct and control the actions, is in a fair way to control the thoughts; the attention that can be concentrated upon physical movements may soon be brought to concentrate itself upon mental operations. It is by means of the senses, that the mind is first of all awakened to consciousness; and it is to impressions received from without that the mental powers are first of all directed. Physical education, in our view of it, is not mere physical exercise, but it is the rendering of the different organs of the body ready and efficient servants of the mind. In order to this, the two must be educated and trained together, the proper thoughts and feelings being connected and associated with the proper actions. In like manner, mental exercise and mental education are by no means the same. Physical exercise, as we have already shewn, constitutes an important part of mental education, and in the same way mental exercise is not without an important effect upon physical education. The truth is, that body and mind are so intimately connected together, that whatever acts beneficially or injuriously on the one, acts in the same way upon the other.

Moral education on the other hand, is not something distinct and different from physical or intellectual, as this division of the subject would lead us to suppose, but it is in a measure a compound of both. It is action of a certain kind guided by intelligence. Custom and habit is the ruling principle here as well as in physical or mental training. Man is a moral man, because he has been accustomed to think and act in a particular way. It is evident, then, that if we would have a correct, a scientific division of our subject, one that will not mislead but aid us in our work, and throw light upon it, it must be something very different from this.

But if a knowledge of the physical constitution of man be necessary to the educator, much more so ought the knowledge of his mental constitution Indeed, here he ought to feel himself particularly at home, for this may almost be said to be the science of which education is the art. If mental philosophy is ever to become other than a dry and barren study, it will be by bringing its facts to bear upon the education of the young. From the field of mental science the educator will gather rich and abundant fruits. From it he will learn the nature and character of the different faculties, the order of their development, the laws to which they are subject, and the conditions under which they act, together with the nature and growth of our knowledge, and the order in which it may be best communicated.

There is no power or faculty of the human mind, a thorough understanding of which is of greater importance to the teacher than that of the attention. "It constitutes," says Sir William Hamilton, "the better half of all intellectual power." There is no difficulty the educator is so frequently called upon to contend with, as the want of attention on the part of his scholars. He feels that everything would go right if he could only command their attention; and that he is unable to do so, is usually to be traced to his ignorance of its nature, or to a wrong system of education. Attention is, strictly speaking, not so much a distinct faculty of the human mind, as a property common to all of them. It is simply consciousness concentrated by an act of the will upon some particular object. There are various laws in accordance with which the will acts in such cases. The time should be taken when the powers are most active and vigorous, and the object ought to be one in which the mind naturally feels an interest. One cannot be expected to attend to a subject which is uninteresting to him, or of which he does not desire to know something. Hence it is first of all necessary to excite an interest in the mind of the scholar, or to excite his curiosity respecting what we wish to teach him. Care must also be taken that this interest does not fag, at least till the faculty has acquired sufficient power to act of itself without these stimulants. Those faculties should also be selected for exercise that have already acquired some degree of strength, for there is always a certain degree of pleasure attending the exercise of any faculty that is strong and vigorous. The objects of sense, the feelings and movements of their own bodies, are those to which the child's attention should first be directed. Then as the intellectual powers come more and more into play, the attention should gradually be directed upon them. Care must also be taken in every exercise to avoid the intrusion of any subject by which the attention may be distracted. By this means desultory habits of thought are produced, and the mind soon looses the inclination, and even the power of concentrating itself upon anything.

The great law of attention, however, is what Sir Wm. Hamilton calls the "Law of Limitation," namely, "that the intension of our knowledge is in the inverse ratio of its extension; in other words, that the fewer objects we consider at once, the clearer and more distinct will be our knowledge of them." "The greater the number of objects among which the attention of the mind is distributed, the feebler and less distinct will be its cognizance of each." "Consciousness will thus be at its maximum of intensity when attention is concentrated on a single object."

Here, then, is a principle of the utmost value in education. Almost every subject—every branch of instruction, is made up of a number of different parts, and hence, in the teaching of any of these our aim ought to be to reduce each to its simplest parts or elements so that by concentrating the attention on each separately, and afterwards connecting them, the whole may be more easily comprehended and mastered.

Two of the principal operations of the human mind are association and comparison, the one forming the basis of memory, the other being concerned in perception, reason, judgment. The two may indeed be said to be parts of the same operation; for we associate things together in order to compare them, and in comparing them together we associate them. The principle of association is, that thoughts, feelings, or emotions, that have been in the mind together, or in close succession, become connected together in such a way as that the one afterwards tends to recall or reproduce the other. The great law of association is contiguity, or the bringing together of two or more ideas or impressions that we wish to recall or reproduce each other. Hence it follows, as a general rule, that the closer these are brought together in the mind, the more strongly will they be associated together, and the greater will be their power of reproducing each other. It is upon this principle that the Hamiltonian system of teaching languages is constructed—that namely of bringing the foreign word and the English equivalent into the nearest possible proximity. Where any appreciable interval takes place between ideas that we wish to associate together, irrelevant ideas are apt to spring up and weaken their adhesive power. The circumstances that have a tendency to increase the adhesive power of ideas are chiefly vividness, repetition, and attention. Ideas that make a vivid impression upon the mind are readily recalled, as are also those to which the attention has been specially directed. The longer or more frequently an idea is before the mind, the more readily is it recalled or remembered. Some ideas are much more easily recalled than others. This is particularly the case with such as come to us through the senses, or are connected with material objects, and it is on this principle that the so-called arts of memory are constructed, namely the associating of what we wish to remember with some familiar material object.

All thought, all perception, as the philosophers tell us, is comparison. I perceive a star in the firmament by comparing its brightness with the dimmer hue of the surrounding sky; I hear a sound because I compare what I hear with the previous stillness; and so with all the other senses. Perception is ever the perception of difference and hence it is, that were a man to be always subjected to the same sensation, he would be as if he were subject to none, because having no change there would be nothing with which to compare his sensations, he could perceive no difference. In the same way, in arranging, classifying, reasoning, and in all the higher mental operations, the mind is ever comparing. A man can only judge of a thing, or even know a thing, by comparing it with something in the mind already. I know that fire burns, or that water quenches thirst, because the mind instinctively refers back to instances in which this has taken place. In fact, a word, or a phrase, or a sentence, is intelligible to one only as he can refer it or compare it with something in the mind already. It is in this way that one comes to acquire the style or modes of thought of another, the mind becoming stored with ideas of a particular kind, with which it compares others of a similar nature that may come before it. The merchant can at once tell the quality or value of a piece of goods, because his mind contains numerous samples of the same thing, and he naturally instantly refers to that which most nearly resembles this. This principle not being understood, the mind is commonly left to chance in the acquirement of its know-

* "Discrimination is a fundamental property of the intellect, and in so far as we can note differences in our sensations, to that extent these may be called intellectual."—*Professor Bain's Senses and Intellect.*

ledge. In each case, carefully selected specimens should be employed and presented to the mind in a regular graduated series, so that it might readily and at once refer what was brought before it to that which it most resembled, and in this way, as some one expresses it, the mind is as it were furnished with hooks with which to lay hold of and retain its subsequent knowledge. In fact, one great purpose of education ought to be to store the mind with such hooks, in other words, with ideas or impressions, with which whatever subsequently is brought before the mind may be compared and understood. But this cannot be the case unless it is done regularly and systematically, and with this end in view. Particularly ought this to be the case in the education of the senses, but, notwithstanding its importance, sense education is a thing that is entirely neglected at present.

The mind of man is thus ever associating, ever comparing, but like all the other powers or faculties of the mind, these require to be guided and trained, otherwise they will be as ready to associate and compare things that ought not to be associated or compared, as those that ought. Things ought only to be associated together that we wish to be associated, and to be compared by their more important, not their less important, qualities—by their essential, not their accidental, characteristics. We ought thus to be very careful only to bring together and associate such ideas or impressions as we wish to be together, and to be reproduced together. Ideas are reproduced or recalled in the same form and with the same associations as they were originally presented to the mind. Hence we ought not in teaching to present both the right and the wrong to the mind of a child, for they will be associated together and reproduced together—the living man chained to the putrid carcase. Build up the child's knowledge with the right, and the true, and the good, and let the wrong, the false, and the bad be as far as possible removed from him. Still more reprehensible is the practice of making a child suspect his knowledge, by asking him, after he has given a correct answer, if he is sure it is not something else. In teaching, one can scarcely do a greater injury to a child than to make him suspicious of his knowledge." "Spoil not," says Andrew Fuller, "thy memory by suspecting it; how canst thou find that true which thou wilt not trust."

Our ideas ought also to be stored up exactly in that order in which we wish them to be reproduced. In this way, each rises up in the mind in its proper place, and in the order in which it is wanted. Otherwise, many different ideas will crowd upon the mind at once, and confusion or embarrassment will be the result. As in any mechanical operation, the work goes on best when the materials are brought to hand exactly as and in the order that they are required, so in our mental operations, the mind ever acts best when the thoughts and words are brought before it exactly when and in the order that they are needed,—when it is given to them at the proper time what they shall say. Hence, in questioning a scholar on any subject, care ought to be taken to strictly observe the natural order, or the order in which it is best reproduced.

But the highest principles, the most exalted operations of the human mind are carried on unconsciously. "Here," (underneath this region of consciousness) says Carlyle, "in its quiet mysterious depths dwells what vital force is in us; here if aught is to be created and not merely manufactured or communicated, must the work go on." A knowledge of the nature and character of this ultra-conscious region of the human mind is of great importance in education; but, unfortunately, philosophy has not as yet been able to throw much light upon the subject. This is a branch of science to which philosophers, at least in this country, have as yet paid little attention. Consciousness has been the basis on which they have constructed their systems, and they have not troubled themselves, or cared to enquire what or whether anything was under or beyond this; and yet Sir W. Hamilton says, "I do not hesitate to maintain that what we are conscious of, is constructed out of what we are not conscious of; that our whole knowledge is in fact made up of the unknown and incognisable." This is the department of mental science of which least is known at present, and it is probably here that the next important discovery will be made, but it can only be established by a careful process of induction, which can be nowhere better carried out than in education. Indeed, we are of opinion that more will be learned respecting this ultra-conscious region from a properly directed system of education than in any other way.

At present it may perhaps be permitted to us to speculate a little on the subject. The human mind may be likened to a dark cavern, into which consciousness, like a light at the mouth, permits us to see but a very little way. In the dark and mysterious region beyond are stored up all our knowledge, and all our experience, and how are carried on those wonderful mental processes that are known to us only by their results. We know that a person may, after getting puzzled with a subject, and unable to see his way through it, lay it aside for a time, and on taking it up again, find it all arranged and clear before him, and that without his being conscious of having even once turned his attention to it in the interval. This can only be accounted for on the supposition that the mind has been unconsciously at work on the subject, and that too with finer and more perfect instruments than any that the conscious mind can command. All the higher and more perfect of the mental operations are unconscious or instinctive. "The truly strong mind," says Carlyle, "views it as intellect, as morality, or under any other aspect, is nowise the mind acquainted with its strength; here, as before, the sign of health is unconsciousness." Genius in its higher forms is of this nature. "What," says Goethe, in speaking of his works, "is in such cases termed invention, is with me spontaneous." "Ich habe nie uber das Denken gedacht."

Look at the orator, for instance, how aptly he selects his words, how adroitly he plies his argument, and employs one after another the various forms of speech, each in its proper place and at its proper time. What mental powers, of which he is not conscious, must be at work here? There is reason to believe that the principles that are at work, and the operations that are carried on in this ultra-conscious region, are the same as those in the conscious, though finer, more minute, and more perfect. There are feelings, emotions, sensations, at work here of which we are unconscious, and which only manifest themselves to us by their results. Thus, certain conditions of the atmosphere, certain states of the body produce elevation or depression of spirits by means of sensations of which we are not conscious; and the beautiful, the true, and the good, when presented to the mind, excite in us feelings and emotions for which we cannot account. In all the higher operations of the human mind, it is not by reason, or even by consciousness that it is guided, but by ultra-conscious feelings and emotions, mostly connected with previous feelings and emotions, the associations connected with which they serve to recal. Association and comparison are, we believe, as active and dominant principles here as in the conscious region of the mind. As regards education, it is impossible to estimate the amount of light that may be thrown upon it from more knowledge on this subject. To know that there are operations of the human mind that are carried on unconsciously, that there exist feelings, and emotions, and sensations of which we are not conscious, that the mind compares unconsciously as well as consciously, that all our knowledge and experience is stored up in this unconscious region in strict conformity with the laws of association, and is reproduced exactly in the form and with the connections that it had originally, all this must of necessity be of immense importance to education.

But not only are all the higher and more perfect operations of the human mind unconscious, or instinctive, but the tendency of all of them is to become so by practice. Acts of which the mind is at first painfully conscious, become gradually less so by practice, until at length they may be performed quite unconsciously. The more simple the act, the more readily may it be brought by practice to be performed unconsciously, and hence the advantage of reducing each subject taught to its simplest elements. In the more complicated of the mental operations, there are a number of different acts that require to be carried on at the same time, and hence the greater number of these that we can render in a measure unconscious, the more is the mind left free to deal with the rest. The orator, for instance, who does not require to think about his actions, knowing that they will naturally suit themselves to his words, nor about the proper tone, accent, or emphasis of his words, knowing that these will unconsciously follow, nor about the best words in which to clothe his ideas as that has become habitual to him, will thus have his mental powers free to deal with the development and arrangement of his ideas. By attacking and mastering each element of a subject separately, we can thus the more easily guide and direct them in combination. For the object of such division, and of mastering them one by one, is to enable us afterwards to carry on the greater number of them at the same time.

Each of our mental powers or faculties has its unconscious as well as its conscious side or end; yea, even reason itself, the highest and most conscious of all our faculties, has its unconscious or instinctive side. It is during the earliest years of life that our instinctive or unconscious powers are most active and most highly susceptible of education, and hence it is during these years that most should be done to improve and strengthen them. Who can estimate the amount of knowledge that a child acquires unconsciously, spontaneously, during the first few years of life. The teaching of this period should be direct teaching, and rules or the application of them should be resorted to as little as possible. The less a child has to do with giving or receiving reasons at this period the better. How reprehensible then is the plan of some teachers who, not content with receiving correct answers to their questions, must also have the child to give reasons for them, or who, not content with telling the child what a thing is, must also puzzle him with reasons why it is so. The reasoning powers in place of being unduly stimulated at this period, should be rather repressed. It is a great mistake to fancy that a child must understand everything that it learns at this period. Let it rather collect all that it can while its perception and receptive powers are at the strongest, it will find plenty of time to reason about them afterwards.

But we must have done. We have only attempted to gather here and there a few specimens, to shew the rich field of knowledge that education is, if it were only cultivated. And we have only entered upon the first of our three great divisions. We have said nothing of the means by which education ought to be carried out, or of the perfection of the individual at which education ought to aim. We have been unable to enter upon the nature and character of the individual faculties, the order of their development, or the laws which govern them; the order in which the various branches of knowledge, or any one branch, ought to be communicated; the place that classical knowledge, languages, or mathematics, ought to occupy. In teaching we ought always to proceed from the general to the particular, or first state the leading principles of a subject before we descend to particulars; on the principle

explained by philosophers that the mind naturally seizes upon the general before it can comprehend the particular. We ought also to be especially careful always to proceed from the known to the unknown, for the unknown can only be understood or apprehended by being compared with or explained by the known. Compare always what follows with something that has gone before; or, as Jacotot says, "Learn something thoroughly, and refer everything else to it."

We should have liked, had time permitted, to have said something of abstraction and generalisation, or the powers by which the human mind can take a single feature or quality of an object apart from the rest, and regard it as a separate individual, or by which it may take several subjects, or parts of objects, and conjoin them into a new and distinct whole. These are of great importance, and ought to be carefully trained in education. An intimate knowledge of them, particularly if we regard them as also acting unconsciously, would tend to throw light upon many of the mental phenomena.

We objected to the ordinary division of education as being according to means, and not having a regard to the end,—thus tending to confuse the means with the end. A proper division of the subject would be according to the ends that are to be had in view. The end of all education, is either to cultivate thought, or to develope expression, using this last in its widest sense to include actions and conduct, as well as mere speech or language. All education or teaching must have a regard to one or other of these, the culture of thought, or development of expression.

AMERICAN AND EUROPEAN SYSTEMS OF DEAF-MUTE INSTRUCTION, COMPARED.

BY E. M. GALLAUDET, PRESIDENT OF DEAF-MUTE COLLEGE.

A REVIEW of the history of deaf-mute education reveals the fact that great diversities of opinion as to the most desirable means of instruction have been coexistent with the work itself. A record of controversies, of angry disputes even, appears in a department of labour where from its nature and from the sad condition of its objects one would naturally expect the gentlest feelings of the heart to be ever uppermost.

Those differences seem to have had their origin in opposite conceptions formed of the psychological condition of the deaf-mute. This was thought on the one hand to be an abnormal state of being. Dumbness was considered as a positive quality, the presence of which rendered its subject a monstrosity. The command of spoken language was deemed absolutely essential to a development of the intellectual powers.

The possibility of education was therefore thought to depend on the ability of the pupil to acquire the power of speech.

Hence all labour was directed primarily to the education of the mute from his supposed abnormal state, and his induction, as far as possible, into the normal condition of speaking persons.

By another class of thinkers the deaf-mute was deemed to be a normal creature; that is to say perfect of his kind, although lacking some of the powers of other men. Dumbness was regarded as a negative quality, inability to speak constituting no obstacle to a full and vigorous mental development. Education on this theory, therefore, sought means to adapt itself to the condition and capabilities of its object, the initiatory step in both cases necessarily being the establishment of a competent channel of communication between teacher and pupil.

Heinicke, who founded in Germany, in the year 1760, the method in which the deaf-mute is regarded as an abnormal creature, held to the view that "the written word can never become the medium of thought." That said he "is the sole prerogative of the voice. Without an acquaintance with spoken language a deaf-mute child can never become anything more than a writing machine, or have anything beyond a succession of images passing through his mind." Consistency, therefore, with such a foundation left him no alternative in the use of material for his superstructure.

Speech! Speech! Speech! from base to turret.

De l' Epeé, on the other hand, the author of that method which ascribes to the deaf-mute nothing unnatural or monstrous as to his condition, which sees no inherent obstacles in the way of mental fruitage, took him as he found him; already possessed of a language, imperfect it is true, but of easy acquirement by the teacher, and as susceptible of expansion and perfection as any dialect of spoken utterance.

Denying the dependence of thought on speech, de l' Epeé found a means of communication between himself and his pupils, in a visible language which conveys thought from one to another as surely through the medium of the hand and eye as is done by means of that which employs the tongue and ear.

The theory entering into the construction of this foundation, unlike that of Heinicke, imposed no restriction on de l' Epeé in the use of materials in his edifice, but, on the contrary, left him and his disciples free to adopt whatever means ingenuity might devise or experience recommend, as serviceable in the great work they had to perform.

The real point of difference then, between Heinicke and de l' Epeé is discovered to lie in a purely philosophical question, the solution of which, in a hundred years of practical labor, proves the former to have been plainly in the wrong, and the latter as clearly in the right.

That much of real good to suffering humanity has resulted from the efforts of both these pioneers in the work of general deaf-mute instruction every candid person will admit; that either was faultless or omniscient none will claim; nor yet, it is to be hoped, will it be maintained that the system of either is entirely destitute of worth.

To that of Heinicke must be accorded the merit, if merit it be, of having the more ambitious aim, though experience has proved his object to have been unattainable; while that of de l' Epee must be awarded the praise of practical success and much wider applicability.

In reviewing the present condition of deaf-mute schools in Europe, all the systems in use are found to involve one or both of these fundamental methods. In certain places articulation is made the object of transcendent importance; while in some localities it is entirely rejected; and again insitutions are found where attempts have been made to harmonize and combine the once conflicting methods.

The imparting of the power of intelligible oral utterance to one born totally and incurably deaf is an achievement so nearly approaching the miraculous as to dazzle the mind and well nigh unseat the judgment of him who, for the first time, has convincing proof of its possibility.

Indeed one of the earliest recorded instances of deaf-mute instruction in England in the seventh century by the Bishop of Hagulstad, is alluded to in the known work of Bede, as a miracle, when it was doubtless nothing more than has been accomplished by teachers of articulation in latter times.

That toto-congenitally deaf persons have been taught to speak fluently and in tones that could be understood by strangers is an indisputable fact.

The inference, however, drawn by some writers and even, though rarely, by practical teachers that because success is attained with one such case, it is therefore to be expected with all or nearly all, has not been sustained by actual results.

Among more than one hundred instructors recently consulted by the author of this article during his examinations of forty-four of the most prominent deaf-mute schools of Europe, but one was found who claimed that success in articulation might be looked for as the *rule* among deaf-mutes. And this gentleman, acknowledging that many deaf-mutes, even in respectable German schools where articulation was made the basis of instruction, did not acquire the power of speech, ascribed the failure to a want of skill or industry on the part of their teachers, thus assuming to sit in judgment on the great body of German instructors whose zeal, ability and infinite good temper have received the applause of their most decided opponents.

The subject of teaching deaf-mutes to speak having been discussed at some length in our public journals during the past two or three years, and the claim having been made in certain quarters that the German system of instruction was productive of far more beneficial results than that obtaining in this country, it seemed important, in the tour of examination already spoken of, that special attention should be paid to the matter of articulation in the European States generally, and in the institutions of Germany in particular.

It is this particular line of effort, and this alone, which essentially differences many of the European deaf-mute establishments from those of this country. Hence in the comparison of methods proposed in the title of this paper, attention will be mainly directed towards a consideration of the practicability of teaching deaf-mutes by a system based on articulation as the prevailing principle of instruction.

The metaphysical blunder of Heinicke, the founder of this system, that thought is impossible without speech, is now everywhere acknowledged, even by the most zealous supporters of his practices.

The single instructor to whom reference has been made, as claiming the possibility of teaching all deaf-mutes by articulation is the able and distinguished Mr. Hirsch of Rotterdan, who may be taken as the most extreme and ultra advocate of this method in Europe.

His views on the subject are clearly expressed in the following terms quoted from an address delivered by him before the ninth scientific Congress of the Netherlands convened in Ghent last August.

"The object to be attained is to render possible the admission of the deaf-mute into society by teaching him to see, that is to understand the movements of the lips and to speak in his turn.

"To attain this end the act of seeing or comprehending and of speaking must be made the exclusive principle of instruction, and neither the palpable alphabet nor the language of signs can have any connection with it.

"The daily observations which I have made for more than thirty years that I have devoted to the deaf and dumb have convinced me that *the art of seeing speech in the movements of the mouth is the most important* of all the branches of instruction and that therefore it should be most sedulously cultivated.

"Next to the art of seeing or understanding, the act of speaking is the principal object of the instruction of the deaf and dumb. By this system ninety-nine out of every hundred deaf-mutes may be taught, and their progress will depend entirely on the talent

and patience of the teacher; this truth too long and too coldly doubted is now penetrating everywhere."

These claims and opinions gravely put forth and no doubt fully believed in by Mr. Hirsch, so far from being sustained by facts, are refuted and proved wholly untenable by a mass of evidence too strong to be questioned for a moment.

Not a single instance was an instructor of deaf mutes met by the writer, who supported these last cited views of Mr. Hirsch, and in critical examinations of schools containing in the aggregate upwards of three thousand deaf mutes far less than fifty per cent were found succeeding with articulation.

(To be continued.)

The end of learning is to repair the ruins of our first parents, by regaining to know God aright, and out of that knowledge to love him, to imitate him, to be like him, as we may the nearest, by possessing our souls of true virtue, which being united to the heavenly grace of faith, makes up the highest perfection.—*John Milton.*

ERRATUM.—JOURNAL OF EDUCATION, p. 187, "Archibald, Harriet N., GRADE E." read GRADE C.

EDUCATIONAL INTELLIGENCE.

AT HOME.

Colchester Co. competition.—The morning of the 13th did not dawn at all auspiciously. It was cold, dark and dreary; floods from above met torrents below, the weather being, if I may be pardoned the phrase, of a most pluvious cast; the mud oozed in unctuous blackness through the softened ice and watery snow in Truro streets, and failure seemed certain. But young hearts are not easily discouraged. Pope or somebody else says,—

"Hope springs immortal in the human breast."

The young live in an atmosphere of beatific expectation, ever seeing the bow in the cloud. Several came 20 miles that wet morning, and some of these were well rewarded. Yet I must confess keen disappointment. A goodly number came, but more might have come. I wish that some of our teachers were more emulous. Some condemn prizes. Two answers are pertinent. Young Nova Scotia is in no danger of being hurt in this way. Again, this was not a giving of prizes to the individuals of any one school, but to the representatives of many. The following table exhibits the number of competitors from each school, and of the prizes to each:—

NO. OF PRIZES AWARDED.

	No. of competitors.	Spell'g.	Read'g.	History.	Mental Arith.	Total
Model School, High Department,	6	..	..	1	..	1
" Preparatory do.	24	1	3	4	..	8
" Intermediate do.	1	..	..	..	..	..
Bible Hill, Truro	3	2	..	..	..	2
Cross Roads, Stewiacke	2	..	..	..	..	..
South Branch "	6	2	..	..	..	2
Middle Stewiacke, South	3	..	1	..	..	1
Lower Stewiacke, East	4	..	1	..	..	1
Otter Brook "	2	..	..	..	..	..
Folly	3	2	..	..	..	2
Great Village	1	1	..	..	1	2
Acadian Mines	4	..	1	..	..	1
Bass River	2	..	..	..	1	1
Totals	61	8	6	5	2	21

The competitors distributed themselves as follows:—Spelling, 34; Reading and Recitation, 26; History, 17; Mental Arithmetic, 11.

It was very soon evident that the prizes ought not to be given in the proposed proportions. The disparity of ratio of competitors in spelling and in other branches to the ratio of prizes, compelled a change. The competition in reading and in British history was of a much higher character and merit than that in spelling. For these reasons it was thought better to make some change.

I have already intimated that the exercises in spelling were not of so high a character as were hoped for. While there was not much difficulty in spelling the words selected from the fourth book, the defining was by no means good, exhibiting looseness and inaccuracy. Some of the pupils had evidently little or no preparation on the specific words. Of those who received prizes, some excelled in consequence of special preparation, while others succeeded rather by reason of a good acquaintance with the language generally. These latter were, in some cases, able to grapple successfully with untried difficulties. The prizes were taken in the following order:—

1. L. Carson Layton, Great Village.
2. George Faulkner, Folly.
3. William McKeen, Preparatory Department Model School.
4. Jeannie McCulloch, Bible Hill, Truro.
5. Alexander Frame, South Branch, Stewiacke.
6. Wilson Frame, " "
7. Nina Gibson, Bible Hill, Truro.
8. Artemus Fulton, Folly.

The contest for the first place was spirited and exciting, very few words being missed by either Layton or Faulkner. The former had, however, a considerable advantage in age.

The reading and recitation were highly interesting and creditable to those engaged. While there was no great difficulty in making an award, many of the unsuccessful deserved high praise. The prizes were awarded in the following order:—

1. Sarah Calkin, Preparatory Department Model School.
2. Elsie Fisher, Middle Stewiacke, South.
3. Thomas Prince, Preparatory Department Model School.
4. Sarah J. Delaney, Acadian Mines.
5. Jane Hattie, Preparatory Department Model School.
6. John Wright, Lower Stewiacke, East.

The mental arithmetic trial was comparatively a failure. I wanted that life which is generally exhibited when the exercise is conducted simultaneously. I felt tied up by the instructions to give the questions individually, a course which I would not again pursue. A few shewed great readiness, and if the questions had been more varied, would have succeeded better.

1. L. C. Layton. 2. Edward Fulton.

The work in British history was a high success. I venture the assertion that it was not excelled in the Province. Several seemed to have so studied Collier's history as to make every sentence their own. The moment the question was given, the event was related with scrupulous minuteness. The final trial in dates, called for with rapidity and without consecutive connection, was most exciting and highly interesting. The following received prizes.

1. Duncan Campbell, High Department Model School.
2. Jessie McKay, Preparatory " "
3. Thomas Prince, " " "
4. James Archibald, " " "
5. Duncan McKay, " " "

The youth of many of the successful pupils is worthy of note. Nine of them were from 9 to 12 years of age.

I must again express my regret that but 13 schools were represented. Known circumstances lead me to think that some teachers may plead ignorance as an excuse. All had equal chance of information. If any one say that he did not see the *Journal*, I leave him to the judgment of the intelligent. Rev. J. Forsythe and Mr. Calkin of the Normal College rendered valued assistance. Other gentlemen were invited but could not attend. It is to be hoped that other similar competitions may take place, and that a larger number may participate.

H. C. UPHAM, *Inspector.*

Pictou Co. competition.—The Competition for the Government prizes for the County of Pictou, took place on the 13th March, in our new school house. Notwithstanding the very unfavorable state of the weather, we had a large attendance of ladies and gentlemen, who took a very lively interest in the proceedings. There were fifty-four candidates for the several prizes to be competed for, from Pictou, New Glasgow, Merigomish, &c.; several teachers were also in attendance.

The contest for the prize in English history was very keenly contested. A. P. Ross, Esq., who was present at this very exciting examination, presented the defeated candidate with a prize of equal value.

The prize for reading and recitation was equally animated. As we had twenty-five prizes to award for spelling and definition, no less than forty-one candidates competed for them.

As it was getting late in the afternoon, the candidates from the rural sections were anxious to return home, leaving but two competitors for the prize in mental arithmetic. After a short examination, it was decided that this prize should be retained for the present.

No. candidates for prize in spelling and definition	41
" " reading and recitation	31
" " English history	12
" " mental arithmetic	2
No. of competitors	54
No. competitors from Pictou Town	33
" " New Glasgow	14
" " Merigomish	2
" " Backland	4
" " Saltsprings	1
	54

Master Robert Ross gained prize for reading and recitation.
Master Charles McDonald gained prize for English history.

M. T. SMITH, *Inspector.*

Antigonish Co. competition.—The prizes, Murdoch's History of Nova Scotia, 3 vol. qto., assigned to the most advanced pupils in the public schools in the County, were competed for in one of the halls of St. Francis Xavier's College on Friday, the 13th inst., according to arrangements made in the Education office. Pupils from Arisaig, Antigonish, South River, and the Harbor, were in attendance promptly at the hour. The Inspector, Roderick McDonald, Esq., who, we are rejoiced to notice, is fast recovering from the effects of a severe accident incurred in the discharge of his duties early in the winter, conducted the examinations. The

contests in history, mental arithmetic, and recitations were keen and wonderfully evenly fought out, betraying a great amount of cleverness in the several candidates. Arisaig, particularly, did special honor to Mr. McInnes, the clever teacher at that place, in the person of a Master Dougald Gillis, who won three prizes, but could only carry off two, the number limited by the powers that be. Master Daniel McDonnell of Antigonish, also won two prizes. The result was as follows:—

Mental Arithmetic—Dougald Gillis, Arisaig.
History—Daniel McDonnell, Antigonish.
Recitation and Reading—Miss Sophia Grant, Antigonish.
Spelling—Dougald Gillis, Arisaig; Daniel McEachern, Antigonish; Ellen Kenna, Antigonish; Augustin McDonald, S. River; Allan McDonald, Arisaig; Colin Chisholm, Harbor; Daniel MacDonnell, Antigonish; John Whidden, Antigonish; William Cameron, South River; John McAmus, Antigonish; Colin Cameron, South River.

All the pupils behaved themselves admirably; and we only regret that the country schools were not more fully represented. Such of them as were showed a proficiency that spoke volumes for the competency of their teachers.—*Antigonish Casket.*

Guysboro' Co. competition.—In conducting the competition for the prizes of Murdoch's History of Nova Scotia on Friday, 13th March, I was assisted by the Rev. W. E. Gelling, Rev. M. Tomkins, P. P., Rev. I. Murray, and Rev. H. Hamilton. The best of order prevailed, and no difference of opinion occurred in awarding the prizes to the successful competitors. It is, however, to be regretted that no pupils from other parts of the County were present to take part in the competition; especially as I know many of them to be very intelligent and industrious young people, and who would, by coming forward, have gained much credit for themselves and their teachers. The pupils who competed were twenty-one from the academy and six from the preparatory school of this section; and the successful competitors and prizes awarded were as follows:—

British History.—Miss Sophia C. Tory.
Mental Arithmetic.—Miss Carrie B. Morrison.
Reading and Recitation.—Miss Sarah Francheville, pupil of the academy; and one set (purchased by the teachers and inspector for the purpose) to Master Lewis Grant of the preparatory department, who, though failing very slightly in pronunciation, exhibited such judgment and gave such expression to the several pieces read as to command the praise of all present.
Spelling.—Miss Hattie Peart, Miss Louisa Peart, Miss Sarah Francheville, Miss Anne Mahony, Miss Carrie B. Morrison.

In awarding the above prizes several of the competitors, whose failure may, perhaps, be attributed to want of confidence more than to want of knowledge, came so near to the more successful as to entitle them to honorable mention, viz., Misses Hattie Peart and Lucy Morris in British history,—Master Lewis E. Hart (for his honesty in the decision of a doubt in which he was interested,) and Miss Florence Tory, both in mental arithmetic,—Miss Sophia C. Tory, Alfred Cunningham, Katie Sutherland, Ida A. Russell and Florence Tory, in reading and recitation; and Sophia C. Tory, Florence Tory, Una Morris, Lucy Morris and Laura Clark, in spelling.

At the close of the competition it was agreed that the prizes should not be delivered till the following Tuesday, in order that the children of all the departments, and persons interested in education, might be present. On that day nearly two hundred children appeared, and were addressed by the Rev. Mr. Gelling, Rev. Mr. Burns, Rev. Mr. Murray, and the Hon. John J. Marshall; and in the presence of these gentlemen, the trustees, teachers and parents of the pupils, the prizes awarded were delivered to the successful competitors before mentioned, by

SAMUEL R. RUSSELL, *Inspector.*

Cumberland Co. competition.—The competition began in the Academy room at 10 a. m., on Friday, 13th March, 1868. The Rev. Dr. Clarke, Rev. Messrs. Steele, Sutcliffe, Thomson and Miles, and Messrs. W. F. Cutten and S. Fulton, rendered valuable assistance to the inspector in arriving at a satisfactory result. There were fifty candidates in spelling; seventeen in mental arithmetic; eight in history; and about forty in reading and recitation. The examination, which was highly creditable to the competitors, resulted in the following awards:—

SPELLING.

Mary E. Hickman.....Dorchester, N. B.
Amelia McLean.....Amherst.
Arthur J. Freeman.....Point deBute.
Nathaniel Angus.....Goose River.
Mary E. Davis.....Shinimicas.
Maria Simpson.....Amherst.
Laura A. Seaman.....Minudie.

ARITHMETIC.

Joseph Howe Pipes.....Amherst.
Robert Barry, proximus...Amherst.

READING.

D. W. Douglas..... .. Amherst.
Eliza Smith..... ...Maitland.

HISTORY.

William H. Pipes.....Amherst.
Eliza Smith, Arthur J. Freeman, } Equal to first.

It was arranged that a meeting should be held in the Court House at 8 p. m., on the same day, for the purpose of presenting the prizes to the successful candidates. In discharging this duty, the resident clergymen happily combined the grave and gay. Rev. Dr. Clarke dwelt with much point on the awakened interest in education now, compared with the apathy of former years. Altogether, the meeting, which lasted two hours, was exceedingly interesting.

F. W. GEORGE, *Inspector.*

Richmond Co. competition.—We had a spirited contest at the competition for "Murdoch's History of Nova Scotia" on the 13th. Unfortunately the weather was unfavorable, which prevented a larger attendance of pupils from schools at a distance from town. There was, however, considering the state of the weather, and it being the first occasion, a considerable number present, and a lively interest was manifested by all. Several of the parents and a number of teachers and visitors also attended and remained throughout the examination, which did not terminate until after candlelight. The copy offered as my remuneration was thrown in, which made 10 copies competed for. The gentlemen who acted as judges with me were—William Crichton, Esq., Chairman of Board of Commissioners; Rev. Dr. Camer[illegible]; Hon. E. P. Flynn, and William LeVisconte, Esq. Prizes were awarded to the successful competitors as follows:—

English history.....Kate Donovan, Female Seminary, Arichat.
Reading, &c.....Sophia C. Fixott, do.
Mental arithmetic...Jeffery Terrio, Academy.
Spelling.....Elizabeth Holmes, Female Seminary, Arichat
" .....Matilda Campbell, do.
" .....F. Ida Cutler, do.
" .....James Toomey, Academy.
" .....David Hearn, do.
" .....Francis Kempt, L'Archeveque, No. 31.
" .....Alexander Ross, South Mountain, No. 24.

W. R. CUTLER, *Inspector.*

Cape Breton Co. competition.—The examination was conducted under the supervision of Mr. Outram, the County Inspector, who was assisted by Messrs. John Rindress, Sydney Mines; W. Dimock, North Bar; T. W. Johnston, Cow Bay; Charles Garrett, Ball's Bridge; and H. C. Creed, Sydney Academy. The judges were Rev. Dr. Uniacke, Rev. Dr. McLeod, and Mr. John George Bourinot.

The first competition was for spelling, and like all the following exercises, was conducted strictly in accordance with the rules set down in the *Journal of Education.* The boy or girl who made two mistakes during the first hour was ruled out. At the expiration of the hour 21 pupils were left out of 33 who entered, to compete for the 13 prizes. Each was then examined separately until he or she made a mistake. On the whole, the pupils were remarkably prompt with their answers, and did much justice to their several teachers. At the close of the competition the following were adjudged prizes:—

Margaret Muggah.....Sydney High School.
Barbara McLeod..... " "
Annie C. Jost..... " "
Roderick J. Buchanan..... " "
Bessie T. Sutherland..... " "
John Armstrong.....North Bar.
Wallace Jerrett.....Ball's Bridge.
Frederick G. Harrington....Sydney High School.
William M. McLeod..... " "
Charlotte Read.....Preparatory Department.
Herbert C. Burchell.....Sydney High School.
Mary Buchanan..... " "
Neville Usher..... .....Preparatory Department.

The writer gives the successful candidates according to the order in which they stood when the competition closed. Miss Muggah did not miss a single word, Misses Jost, McLeod, and Sutherland, Masters R. Buchanan, J. Armstrong and W. Jerrett also deserve especial mention for the manner in which they acquitted themselves.

The next examination was in History, from the reign of Elizabeth down to the present time, and was very searching. The contest lasted about an hour, and displayed the knowledge of the several competitors, 6 in all, in an exceedingly gratifying manner. It was finally decided that Master W. Harrington had best stood the trying ordeal and was entitled to the prize. Miss M. Muggah, and Master E. Sutherland are also entitled to honorable mention for the manner in which they contested this prize.

Then followed the competition in Reading and Recitation,—thirteen candidates in all offering themselves. Each was allowed to recite or read a selection, as he or she might think proper. The pieces were choice ones, and mostly taken from the sixth and seventh Readers used in our schools. Miss Susan Barrington from the Mines, who recited with much spirit and taste, was finally awarded the prize. Clarence and George Meloney, Herbert Burchell and Thomas Lawlor also deserve notice for the manner

in which they acquitted themselves. Indeed, the reading and recitation showed much diligence on the part of both pupils and masters.

The concluding exercise was in Mental Arithmetic, for which fifteen pupils entered. The quickness and accuracy of the answers, on the whole, certainly surprised the audience. Master C. Rudderham from the Bar was finally awarded the prize. John Armstrong, Roderick Buchanan, Hester Muggah, Malcolm Buchanan, and Matthew Sullivan came next in order of merit.

The prizes, Murdoch's History of Nova Scotia, were then handed to the successful candidates amid the applause of the assembled scholars. This proceeding closed the competition which had been most spiritedly conducted throughout. As it will be seen by the foregoing list, the majority of the prizes for spelling and the one for history were taken by pupils of Mr. Creed, whose ability in his profession deserves every recognition. The prizes for mental arithmetic and recitation, and two for spelling were, however, taken by pupils from other places. It is certainly to be hoped that such examinations will be continued from year to year, as they must assist materially in stimulating education and establishing the system firmly throughout the country.—*Cape Breton News.*

Hants Co. competition.—The competition for prizes to-day was close and spirited. A much larger number of competitors would doubtless have been present had the weather permitted. The following sections were represented thus:—

Windsor	26 pupils.
Hantsport	6 "
McKay	5 "
Martock	2 "
East Rawdon	1 "
Middle Rawdon	1 "
Newport and Douglas.	3 "

In mental arithmetic 8 competed, and the prize was taken by Austin Mosher of the Newport and Douglas section.

Twenty-seven competed in reading and recitation, and Maggie Burton of the Hantsport section took the prize.

In British history 13 entered the list, and James Mosher of the Newport and Douglas section came off victor.

Of the 29 who competed in spelling, 13 took prizes as follows Windsor section—Percy Scott, Evvie McCully, Annie Mosher, Agnes Doran, Minnie McLatchy and Isabel Geldert. Martock section—Jeremiah McDonald. McKay section—Annie Bowes, Laura McKay and Helena Harvie. Hantsport section—Sarah Holmes. Newport and Douglas section—Rufus Mosher and James Mosher.

It will be seen from the above that four sections are entitled to Chisholm's Mathematical scale, viz., Windsor, Hantsport, McKay, and Newport and Douglas. The highest general proficiency exhibited by the competitors was in mental arithmetic and British history; the lowest, in reading and recitation. The successful competitor in mental arithmetic gave the first correct answer to 45 questions, many of which involved calculations of a very complicated and ponderous character. Next to him honorable mention should be made of William Black, who was first correctly to answer 21 questions. In British history the winner of the prize correctly answered 54 questions,—next to him Rufus Mosher answered 53, and Otis Redden 46.

My thanks are hereby tendered to Colonel Poyntz, Dr. Read, and George DeWolf, Esq., for the valuable assistance they rendered in helping me form a judgment in cases of doubt.

D. M. Welton, *Inspector.*

King's Co. competition.—The competition for prizes offered by the Legislature to the pupils of the public schools of this county, came off to-day in accordance with previous notice. The weather was extremely unpropitious, and I feared the ardor of those who had intended presenting themselves would be effectually damped. There was not so many schools represented, and from those that were represented there was not so large an attendance as if the weather had been fine; yet, the number present was larger than, under the circumstances, we dared to hope.

Somerset sent 1 competitor, Town Plot 1, Kentville 6, Lower Canard 5, Randville 10, Upper Church Street 3, Upper Canard 15, Sheffield Mills 1, Canning 4.—In all 46. Of these there were in history 9, reading 25, spelling 34, mental arithmetic 3.

The examination in history was spirited, and the answers given showed a minute and comprehensive knowledge of this interesting and instructive branch of study. After the number had dwindled down to five, the contest was so sharp as to leave the judges for a long time in doubt as to who should win. I venture to say that this class can hardly be excelled.

Reading.—The examination in this branch necessarily occupied considerable time, and so little disparity was there in the reading of half a dozen, that a nice discrimination was required to be exercised by the judges. Their award was in favor of the only recitation presented. There was, of course, much diversity in style, and although in general the execution was creditable, yet too little of the reading reached that high standard which a refined taste, aided by practice, may attain. Upon no branch have I, during my visitation, bestowed so much attention; as too frequently I have observed, on the part of teachers, a carelessness of all else save the ability to call words correctly and with facility. Honorable mention should be made of the reading of a number of small children; and could the judges, in their award, have taken into consideration the circumstances of age, &c, a different conclusion would have been arrived at.

The spelling and definition were excellent, and two hours were occupied in reducing the number of competitors to the number of prizes.

The show in mental arithmetic was small, much smaller than I had hoped,—creditable, however, to those who competed.

The Court House, in which the competition was conducted, was during the whole day crowded with spectators, who evinced the liveliest interest in all the proceedings.

I was fortunate in securing the assistance of Revds. D. O. Ruggles and S. B. Kempton, and George Blanchard, Esq., Judge of Probate, who exercised the strictest care that no cause of complaint should be afforded to any of the competitors.

The following is a list of those who were successful:—

MENTAL ARITHMETIC.

Burgess McKetrick.....Upper Church Street.

HISTORY.

Cornelius Russell .....Town Plot.

RECITATION.

Gideon Barnaby.....Upper Canard.

SPELLING.

Carrie Greenough	Upper Canard.
Andrew McDonald	"
Mary Beckwith	"
Esther A. Ells	"
Charles Hardwick	Lower Canard.
Almira Lockwood	"
Laura Rand	Randville.
Alfred Hays	"
Mary Woodworth	Canning.
Prudence Woodworth	"
Emma Dickey	"
Annie Webster	Kentville.
Francis Harris	"

Thus requiring 7 copies of Chisholm's Mathematical Scale.

William Eaton, *Inspector.*

Yarmouth Co.—The Inspector, upon request, was allowed to appropriate one of the spelling prizes to the subject of grammar.

English Grammar and Analysis—Abbie Kimball, Milton Section; *Reading and Recitation*—Minnie Gridley, Lower Town Section; *Mental Arithmetic*—Albert Crosby, Lower Town Section; *English History*—Agnes Robbins, Chebogue Point Section; *Spelling*—Eva Crosby, Lower Town Section; Clara Gridley, Lower Town Section; Jane Killam, Milton Section; Annie Guest, Lower Town Section; Carrie Wyman, Central Town Section; Maggie Lewis, Lower Town Section; Salia Goudey, Lower Town Section; Alfred Hanford, Milton Section.

The sum of forty dollars was subscribed to procure additional prizes.

G. J. Farish, *Inspector.*

Digby Co. competition.—The examination for the prizes offered by the legislature came off in the Academy on the 13th March. The inspector was assisted by the Rev. A. Martell, P. W. Smith, Esq., M.D., W. H. Taylor, and A. B. Holdsworth, Esqs. Mr. D. W. Elder was requested to act as Secretary to the examiners. The number of competitors, in spelling, was 18; reading and recitation, 10; English history, 5; mental arithmetic, 4. Dr. Smith proposed, for spelling, the names of plants, fruits, &c.; and others of the examiners made some pertinent suggestions. After a searching and impartial examination of nearly five hours, the following were declared successful competitors:—

Spelling.—Frances Jones, Digby; Elizabeth Waters, Digby; Rose Hanley, Digby; Maria Hankenson, Weymouth; Mary McCormick, Digby; Ella Ruddock, Digby; Arthur W Burns, Digby; George Dunham, Digby.

Reading and Recitation.—Eleanor A. Cornwell, Little River, D. N.

Mental Arithmetic.—Wallace Johnston, Waterford, D. N.

English History.—Budd Dakin, Digby.

In the opinion of the examiners several others acquitted themselves so creditably, that, with the view of rewarding their efforts and industry, ten dollars were contributed on the spot for the purchase of books as prizes, which were awarded to the following:—

Recitation.—Eugenia Eldridge, Sandy Cove, D. N.; Annie S. Morse, Sandy Cove, D. N.; Caroline Morehouse, Sandy Cove, D. N.; Sarah Saunders, Sandy Cove, D. N.

Spelling.—Sabia Churchill, Digby.

Several of the parents and friends of the competitors were present, and they, together with others, manifested much interest in the examination. Unfortunately the day proved very rainy, and the roads, bad before, were rendered in some places almost impassable. Under these circumstances the number of candidates could not be so large as it would otherwise have been. But, while this could not but be regretted, all concurred in expressing satisfaction at the creditable exhibition they had witnessed, and in admitting

the beneficial influence which awards of this nature must exert over the schools of the province, which are now, by the wisdom of the legislature, placed in a position from which, it is hoped, they will never be permitted to recede.

P. J. FILLEUL, *Inspector.*

Queens Co. competition.—Our County Competition took place as prescribed. The very general conviction that it was not instituted on an equitable basis—peculiar, perhaps, to this County—divested it of much of its interest and utility. Liverpool section contains about one-third of the children between five and fifteen years of age in the County. The school is graded, and the first department, of course, has the most advanced pupils, who have long enjoyed peculiar and extraordinary advantages. Under such circumstances there was very little to stimulate the pupils of the miscellaneous schools to engage in so unequal a contest. Several in different parts of the County, who had prepared themselves with the most commendable zeal and diligence, at last retired from entering the competition. Milton—the County Academy—from which there was no competitor, I leave to excuse its own delinquency.

In reading and recitation there were six competitors. The prize was awarded to Fredie Forbes, son of Dr. Forbes, member of the House of Commons.

In spelling there were eight competitors. During the first hour two retired. The others were then examined individually, and at the close stood, words missed, as follows,—3, 11, 12, 13, 13, 19. The prizes were awarded to Reuben Sherriffs, Bessie Mulhall and Mary Jackson.

In mental arithmetic there were five competitors. The prize was closely contested. It was won by George Lightizer.

In English history there were only three competitors. The first hour none retired, in the second, one; the prize was finally awarded to Miss Salomme Freeman.

The proficiency of nearly all the competitors was most remarkable; and it was with great pleasure that I awarded to them all a prize better than books, rather to be chosen than great riches,—the honor of a good name. The County prizes were all awarded to pupils of Mr. T. R. Pattillo's department of the Liverpool section. Miss Alice Minard from Harmony, North Queens, a competitor both in reading and spelling, maintained her standing so honorably, that on my own account I publicly presented her with Dr. Forrester's Teachers' Text-book.

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D. O. PARKER, *Inspector.*

Shelburne Co. competition.—On the 13th inst., at 10 o'clock, A. M., notwithstanding the inclemency of the weather and the badness of the roads, a large number of persons of both sexes assembled in the Shelburne Academy, to witness the competition of the pupils of the county, for prizes. The Revds. Dr. White, G. M. Clarke, R. D. Porter, and T. W. Smith, assisted as judges. R. G. Irvin, Esq., as Secretary, and Messrs. R. W. Ells, A. C. A. Doane, and J. H. Munro, assisted in reading, questions, &c. There were in all branches 20 competitors, of whom 7 belonged to Shelburne, 5 were from Locke's Island, 4 from Barrington Passage, and 4 from Hibbert's Brook, Section B, Barrington. After prayer by Dr. White, 13 came forward as competitors in reading and recitation. Having gone through with their selections,—all of which were rendered in a very creditable manner,—the judges retired to compare notes; upon which it was found that five were so nearly equal as to necessitate a further test. Brief selections were then made by the judges. These the five competitors were permitted to examine for five minutes, after which they were conducted to a separate apartment. They were then brought individually before the audience and examined upon the selections, when the judges unanimously agreed to award the prize to Miss Crissie Bell, of Shelburne Academy.

A class of 10 next came forward as competitors in British history. After continuing the examination for more than an hour, during which all the pupils acquitted themselves nobly, the judges retired to compare notes, upon which it was found that five were free from failures. Upon continuing the examination with these, one after another was obliged to retire from the contest, until Master J. G. Allen, of Locke's Island, was left the undisputed victor.

Next came 7 as competitors in mental arithmetic. After a brief contest in the fundamental rules and reduction, the prize was awarded to Master Edwin Crowell, of Barrington Passage.

Now came the last and most stubborn contest of all, viz., that for the prizes in spelling. Thirteen entered the competition in this branch. After the spelling of several hundreds of words within the prescribed limits, the class remained nearly the same as at first. Other and more difficult words were then given, and, finally each individual was tested separately upon the few words which had been misspelled and passed over. Still eight remained, and there were but six prizes; upon which A. McNaughton, Esq., suggested that as they had done so well, two additional prizes should be guaranteed and the contest terminated. Acting upon this suggestion, a number of gentlemen readily subscribed the amount required ($14.00) and the eight were pronounced victorious. Their names, &c., will be found in the subjoined table.

Some of the pupils who came from a distance, evidently labored under a great disadvantage. After spending a restless night, and then travelling upwards of 20 miles through the mud and rain, they could hardly be expected in a strange place, and amongst entire strangers, to compete successfully with the pupils of the Academy, who were at home and refreshed. This fact accounted for the failure of Mr. A. C. Doane's pupils (four of whom were present) to obtain any of the prizes. Mr. D.'s school, taught in Hibbert's Brook section, Barrington, is not inferior to any in the county; and his pupils, in point of scholarship, will compare favorably with any within my jurisdiction.

I beg leave here to suggest that such competitions might be more satisfactory to all concerned, if confined to districts. While they embrace counties, and are held in the county towns, the pupils of the academies evidently possess great advantages over those living in remote sections.

In the following table are given the names of successful competitors, the sections to which they belong, the names of their teachers, the number of prizes won by each, and the branches in which they excelled:—

Names of Pupils.	Section.	Teacher.	Prizes.	Branches.
Miss Crissie Bell,	Shelburne,	Mr. R. W. Ells,	2	Reading and Spelling.
Ella Fraser,	"	"	1	Spelling.
Fanny Locke,	"	"	1	"
Anne Barclay,	"	"	1	"
Jane Ringer,	Locke's Island,	Mr. A. H. Fisk,	1	"
Josephine Allen,	"	"	1	"
Margt. McDonald,	"	"	1	"
Master J. G. Allen,	"	"	1	Brt'sh Hist'y
Edwin Crowell,	Bar'gton Passage,	J. H. Munro,	2	M. Arthm'tic and Spel'g.

W. H. RICHAN, *Inspector.*

Colchester Co.—During the month of February I visited the schools in the following sections:—Upper Waugh River, West New Annan, Byers' Mills, A. McKay's Mills, G. Sutherland's, Earlton Village, Princeport, Clifton, Green's Creek, No. 1, Green's Creek, No. 2, Lower Stewiacke, (West), Eastville, Pembroke, Cross Roads, Upper Stewiacke Village, Newton Mills, South Branch, Otter Brook, Smithfield, Middle Stewiacke, Middle Stewiacke, (South), Lower Stewiacke, (East), Gay's River, Alma, Fort Ellis, and Forest Glen. Since my last visit the school-house of McKay's Mills section has been considerably improved. Earlton Village house, which will be, when completed, a fine building, has been getting along slowly. Clifton school-house has been well seated. The school-house at Green's Creek, (No. 2) has also been well furnished with seats, apparatus and books. The school-house in Smithfield section has been finished inside and furnished; and that in Fort Ellis section has been somewhat improved. The house in Alma section (new) has been built, finished and furnished since last May in a manner most creditable to the inhabitants, who are mostly new settlers and in very moderate circumstances. The new house in Lower Stewiacke East section, replacing the building accidentally burned last winter, is a very fine building, of ample size, thoroughly finished and furnished in a superior manner. This section has always been considered by me one of the most progressive and spirited in the County. It has been compelled to meet disappointment and misfortune in many forms, but present prospects are most encouraging. Those who persevere patiently in well-doing will finally secure a reward.

A contrast of the present condition of most of the sections visited with their state four years ago, might be interesting and exceedingly instructive. It is true that the present advantageous stand point has not been reached without a large expenditure of time, care, industry and pecuniary means; but no reasonable lover of his country or his race would barter present privileges and prospects for all that he has expended in this good work. The people have sown in faith, and now begin to reap a rich harvest.

I am sorry to report that the *Journal* is not regularly received in some sections, more sorry that many teachers are careless about getting and reading it. During the month I have found teachers who knew little or nothing of the prize competition upon the 13th March. I have again to note the superiority of attendance over that in former winters.

H. C. UPHAM, *Inspector.*

King's Co.—During the month of February I was able to make but few official visits, domestic circumstances preventing my absence from home. You will, however, be pleased to learn that there are more schools in operation this term than ever before in the winter. The numbers for the three past, as compared with the present winter, are, 45, 49, 64, and 71. There are also 8 assistants. Never before have there been more than 3. The attendance is also more regular, and the registers show, in general, much higher numbers than heretofore.

These are not the only gratifying circumstances in connexion with the schools. In the method of presenting instruction, as well as in the quality of instruction presented, there is gradual but decided progress.

The trustees also very generally show commendable zeal in the performance of their duties. Even the opposition which in some communities is presented, tends to a stricter supervision of school matters, thereby influencing for good the school itself.

The coming examination will, I trust, be so well attended as to enable trustees in future to obtain suitable teachers,—there being now 4 or 5 sections without schools, just because male teachers could not be obtained.

WILLIAM EATON, *Inspector.*

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. Amended and Additional Regulations concerning Superior Schools.

NOTICE IS HEREBY GIVEN to Teachers of the First Class, Trustees of schools and others, that CHAPTER V. of the COMMENTS AND REGULATIONS OF THE COUNCIL OF PUBLIC INSTRUCTION, "Of Superior Schools," has been revised as follows:—

1. In lieu of sub-divisions (2), (4), and (10) of SECTION 3—

(2) Ample School accommodation must be provided for all children of school age in the Section.

(4) The furniture must be of an approved pattern, and the supply of books, apparatus, and school materials, sufficient for and adapted to the wants of the school.

(10) *a.* School must have been kept at least 100 days during the term.

b. At least three-fourths of the children of school age must be registered at school.

c. The number of pupils daily present on an average, must be at least two-thirds of the number registered.

2. In Sections having Graded Schools, tests referring to school buildings, furniture, books, apparatus, and school materials, shall apply to all the departments. The number of registered pupils daily present on an average, shall apply to all the departments in the aggregate.

3. In the case of Graded Schools, the Council will determine which department shall be eligible to compete in any term; and notice of the same will be given at least three months previous to the commencement of such term. Any department of a Graded School shall be examined only upon such subjects as are suited to its grade.

4. Agreements respecting Teachers' salaries must be regular in every respect.

5. As one-half of the grant to any superior school is payable to the Trustees and one-half to the Teacher, in deciding the competitions two elements will be kept in view as the basis of all awards:

First—The character of the school accommodation, general equipment, school attendance: and generally, all matters wholly or chiefly under the control of the SECTION—

Second—The organization, management, discipline, and progress of the school; and generally, all matters wholly or chiefly depending on the ability and diligence of the TEACHER—

And these two elements will be regarded as of equal force and importance.

6. The foregoing Regulations shall take effect on the first day of May, 1868, and all existing Regulations not inconsistent with the foregoing shall continue in force thereafter.

☞ In pursuance of the above Regulations, Trustees and Teachers of Graded Schools are hereby notified that the Council of Public Instruction has determined that the most ADVANCED Department shall be eligible to compete during the term beginning May 1st, 1868; and the most ELEMENTARY Department during the term beginning November 1st, 1868.

II. Evening Schools.

The Council of Public Instruction has made the following Regulations in reference to Evening Schools:

1. Trustees of Public Schools may establish in their several Sections Evening Schools, for the instruction of persons upwards of 15 years of age, who may be debarred from attendance at the Day School.

2. Such Evening School shall be in session 2½ hours: and in relation to Public Grants, two evening sessions shall count as one day. The Prescribed Register shall be kept, and a Return of the school made in the form directed by the Superintendent.

3. Books and School materials for such Evening Schools will be furnished at the same rate, and subject to the same conditions as for day schools; provided always that no pupil of an Evening School shall have power to *demand* the *use* of books free of charge, but shall, on the other hand, have the right of purchasing from the Trustees at half-cost, if he should desire to do so.

4. No portion of Provincial or County funds for Education, shall be appropriated in aid of Evening Schools, unless teachers are duly licensed.

5. The Council would greatly prefer that the Teachers of Evening Schools should be other than Teachers of Day Schools; but where this may not be practicable, it shall be legal for the Teacher of the day school to teach day school four days in the week, and evening school three evenings in the week.

III. Holidays and Vacations.

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

HOLIDAYS.

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

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

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

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

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

The Anniversary of the QUEEN'S BIRTHDAY shall be a Holiday in all the Public Schools, as heretofore; also any day proclaimed as a public holiday throughout the Province.

VACATIONS.

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

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

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

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

July, 1867.

IV. 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.

V. 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.* 48, *reg.* 2.

VI. The procuring of Books and Apparatus.

1. WHEREAS, by the 20th Section of the Amended School Law, the ratepayers 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.

Regulations.

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.

PUPILS' WEEKLY RECORDS.

Weekly Record for one Term (on printing paper) 1 cent each.
do. do. (on writing paper) 2 cents each.

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. (completo).....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 " each.
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 " "

Blackboard Chalks, 20 cents per box, (1 gross); Slate Pencils, 7 cents per box, (100).

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, " "	For boys only.	" No. 7, "
	" No. 4, " "		" 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.—		Grecia Antiqua	$1.20 each.
Orbis Veteribus Notus	$1.20 each.	Asia Minor Antiqua	1.20 "
Italia Antiqua	1.20 "	Orbis Romanus	1.20 "

HISTORY.

Hodgins' School History of British America 25 cts. each.
Curtis' Chronological Outlines of Eng. History 6 "

For use in adv. Com. Schools.
- Collier's School History of the British Empire (Revised Edition) ..... 20 "
- Collier's History of Rome ..... 15 "
- Collier's History of Greece ..... 15 "

For use in Co. Academies.
- Smith's Smaller History of Rome ..... 35 "
- Smith's Smaller History of Greece ..... 35 "

Chambers' Ancient History ..... 25 "

NATURAL SCIENCE.

Chambers' Chemistry, (with new notation) .....35 cents each.

ECONOMIC SCIENCE.

The Chemistry of Common Things....15 cents each.

CLASSICS.

Latin,—Bryce's First Latin Book,.....20 cts. each.
Bryce's Second Latin Book.....35 "
Edinburgh Academy Latin Grammar..20 "
or, Bullion's Latin Grammar.....50 "
Arnold's Latin Prose Composition.....60 "

AUTHORS—OXFORD EDITIONS.

CÆSAR, de Bello Gallico, *paper*, 20 cts.: *bound*, 25 cts.: Lib. I.—III. (with short notes), 1 vol., *paper*, 10 cts.

VIRGIL, (complete), *paper*, 20 cts.: *bound* 25 cts.: the Georgics (with short notes), 1 vol., *paper*, 20 cts.: the Æneid, Lib. I.—III. (with short notes), *paper*, 10 cts.

CICERO, de Off., de Sen., de Amicit., 1 vol., *paper*, 15 cts.: *bound*, 20 cts.: de Sen., and de Amicit., 1 vol., (with short notes,) *paper*, 10 cts.: Oration for the Poet Archias, (with short notes,) *paper*, 10 cts.

HORACE, (complete), *paper*, 15 cts.: *bound*, 20 cts.: the Odes, (with short notes), *paper*, 20 cts.

DICTIONARY.

White's Junior Scholar's Latin-English Dictionary....93 cts. each.

Greek,—Bryce's First Greek Book,.....25 cts. each.
Bryce's Second Greek Book.....35 "
Bullion's Greek Grammar.....55 "
or, Edinburgh Academy Greek Grammar, 35 "
Arnold's Greek Prose Composition.....55 "

AUTHORS—OXFORD EDITIONS.

XENOPHON, Anabasis, *paper*, 15 cents: *bound*, 20 cts.
EURIPIDES, Alcestis, (with short notes), *paper* 10 cts.
XENOPHON, Memorabilia, *paper*, 10 cts.: *bound* 14 cts.
HOMER, Iliad, (complete), *paper*, 30 cts.: *bound*, 35 cts.: Lib. I.—III. (with short notes), 1 vol., *paper*, 20 cts.

LEXICONS.

Liddell & Scott's Greek-English Lexicon (abrgd.).....$0.93 each.
Yonge's English-Greek Lexicon..... 1.06 "

FRENCH.

DICTIONARY.

Contanseau's French-English and English-French Dictionary..$0.43 ea.

* The Council of Public Instruction has authorized the preparation of a General Geography, and an English Grammar for use in the Public Schools, and until these works are published the Superintendent of Education *will not procure any text-books on these subjects.* In the mean time, Trustees are authorized by the Council to use whatever Geography or Grammar they prefer. Campbell's or Lovell's Geography will be found to be about the best; and Lennie's Grammar, if followed by Morell's Analysis, will, perhaps, give as good results as any.

VIII. The Provincial Normal School.

FIRST TERM begins on the second Wednesday in November, and closes on the Friday succeeding the last Thursday in March.

SECOND TERM begins on the second Wednesday in May, and closes on the Friday succeeding the last Thursday in September.

*** Students cannot be admitted after the first week in each term, except by the consent of the Principal.

FACULTY OF INSTRUCTORS.

NORMAL COLLEGE.

Method, and the Natural Sciences:—REV. ALEXANDER FORRESTER, D.D. Principal of the Normal College and Model School.
English and Classics:—J. B. CALKIN, ESQ.
Mathematics:—W. R. MULHOLLAND, ESQ.
Music and Drawing:—MISS L. HAYES.

MODEL SCHOOL.

High School Department, MR. EDWARD BLANCHARD.
Preparatory " MR. JAMES LITTLE.
Senior Elementary " MISS LOGAN.
Junior do. " MISS A. LEAKE.
Janitor:—MR. DODSON.

None but holders of valid licenses will be admitted to the Normal School as pupil-teachers. The licenses must be presented to the Principal at the opening of the Term.

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."

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."

IX. 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* 1866, *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 Secretary.*] (*Seal*) [*Names of Sureties.*] (*Seals*)
[*Name of Witness.*]

WE, THE SUBSCRIBERS, two of Her Majesty's Justices of the Peace for the County of ———— do certify our approbation of ———— (*names of Sureties,*) within named, as Sureties for the within named———— (*name of Secretary,*) and that they are to the best of our knowledge and belief persons of estate and property within the said County of ———— and of good character and credit, and sufficiently able to pay, if required, the penalty of the within bond. Given under our hands this day of A. D. 186 [*Names of Magistrates.*]

X. List of Inspectors.

J. R. Miller	Halifax.
Rev. D. M. Welton, M A	Windsor.
William Eaton	Kentville.
Rev. G. Armstrong, M. A	Bridgetown.
Rev. P. J Filleul, B. A	Weymouth.
G. J. Farish, M. D	Yarmouth.
Rev. W. H. Richan	Barrington.
Rev. D. O. Parker, M.A	Liverpool.
W. M. B. Lawson	Lunenburg.
H. C. Upham	Great Village.
F. W. George, M.A	Amherst.
M. T. Smith	Pictou.
Rodk. McDonald	Antigonish.
S. R. Russell	Guysboro'.
James Macdonell	Port Hood.
C. R. Macdonald	Baddeck.
Edmund Outram, M. A	Sydney.
W. R. Cutler	Arichat.

TEACHERS WANTED.

Wanted a FIRST CLASS MALE TEACHER for a third grade department, in the Public Schools in the town of Pictou, to engage from 1st May, next. Salary, $400. Apply to the subscriber.

By order of the Trustees,
ROBERT DOULL.

THE Trustees of Section No. 1, Sydney, C. B., desire to engage a First Class Male Teacher. Services to begin on 1st May. Salary $280, exclusive of Provincial Grant.

Applications, accompanied with testimonials of character and capability, will be received until the 31st day of March next, by

C. H. HARRINGTON,
Sydney, February, 1868. *Secretary to Trustees.*

APPLICATIONS will be received from Male Teachers of the first class, to teach the Advanced Department and oversee the Elementary Department of the public school of Weymouth. None but competent teachers need apply,—holders of provincial licenses preferred. A good salary will be given. Services to begin May first. The Trustees are prepared to compete for the Superior Grant. Address, stating terms,

C. D. JONES,
February, 1868. *Secretary to Trustees, Weymouth.*

A SECOND CLASS MALE TEACHER. Salary $80 for the Summer Term, exclusive of Provincial Grant. Board can be obtained for about $2 a week. Address,

JOHN CONOLLY,
Sec'y. to Trustees French Village, St. Margaret's Bay.

By the Trustees of Section No. 24, St. Mary's River, County of Guysboro', a Female Teacher of the Second Class. Services to begin May 1. Apply, stating terms, to

WM. PRIDE, ESQ,
Secretary Trustees St. Mary's River, Co. Guysboro'.

A Second Class Female Teacher for School District No. 34, Loading Ground, South Pictou. School to open first of May next. Applications, addressed to any of the Trustees, will receive prompt attention.

GEORGE W. FRASER,
WILLIAM DUNBAR,
ALEXANDER FRASER. } *Trustees.*

Loading Ground, South Pictou, March, 1868.

SCHOOL DESKS.

THE undersigned is prepared to supply School Trustees with the improved School Desks recommended by the Council of Public Instruction for use in the Public Schools throughout the Province.

The desks and chairs are made of thoroughly seasoned oak and ash, and the standards or supports are made of iron. The desks are finished in oil, and the chairs are varnished.

The following scale will furnish any needed information, as to sizes, &c. The prices attached are for one desk and two chairs:

Age of Pupils.	Height of Chairs.	DOUBLE DESKS. Height of side next to Pupil.	Length.	Width.	Space betw'n desks for chairs.	Prices.
5 to 6 years.	11 inches.	21 inches.	36 inches.	12 inches.	14 inches.	$4 00
6 to 8 "	12 "	22 "	39 "	13 "	15 "	4.25
8 to 10 "	13 "	23 "	42 "	13½ "	15½ "	4.50
10 to 12 "	14 "	24½ "	44 "	14 "	16 "	4.75
12 to 14 "	15 "	26 "	46 "	14½ "	16½ "	5.00
14 to 17 "	16 "	27½ "	48 "	15 "	17 "	5.25
17 "	17 "	29 "	48 "	16 "	17 "	5.50

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

Desks and chairs (with screws) packed and delivered on board the cars, steamer, or packet at WINDSOR, at the above prices. Terms cash on delivery. Trustees wishing to procure desks should send in their orders as early as possible. Specimen desks and chairs may be seen at the EDUCATION OFFICE, Province Building, Halifax. Address,

EDWARD CURRY,
Windsor, N. S.

JAN. NOW READY. 1868.

Demy 8vo Price $2.00

THE

TEACHER'S TEXT-BOOK,

BY

REV. ALEXANDER FORRESTER, D. D.,

Principal of the Provincial Normal School.

A. & W. MACKINLAY,
Publishers.

The undermentioned gentlemen have kindly consented to act as Agents for Dr. Forrester's work on Education. Supplies of the book are now being forwarded to each, and subscribers can obtain their copies on application. Subscription price $2.00:—

Rev. George Armstrong.....Annapolis Co.
Rev. P. J. Filleul.....Digby Co.
Dr. Farish.....Yarmouth Co.
William B. Lawson, Esq.....Lunenburg Co.
James McDonnell, Esq.....Inverness Co.
S. R. Russell, Esq.....Guysboro' Co.
C. R. McDonald, Esq.....Victoria Co.
Rev. E. McCurdy.....Musquodoboit.
W. R. Cutler, Esq.....Richmond Co.

MAY DISTRIBUTION.—COLCHESTER COUNTY.

ORDERS on the County Treasurer, and the Provincial Grant to Teachers, will be disbursed at Truro, on TUESDAY, May 26th, at Tatamagouche, on THURSDAY, May 28th. H. C. UPHAM, *Inspector.*

Books for School Teachers.

COMMON SCHOOL EDUCATION, By Currie.
EARLY AND INFANT SCHOOL EDUCATION, By Currie.
For sale by A. & W. MACKINLAY.

The Journal of Education,

Published monthly, under authority of Act of Parliament, and furnished gratuitously to Trustee-Corporations, and to Teachers as specified in Sect. 6 (15) of the law concerning public schools.

Any person not entitled to a copy free of charge, will have the *Journal* sent to his address on payment of $1.00 *per annum*, in advance. The Inspectors in the several Counties are authorized to receive subscriptions.

The number of copies required for distribution to Trustee-Corporations and to Teachers entitled to receive them, will be forwarded to the Inspectors. Subscribers will receive their copies direct from Halifax.

Trustees will file and preserve this *Journal* as the property of the section they represent, to be handed over to their successors in office. Each number should be properly stitched and cut open before being read.

Teachers wishing situations will have the privilege of inserting a brief advertisement (class of license, experience, references, salary, and address,) for one month, free of charge. Trustees in want of teachers will be allowed a similar privilege.

A limited number of advertisements in connection with education and kindred subjects, will be inserted at 20 cents a line for the first and 10 cents a line for each subsequent insertion.

Communications to be addressed EDUCATION OFFICE, HALIFAX, N. S.

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