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THE  
**JOURNAL OF EDUCATION**

FOR

**ONTARIO.**

EDITED, UNDER THE DIRECTION OF THE  
**REVEREND EGERTON RYERSON, D.D., LL.D.,**  
*CHIEF SUPERINTENDENT OF EDUCATION.*

BY

**J. GEORGE HODGINS, LL.D., BARRISTER-AT-LAW,**  
*DEPUTY SUPERINTENDENT.*

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## THE RECENT EXAMINATION OF TEACHERS.

*To the Editor of the Journal of Education.*

SIR,—The answers given to the first-class papers in Algebra and Natural Philosophy, at the recent examination for teachers' certificates, are such as to call, in my opinion, for some remark. I have added to this letter a few notes, in which I show how to solve all the questions proposed, except one or two, which are of a very simple character.

The answers to the questions in Algebra are, on the whole, a signal failure. I do not think that any person, who is competent to pronounce a judgment, will say that the Algebra paper is too difficult. With the exception of the last problem—which was not taken into account in fixing the total value of the paper, but was introduced for an important purpose, mentioned below—it contains nothing which does not lie directly in the line of familiar Algebraical principles, or which a candidate for a first-class certificate ought not to be able to solve off-hand. The notes which I have appended will show how easy the questions are to a moderately qualified student; yet not one of the candidates who presented themselves at the recent examination for first-class certificates is entitled to 60 per cent. of the total marks; and the great majority of them fall very far below that point.

I regret to say that the ladies have been particularly unsuccessful in this department. There were 21 female candidates for first-class certificates—20 of them being Normal School

students—and none of them obtained 40 per cent. of the marks assigned to the Algebra paper; 18 out of the 21 fell below 30 per cent., 13 out of the 21 were under 20 per cent., and 7 out of the 21 were under 10 per cent. It may perhaps be said that this extraordinary record proves the paper to have been too difficult; but I deny that this is the case. I appeal to the notes below, as proving that the questions, though they may perhaps not be of a kind to suit mere rule-of-thumb Algebraists, are really simple to those who have an intelligent apprehension of the elementary principles of the science.

In Natural Philosophy one gentleman answered with substantial accuracy, though with occasional imperfection of expression, all the questions proposed, except one where he was partially wrong. A considerable number of other gentlemen made a creditable appearance in this branch; but I am obliged to say that the papers of the ladies in Natural Philosophy were, for the most part, like their papers in Algebra, a signal failure. Ten ladies, out of twenty-one who competed, failed to get more marks than were assigned to the correct answer of a single question.

Here, again, it would be ridiculous to say that the paper is too difficult for first-class teachers. The solutions, given in the notes appended, will show that the paper is really a very easy one—that is, to a person who knows anything of the principles of Natural Philosophy, and has not merely got up some rules by rote. But as it is not unlikely that the cry of *difficulty* may be raised, I will state two facts which should be conclusive. The first question on the paper asks how the velocity of a moving particle is estimated, when the velocity is not uniform. Only one lady out of twenty-one answers this clearly and correctly; two others give ambiguous answers; the rest give no answer, or an answer which is decidedly erroneous. This fact, of course, means that 20, or at least 18, out of the 21 female candidates for first-class certificates, are ignorant of the science of Dynamics. Again, the fourth question asks:—what power will sustain a weight of 40 lbs. in a system of two moveable pulleys, where each pulley hangs by a separate string, the weight of the pulleys (each of which weighs 2 lbs.) being taken into account? Inability to answer this question means ignorance of the elementary principles of Statics; and yet the question was answered by only four ladies out of twenty one.

I have sometimes doubted whether it is desirable to make the study of Algebra and Natural Philosophy, any more than that of Geometry, compulsory on female teachers. I do not question the ability of ladies to learn these branches; but ought they to be required, in the present state of female education throughout the Province, to do so? Would it not be better to grant first-class certificates to female teachers, if they had the necessary attainments in other branches, and in the event of their passing a successful examination in Algebra and Geometry, and Natural Philosophy, to add this to their certificate as a circumstance which would enhance the value of the certificate? One advantage of such an arrangement would be that those ladies who wished to study Natural Philosophy, might be required to prepare themselves for doing so by a previous course of Geometry as well as of Algebra; and the master, whose duty it is to teach Natural Philosophy in the Normal School, would be delivered from the hard and (in some respects) impracticable task of giving instruction in this science to a class, one-half of the members of which have no acquaintance with the elements of Geometry. I have no desire to make rash changes. I only throw out an idea which has frequently occurred to me, and which the recent examination has forcibly revived.

The Principal and masters of the Normal School have become satisfied that new arrangements are necessary to render that Institution thoroughly efficient; and, acting on their representation, the Chief Superintendent and the Council of Public Instruction have framed regulations as to the entrance examination to the Normal School, and the curriculum to be pursued, which I have no doubt will have a very beneficial effect.

I am, sir,

Your obedient servant,

GEORGE PAXTON YOUNG,

Toronto, 13th Jan., 1872.

Chairman of Central Committee.

#### ALGEBRA.—First Class.

1. The first question in the Algebra Paper, though simple and even elementary in its character, was correctly answered by a comparatively small number of the candidates. The expressions, whose product is to be found, may be written in the forms,

$$(x^2 - x - 1)\sqrt{-1} - (x^2 + 2x - 1),$$

$$(x^2 - x - 1)\sqrt{-1} + (x^2 + 2x - 1).$$

The product of these is,  $-(x^2 - x - 1)^2 - (x^2 + 2x - 1)^2$ . Expand and arrange according to the powers of  $x$ , and the required result is obtained.

2. Very few of the candidates answered the second question in the Algebra Paper. I am at a loss to understand what puzzled them. Divide every term by  $x^n$ . Then

$$x^{m-n} - (a^2 - b^2) = 4ab \frac{m-n}{2},$$

a quadratic which can be solved by the ordinary rules.

3. Most of the candidates solved the equation in the third question, finding  $x = \frac{5}{4}$ . But not many succeeded perfectly in showing that this value of  $x$ , when substituted in the given equation, satisfies the equation. In fact, the substitution gives us

$$\sqrt{\frac{9}{4}} - \sqrt{\frac{1}{4}} = 2.$$

Now  $\sqrt{\frac{9}{4}}$  has two values,  $+\frac{3}{2}$  and  $-\frac{3}{2}$ ; and  $\sqrt{\frac{1}{4}}$  has two values,  $+\frac{1}{2}$  and  $-\frac{1}{2}$ . We require to take the former value of the first expression along with the latter value of the second, thus:

$$\frac{3}{2} - (-\frac{1}{2}) = \frac{3}{2} + \frac{1}{2} = 2.$$

4. The fourth question was correctly answered by the majority of the candidates.

5. The fifth should have presented no difficulty to a candidate for a first-class certificate; but, out of thirty-eight papers which I have examined, only one, that of Mr. J. Derness, contains a perfectly correct answer. Let  $r$  be the common root. Then

$$r^2 + pr + 3 = 0$$

$$r^2 + (p-10)r - 7 = 0.$$

$$\therefore 10r + 10 = 0 \text{ and } r = -1.$$

Hence, from the first of the given equations  $p = 4$ . Divide  $x^2 + 4x + 3$  by  $x + 1$ , and we get  $x + 3$ . Therefore the second root of the first equation is  $-3$ . The second root of the second equation is found in the same way.

6. A considerable number of the answers to the sixth question were unsatisfactory. Many of them gave me the impression that the candidates were trying to remember something they had met

with in their text-books, but had never understood. As the question is book-work, I need not give the solution here.

7. Only one of the papers which I have examined, that of Mr. W. G. Carson, contains a correct solution of the seventh question. The following is Mr. Carson's solution, E is the middle point of AC, and D of BC:

$$\frac{x}{2m} = \text{P's time from A to E.}$$

$$\frac{x}{m+1} = \text{P's time from E to D.}$$

$$\frac{x}{2m} + \frac{x}{m+1} - 1 \frac{1}{2} = \text{time Q travels to D.}$$

$$\frac{x}{2m} + \frac{x}{m+1} - 1 \frac{1}{2} = \text{time of Q from D to C.}$$

$$\frac{x}{2(m+1)} = \text{P's time from D to B.}$$

$$\frac{x}{2(m+1)} - \frac{3}{10} = \frac{\frac{x}{2m} + \frac{x}{m+1} - 1 \frac{1}{2}}{3}$$

$$\frac{x}{2(m+1)} = \frac{x}{6m} + \frac{x}{3(m+1)} - \frac{1}{4}$$

$$3mx = mx + x + 2mx - m^2 - m$$

$$x = m(m+1).$$

8. As Mr. Carson's papers are open before me, I may give his solution of the eighth question also. He takes  $v$ ,  $x$ ,  $y$  and  $z$  as the numbers sought.

$$xyz = 1, \quad xyz = 8, \quad yzv = 27, \quad vxz = 64$$

$$(xyz)^3 = 14824, \quad vxyz = 24$$

$$vxy = 1.$$

$$\therefore z = 24.$$

$$vxyz = 24, \quad yzv = 27, \quad x = \frac{3}{5}.$$

$$vxyz = 24, \quad vxz = 64, \quad y = \frac{3}{5}$$

$$vxyz = 24, \quad xyz = 8, \quad v = 3.$$

9. The following solution of the ninth question is from the papers of Mr. Derness. Every number, or any number  $n$ , when divided by 3 will give a quotient without a remainder, or with either 1 or 2 as remainder.

$$n = 3q$$

$$\text{or } 3q + 1$$

$$\text{or } 3q + 2.$$

$$\therefore \text{1st. } -n^2 = 9q^2$$

$$\text{2nd. } -n^2 = 9q^2 + 6q + 1$$

$$\text{3rd. } -n^2 = 9q^2 + 12q + 4.$$

Evidently the first is divisible by 3. In the 2nd the first two terms are divisible by 3; therefore if we add 2 to the third term, it renders it divisible. In like manner it can be shown that the third is divisible by adding 2 to 4, equal to 6 [which] is divisible by 3.

10. The tenth question has not been solved by any of the candidates whose papers I have yet examined. Where is the difficulty? Let  $2x$  = rate required, and  $y$  the distance between A and B. Then

$$y \left\{ \frac{1}{2x+4} + \frac{1}{2x-4} - \frac{1}{x} \right\} = \frac{39}{60},$$

$$\text{and } y \left\{ \frac{1}{3x+4} + \frac{1}{3x-4} - \frac{2}{3x} \right\} = \frac{8}{60}.$$

Eliminate  $y$ , and the result is a pure quadratic, giving  $2x = 6$ .

11. The eleventh question, as being somewhat peculiar, I did not take into account in fixing the total value of the paper; so that its presence in the paper could be an injury to no candidate, though it might be of service to some. It has not been solved by any of the candidates whose papers I have yet examined. I gave it for the purpose of exemplifying a method which is of the greatest use in Algebra. It is easily seen that the law, which has to be established, holds for a certain number of terms. For instance, it is true when the series consists of only one term, or when it consists of two terms; for  $1^2 = 1^3$ , and,  $(1+2)^2 = 1^3 + 2^3$ . Now, when a law has been ascertained to hold good for a certain number of terms, how do we proceed to show that it holds universally? In this way: assume that it has been found to hold for  $(n-1)$  terms. Then prove that it holds also when  $n$  terms are taken. If this can

be done, it must hold whatever number of terms be taken. In the case before us, assuming the law to hold for  $(n - 1)$  terms, let

$$1 + 2 + \dots + (n - 1) = s,$$

$$1^3 + 2^3 + \dots + (n - 1)^3 = S. \text{ Then}$$

$$(1 + 2 + \dots + n)^2 = (s + n)^2 = s^2 + 2ns + n^2.$$

But, by hypothesis,  $s^2 = S$ . Also,  $s = \frac{n(n - 1)}{2}$ . Therefore

$$(1 + 2 + \dots + n)^2 = S + n^2(n - 1) + n^2 = S + n^3$$

$$= 1^3 + 2^3 + \dots + n^3.$$

NATURAL PHILOSOPHY.—First Class.

1. I ask particular attention to the first question, because a large number of the papers which I have read—not less than fifty per cent.—exhibit the most indistinct and erroneous ideas in regard even to so elementary and fundamental a matter as the mode of estimating the velocity of a moving particle, whose velocity is not uniform. The following answer, by Mr. John F. Maclaren, is correct: "The velocity of a moving point, when the velocity is not uniform, is estimated by finding the space through which the point would move in a certain unit of time, were it to keep the same velocity throughout that unit of time, which it had at the beginning of it."

2. The second question presents no difficulty.

3. Very few correct answers have been given to the third question; and none are as simple as they might have been. Let H be the highest point to which the first particle rises, and P the point where, in its descent, it meets the second particle ascending. Then, as the one particle is a second ahead of the other, a second is occupied with rising from P to H, and again falling from H to P. But the times of rising and falling are equal; therefore, it takes half a second to fall from H to P, and therefore HP = 4 feet. But the height of H above the ground is 1600 feet. Hence P is 1596 feet above the ground.

4. The fourth question is easy book-work.

5. Almost all the gentlemen, whose papers I have read, have answered the fifth question correctly; but it has been answered by only three ladies out of twenty. This, as I have observed above, is a significant fact. The problem is of the simplest character. Can any one, who understands the elements of Statics, fail to perceive that the weight being 140 lbs., and the pulley to which it is attached weighing 2 lbs., the tension of the string passing round that pulley must be  $\frac{1}{2}$  or 21? In like manner the tension of the string passing round the second pulley must be one-half of  $(21 + 2)$ , that is, it must be  $11\frac{1}{2}$ .

6. The following is the answer given to the sixth question by Mr. J. G. Hands.

Weight of flask =  $y$   
 Weight of air =  $y - x$   
 Weight of water in vacuo = weight of flask and water, minus weight of flask, plus weight of air displaced  
 =  $w - y + y - x = w - x$ .

$$\therefore \text{Specific gravity of air} = \frac{\text{weight of air}}{\text{weight of water}} = \frac{y - x}{w - x}$$

The question was correctly answered by almost all the other gentlemen, whose papers I have read, and by four ladies out of twenty.

7. The seventh and eighth questions are book-work.

8. The ninth question is solved with substantial accuracy by several gentlemen, though all the solutions which I have read contain defects of expression. From CA cut off CF = AE. Join BF, DF. Then BEDF is a parallelogram. The resultant of the forces EB and ED is EF. We have, then, acting on the particle at E, the following forces:

In the direction EA, --- a force represented by EC.

In the direction EC, --- a force represented by EA, together with a force (the resultant of EB and ED) represented by EF.

But EA and EF, which are equal to CF and EF, are equal to EC. Therefore the particle at E is kept at rest.

9. The following solution of the tenth question is from the papers of Mr. J. G. Hands:

The weight upon which the force of gravity acts is only 2 lbs.; 10 lbs. of B being counterbalanced by A. But the weight to be set in motion is  $10 + 12 = 22$ , the sum of A and B. Hence

$$\text{Velocity} = \frac{2}{22} g,$$

that is  $\frac{1}{11}$  th of the velocity produced by gravity upon a particle moving freely.

General formula---

$$\text{Velocity of A and B} = \frac{A - B}{A + B} \times g.$$

[Mr. Hands, in this last line, has written A - B for B - A, manifested by oversight. Other gentlemen have given the numerical value of the result, obtained by putting 32 for  $g$ , namely,  $2\frac{10}{11}$ . One gentleman, Mr. Derness, correctly remarks that this problem contains the principle of Attwood's machine.]

To the Editor of the Journal of Education.

SIR,—The prepared answers of the following questions in the recent examination papers on Arithmetic were wrong:—

Divide £4,762 15s. 9½d. by 300. Ans.—£15 17s. 6¼d. (Question 1, III. Class). A coal dealer bought 784,000 lbs. of coal at \$4.50 per ton (2,340 lbs.), and sold 524,500 lbs. at \$5.50 per short ton (2,000 lbs.), and the balance at \$4.20 per short ton. Find his whole gain? Ans.—\$412.32½. A circular fish pond of 90 feet radius is surrounded by a walk 25 feet wide. Find area of the walk? Here the radii are 90 and 115, then sum of radii multiplied by their difference = 5,125, which multiplied by 3.1416 gives the required area. (Question 12, II Class). The above questions are so very simple that the errors in the given answers would be detected at once, and I am safe in saying that the candidates would suffer no injustice, because, if a candidate's answer does not agree with the given answer (even if correct), the Examiner is bound to read the proffered solution, and to allow for accuracy of reasoning whilst deducting for inaccuracy of result. No one correctly solved the following question, No. 4, I. Class:—City of Toronto 6 per cent. Debentures, having six years to run, are offered for sale. What price shall I pay in order to realize 10 per cent. on my investment? Now the amount of \$100 for 6 years at 6 per cent. is  $100(1.06)^6$ , which must equal the amount at 10 per cent. for 6 years, of the price paid—hence, for every \$100, I should pay  $100 \times \left(\frac{1.06}{1.1}\right)^6$ .

Only two or three candidates (students of the Normal School, I believe), solved the following question (6th, Class I.):—A man bought a farm for \$5,000, and agreed to pay principal and interest (6 per cent.) in four equal annual payments. Find the annual payment? Most of the candidates that attempted the solution of this question, found the amount, at compound interest, of \$5,000, and divided that amount by four for the annual payment, thus proceeding on the false principle that an annual payment of \$100 (6 per cent. interest) will amount to \$400 in 4 years. They should have found what annual payment continued 4 years will give the amount of \$5,000 for 4 years. I need hardly say that compound interest is the only correct principle to employ in the solution of the last two questions.

The 6th question in 1st Class Book-keeping paper, the solution of which has been declared "impossible," is as follows:—

What is meant by averaging an account? What is the balance of the following account, and when is it due?

JOHN SMITH.

1871.	Dr.	1871.	Cr.
March 1...	To Sundries.....	\$436 00	March 25...By draft at 60
April 12...	Goods .....	548 00	days .....
July 16...	" .....	312 00	April 6...By draft at 30
Sept. 14...	" .....	536 00	days .....
			June 20...By cash.....
			Aug. 3....." .....
			84 00

Solution of the above by Mr. McColl.

Averaging an account is finding at what time several debts due at different dates might be paid without loss to either party, or at what time an account would properly begin to draw interest.

The balance of the account is \$1,832 - \$1,334 = \$498. Assuming March 1st as date of reference we have:—

Dr.	Cr.
\$436 × 0 = 0	\$400 × 87 = 34800
548 × 42 = 23016	650 × 69 = 44850
312 × 137 = 42744	200 × 111 = 22200
536 × 189 = 105592	84 × 155 = 13020
	(Days of grace allowed.)
	114870
171352	
114870	

Balance..... 498) 56482(113 days from March 1st = June 22nd, 1871, when the balance should be paid.

Mr. J. G. Hands gave the same solution, and Mr. J. Derness and Miss Meehan, taking September 14th as date of reference, obtained the same result. These four were Normal School students.

J. A. McLELLAN.



I. Monthly Report on Meteorology of the Province of Ontario.

I. ABSTRACT OF MONTHLY METEOROLOGICAL RESULTS, compiled from the Returns of the ten High School Stations, for NOVEMBER, 1871. OBSERVERS:—Pembroke—James Smith, Esq., M.A.; Cornwall—James H. Coyne, Esq., B.A.; Barrie—H. B. Spotton, Esq., M.A.; Peterborough—A. Burdon, Esq.; Goderich—Hugh J. Strang, Esq., B.A.; Stratford—C. J. Macgregor, Esq., M.A.; Hamilton—A. Macallum, Esq., M.A.; Simcoe—Dion C. Sullivan, Esq., L.L.B.; Windsor—J. Johnston, Esq., B.A.

Table with columns: STATION, ELEVATION, BAROMETER AT TEMPERATURE OF 32° FAHRENHEIT, TEMPERATURE OF THE AIR, TENSION OF VAPOUR. Rows include Pembroke, Cornwall, Barrie, Peterborough, Belleville, Goderich, Stratford, Hamilton, Simcoe, Windsor.

Approximation. d On Lake Simcoe e Near Lake Ontario on Bay of Quinte. f On St. Lawrence. g On Lake Huron. h On Lake Ontario. i On the Ottawa River. j Close to Lake Erie. m On the Detroit River. k Inland Towns.

Table with columns: STATION, HUMIDITY OF AIR, WINDS, NUMBER OF OBSERVATIONS, AMOUNT OF CLOUDINESS, RAIN, SNOW, A U R O R A S. Rows include Pembroke, Cornwall, Barrie, Peterborough, Belleville, Goderich, Stratford, Hamilton, Simcoe, Windsor.

a Where the clouds have contrary motions, the higher current is entered here. Velocity is estimated, 0 denoting calm or light air; 10 denoting very heavy hurricane. REMARKS. PETERBOROUGH.—On 9th, at about 5.23 p.m., large irregular track of fog. SNOW.—On 2nd, 3rd, 8th, 11th, 14th, 16th, 18th, 21st-24th. CORNWALL.—On 9th, brilliant aurora—at 6 p.m. the whole northern over the canal. HAMILTON.—On 9th, from half-past five to six p.m. a remarkable display of bright crimson light in the N. and N.W. WINDSOR.—On 9th, from half-past five to six p.m. a remarkable display of bright crimson light in the N. and N.W.

15th, 24th, 26th. Month unusually dark, inclement, unseasonable, and cold,—the coldest November ever known here. Winter closed in unusually early. Lakes and rivers lower than ever known in consequence of continued dry weather. None of the usual fall rains. Great scarcity of water in wells and springs through the country.

**BELLEVILLE.**—On 8th, between 7 and 8 p.m., the sky to S. and S.W. crimson; but on 9th, after sunset, the whole N. sky overspread with a bright red glare. Strong gales, with heavy rains, 14th and 15th, depth 2.364 inches, but the ground was so parched that the Moira showed no perceptible rise. Great difficulty experienced through town and country in procuring water, “the oldest inhabitant” not remembering so long continued a drought. Very low temperature on 30th. Snow, 10th, 16th, 24th, 29th. Rain, 1st, 2nd, 10th, 14th, 15th, 20th.

**GOBBRICH.**—On 15th, wind storm. Snow, 13th–15th, 26th–30th. Rain, 2nd, 9th, 10th, 13th–15th, 26th.

**STRATFORD.**—On 9th, mill-pond frozen 23rd, lunar circle. Wind storms, 14th, 15th, 16th. Fog, 18th. Snow, 9th, 10th, 14th, 15th, 21st, 22nd, 24th, 28th. Rain, 10th, 14th, 16th, 21st, 26th. Difference of mean monthly temperature, from average of ten years, was  $-7^{\circ}.02$ . Scarlet fever prevalent and fatal.

**MILLTON.**—On 8th, meteor E.,  $45^{\circ}$  high, fell S. at 8.45 p.m. 9th, at 5.45, N. sky brilliantly lighted by a grand display of aurora of a crimson color; streamers faint of same color; all disappeared about 6.45, afterwards there appeared a faint aurora of the ordinary color. Wind storms, 4th, 7th, 15th, 15th, 20th, 24th, 26th. Weather on the whole pleasant, but at the close of the month an unprecedented cold set in. The temperature fell to  $8^{\circ}9$  below zero. Snow to depth of 8.29 inches fell.

**SIMCOE.**—Wind storms, 9th, 10th, 14th. Snow, 19th, 20th–24th, 28th, 20th. Rain, 4th, 10th, 11th, 14th–16th, 20th, 27th. A very gloomy month, with lowering sky, but little precipitation. Unusually cold and cheerless. Sickness in town and neighbourhood,—diphtheria prevalent and extremely fatal.—the epidemic threatens to close the school.

**WINDSOR.**—Wind storms, 14th, 15th. Snow, 14th, 22nd, 24th, 28th. Rain, 9th, 13th, 14th, 19th.

2. METEOROLOGICAL OBSERVATIONS.

Mr. Thomas D. King writes a very excellent letter to the *Montreal Daily News*, urging the necessity for a system of meteorological observations throughout Canada, and pointing out their value to those engaged in commerce, navigation and agriculture, as well as to those who are charged with looking after the sanitary affairs of the country. He points out several phenomena over which the wise men of the country are just now puzzling themselves, but which they can furnish no satisfactory explanations, owing to the lack of data which a series of observations extending over the whole country and through a number of years would probably supply. The observant can scarcely have failed to notice the peculiar features which have characterized the seasons at intervals for years past, each more or less marked, yet for want of a reliable, systematic, aggregated record of these phenomena by which the effect could be traced to its cause with some degree of certainty people know now almost as little concerning them as they ever did. True, they know that such things had been, and they may even have noticed that each had produced its peculiar effects, but to trace them to their several causes, to predict the recurrence of any of them, or to describe the signs by which their respective comings or goings are indicated, is as much an unsolved problem with ninety-nine out of every hundred of the inhabitants of the country as it ever was, and is likely to continue to be unless some systematic plan of collecting and preserving the necessary information is adopted.

Says a writer, “When the fall of rain is less than the average, springs become dry, and rivers low, and milling operations dependent upon our streams are at a stand still, and when the fall is excessive it has an injurious effect on the sanitary condition of the people, as well as a damaging effect on the country at large;” but how are we going to predict either condition with sufficient accuracy to guard against its effects unless we know its causes. Mr. King says, and truly so, that “whatever causes produce the diminution of the rain-fall, they cannot be solved solely on theoretical considerations. It is only from long series of exact and methodically grouped observations that indisputable results can be obtained; but unfortunately such observations are so few in number and extend over such comparatively short periods in Canada, that it might almost be said we know nothing practically of the science of meteorology.”

To pave the way for future amendment, and it is high time that some steps in that direction were taken, Mr. King suggests that “observations be at once commenced in order to set forth the advantages that would result from the pre-announcement, at the right time, of the approach of bad weather. Let the pupils of our Normal Schools and the students in our colleges, under the direction of a master, daily take meteorological observations, to be published in the *Journals of Education and Practical Agriculture*.” He says: “the reception, accorded by our maritime populations, of the warnings furnished them by the public observatories of Europe and America causes us to foresee the time at hand when our farmers and mariners will claim similar attention from the solicitude

of our Ministers of Agriculture and Marine.” In an article published a few days ago we pointed out the value of a system of meteorological observations, also the means by which such a system could be put in operation, which we strongly urged upon our authorities. We agree with Mr. King that the pupils of the Normal schools should be taught to take meteorological observations, and, we would add, that the pupils of every common school should also be taught to do so. The importance of this class of information cannot be over-estimated; and it would be well if our educational authorities made some provision for its being introduced to our schools, as one of the branches in which every child should be required to attain a moderate degree of proficiency.\*—*Hamilton Spectator*.

\*The writer of this and other articles on the subject quite overlooks the fact that the Education Department for Ontario has had for years the most successful meteorological stations established in connection with the High Schools, and that their reports carefully collected by Mr. Marling, of the Department, are published every month in the *JOURNAL OF EDUCATION*.

II. Miscellaneous Correspondence of the Journal.

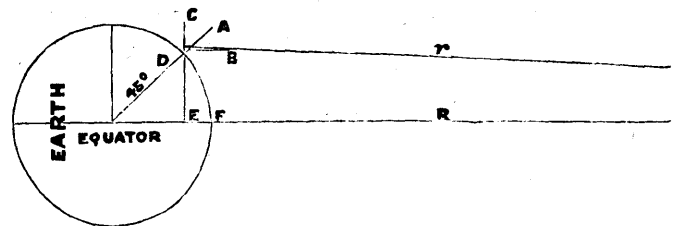
1. NEW METHOD OF FINDING THE DISTANCE OF THE SUN FROM THE EARTH.

LINWOOD, October 7th, 1871.

To the Editor of the *Journal of Education*.

DEAR SIR,—The following idea of finding the distance of the sun from the earth suggested itself to my mind over three years ago. Since that time it has been in the hands of several gentlemen of education, each of whom has pronounced the theory correct; and as I have been from time to time advised to forward it to some scientific journal, I now forward it to you, and if you deem it worthy of “being made public,” you can place it in the columns of your admirable journal.

The whole was the result of an argument I had with a party who believed not in the rotundity of the earth, and that the sun passed around the earth once in every 24 hours. In opposition to his views, I, of course, adopted the old argument, viz.: the awful velocity at which the sun would have to travel in order to wend his way, in 24 hours, around a circle 190 millions of miles in diameter. But it was of no avail. My opponent would not believe that the sun was so distant, and said, “Can you prove to me in plain figures that the sun is so far away? If you can, I will believe you; if you cannot, I will still adhere to my own theory.” This started my mind to work, and resulted as follows:—



EXPLANATIONS.—D A, a perpendicular at the point,  $45^{\circ}$ ; D B, a line of limited length, at an angle of  $45^{\circ}$  southward from A, also parallel to a perpendicular at the equator; D C, a line of limited length, at an angle of  $45^{\circ}$  northward from A, also parallel to a level at the equator; D E, the distance from the point,  $45^{\circ}$ , to the equator, cutting off the arc, D F E; r, the sun's rays falling upon the earth (time, noon), at  $45^{\circ}$ ; R, the sun's rays falling perpendicularly on the earth at the equator (time, noon). NOTE.—It is only for convenience I take the point  $45^{\circ}$ , and the time equinox. Now, it is evident that R, with its extension F E, forms a perpendicular. It is also evident that the line C E forms a base, and that the angle C E F is a right angle: therefore the sun's ray at  $45^{\circ}$ , or r, forms a hypothenuse, and therefore by a simple experiment (forming the angle C D B, C D forming a base, and being parallel to a level at the equator, and D B forming a perpendicular, and being parallel to a perpendicular at the equator), and by finding the distance from D to E, we can by simple proportion find the distance of the sun from the earth: for, the sun's ray (time, noon), striking B D at the point B will cast a certain shadow on the base, D C, and as the length of that shadow is to the whole distance from D to E, so is the altitude of the point B to the height of the sun; or let  $w$  = length of shadow cast from B D, and let  $x$  = whole distance from D to E, and  $y$  = altitude of B, and  $z$  = height of the sun, then as  $w : x :: y : z$ .  $z = \frac{x y}{w}$ , and as the values of  $w$ ,  $x$  and  $y$  can be found, therefore we can find the value of  $z$ , or height of sun.

## 2. DIOPHANTINE PROBLEM.

To the Editor of the Journal of Education.

The legs of a carpenter's square are 2 feet and 1 foot, and the hypotenuse is the square root of 5, but this root cannot be exactly found. How much then should one cut off the 2 feet and add as much to the 1 foot, so that the hypotenuse can be exactly found?

NOTE.—It is desirable to not cut more than one inch, for the question has many answers.

JOHN IRELAND, Teacher,  
S. S. No. 9, W. Garafraxa.

## 3. To the Editor of the Journal of Education.

SIR,—In the whole range of mechanical art there is nothing so interesting and instructive to either old or young as the study of the steam engine, and the properties and uses of steam. And I write to ask you whether the Department is in connection with, or can recommend me to, any artisan or philosophical instrument maker who could make for us not a flimsy, ill-fitted toy, but a really good, compact, useful model of either an upright, horizontal, oscillating, or beam engine or locomotive. I think that were such to be obtainable at reasonable rates, our Public Schools would largely patronize this department of mechanics, as probably no branch of practical study would be gone into with more zest, or would yield so much useful knowledge as an acquaintance with this most useful and extensively used and dangerous agent—dangerous only, however, when in the hands of the ignorant and untutored.

Very respectfully yours,

R. BLACKWOOD.

Waterloo, Jan. 22nd, 1872.

## 4. SUPERANNUATED TEACHERS' FUND.

To the Editor of the Journal of Education.

The determined resistance of so many teachers against that clause of the new School Act requiring them to pay \$4 a year to this fund, affords grand opportunity of knowing that teaching is not the ultimate object of the teachers in Ontario. If their ambition culminates in their present business, that resistance is incompatible with fairness, wisdom and liberality. If they want to earn a few hundred dollars to carry them through a college course in the legal or medical profession, four dollars a year is a small tax for the privilege to intrude. If they want to follow teaching till they become superannuated, they have deplorable proof in every county of the necessity for providing for old age. It would be an unfortunate conjuncture of pride, poverty and ingratitude, if teachers should, in old age and exigence, refuse to accept their own contributions so liberally supplemented by the Government grant. If a teacher should be so fortunate as to find himself independent in pocket as well as in principle, it would be a hardship for him to suffer compulsion and grumbling to rob him of his claim to liberality in giving his pension to the unfortunates of his own avocation. I fear it is not the mode of paying the money, but the four dollars themselves that is the real trouble. I believe, that in a majority of cases, there is a better moral principle evolved from objecting at once to the paying of money itself, than there is evolved from objections to modes. The new Ministry will, it is likely, be asked to "rescind the obnoxious clause." Their refusal to accede to a request so palpably injurious to the petitioners themselves, will not only evince a generous respect for the Opposition, ex-Government, passing the clause, but will be a proof that a member of Parliament cannot consistently and ideally represent everyone.

JOHN IRELAND,  
Teacher, Garafraxa.

## III. Papers on Education in Ontario, &amp;c.

## 1. WORKING OF THE NEW LAW AND REGULATIONS—EXAMPLE.

An Inspector, writing to the Department, illustrates the working of the new School law and regulations as follows. The extract is most instructive and interesting. It shows how absolutely necessary the little "outside pressure" caused by the new law has been:—

"I examined the ——— School a few days ago and sent for the

trustees - of whom two were at home and came. In my visitation report lately sent in, I had reason to speak of this school as being in an unsatisfactory state. I was pleased to see much improvement, principally in much greater accuracy in all school work, the introduction, to a considerable extent, of the new course of study. A taste for drawing is being developed. One girl showed some pencil drawings very fairly done. The present school-house is a substantial brick building, not well lighted, and furnished in the old style. From eight to ten are seated at one desk. There is great difficulty in any individual getting out, the desks being very close so as to economise room. Forty scholars might be accommodated. There were present 59, and the teacher expected 15 or 20 more soon! It is a question whether humanity would not demand that the smaller of these children be forbidden to attend school till there is room for them. You will naturally ask if this is a poverty stricken region, and if the parents of these children are prevented by insurmountable difficulties from providing comfortable school accommodation for those so dear to them. No, it is the richest rural neighbourhood in the county. Better farming lands or more comfortable and substantial buildings are not to be seen anywhere. To none of these ratepayers would the necessary tax be burdensome, and to many it would be the merest trifle. One of these opulent farmers owns and occupies the largest and most beautiful private residence (I think) in the county. Another, who in my presence promised a hundred dollars over and above his tax if a school-house were built to suit his taste, sells grapes by the ton. Both of these gentlemen are advocates for 'children's rights.'

"To teach properly in the present school-house is simply impossible if the present number of scholars attend. It is easy to picture to oneself the state of discomfort of all the inmates—teacher and scholars. There is no opportunity of cultivating the habits of mutual courtesy, which ought to be encouraged in school, in the unavoidable pressure and crowding, the less lovely instincts are in danger of being called into action. The majority of the trustees would be glad of some outside pressure that would relieve them somewhat of the responsibility."

## 2. GOVERNOR HOWLAND'S SPEECH.

From the recent speech of His Excellency Governor Howland, at the opening of the Legislature, we make the following extracts:—

"The liberal measures which the Legislature adopted at its last Session to improve our system of National Education by making the Public Schools free by law, by providing for their more efficient inspection, by giving stability to and elevating the profession of teachers, and by rendering practically symmetrical and coherent the Public and High Schools have been brought into operation, and they are likely to fulfil the most sanguine expectations of the friends of thorough and universal education.

"The demand for regular trained teachers has augmented from year to year, and the number of young persons desirous of properly qualifying themselves for the profession of teaching by a regular course of training is so largely increasing that it may be worthy of your consideration whether additional facilities should not be provided for that purpose.

"Nor less useful do I think will prove the measures of the same Session for providing, by a new School of Technology now shortly to be opened, for preparatory education of skilled men as engineers, managers and operators in the various mechanical and manufacturing establishments, and in the steamboat and railroad systems of the country. When we find these establishments are springing up and dotting our country on every side, and a network of railways is covering its surface, we should be wanting in wisdom and common prudence not to provide, as every progressive people is providing, for the scientific and practical education of classes of men to conduct these vast and important operations, and thus develop the latent and unmeasured resources of our favoured land. No maxim of civil government is more sound than that each country should provide, as far as possible by its own culture and skill, for the supply of its own wants, and the development of its own resources—and it is unquestionable that money expended to educate men for these purposes is a most profitable public investment."

## 3. COMPULSORY EDUCATION.

Canadian educationists should note the fact that education is progressing in South America, and that even there the compulsory system has been put in operation. Brazil, under the wise rule of its Emperor, who recently made a tour throughout Europe to notice the position of manufactures and trade there, has enacted a law making it in the chief province obligatory upon parents to send their chil-

dren, from the age of seven to fourteen, to either private or public schools, and such children whose parents are too poor to provide for them will be educated and clad at the public expense.

#### 4. PUBLIC SCHOOL LIBRARY—LIBERALITY.

At the annual school meeting of the rate-payers of School Section No. 2, in the village of Warkworth, township of Percy, the trustees read a communication from the Rev. Dr. Bartlett, late rector of Everley, Wilts, England, offering a sum of £25 stg. to aid in the formation of a free public school library, provided that the rate-payers would raise a similar amount. Resolutions were unanimously passed accepting the very kind offer of Dr. Bartlett, and authorizing the trustees to borrow the duplicate sum of £25. A vote of thanks, together with a copy of the resolutions, was forwarded to the Rev. gentleman by the meeting.

#### 5 THE FIRST SABBATH SCHOOL IN CANADA.

At present this subject is being discussed in several papers in the United States. We think the following letter from our old and esteemed friend, the Rev. William Smart, will settle the matter. To this gentleman belongs the honour of establishing the first Sabbath School, and to our even more aged but no less esteemed friend Adriel Sherwood, Esq., ex-High Sheriff of Leeds and Grenville, belongs the honour of being the first Sabbath School Teacher on the Continent of America. Both these worthy gentlemen, the one over 90 and the other over 80 years of age, will soon enter into the joy of the Lord, and yet many who are young and blooming with health may be called even before them. We submit Mr. Smart's interesting letter.

*For the Brockville Recorder.*

A question has been raised, and a considerable controversy is now carried on in the United States, as to who is the father of Sunday Schools in America? And when, and where they were commenced on this continent?

In addition to solving this question, in which no doubt your readers are interested, I hope you will allow a few words on the importance of Sabbath Schools to appear in the columns of the *Recorder*.

It is not to be wondered at, that the subject of Sunday Schools should take a deep hold on the public, and the religious mind in particular, and excite a very general interest, when we consider what a wide spread institution the School of the Sabbath now is. Not only in its rise, but in its amazing progress,—the astonishing results accomplished, and what it is likely to achieve in the church and in the world, in its future career of usefulness to the best interests of Society in every point of view.

For Sabbath Schools are like Leaven, they work in the whole mass of the community to raise and elevate it in intelligence and Christian character, and thus promoting the good of man, and the glory of God.

The establishment of Sunday Schools has given an impetus to education throughout the world, and awakened energy and improvement in every department of life.

From these institutions have been drawn the most active, learned, devoted, and successful missionaries and ministers of our churches, and I believe if the inquiry could be made, it would be found that even many of our practical engineers and men of science and skill in the various professions were first introduced into intellectual light in the Sunday School. Nor would it be too much to say, that even the civil constitution and laws of our country, as well as its municipal institutions, have been improved by the universal formation of Sunday Schools.

I only speak of what I know, and have seen with my own eyes in my native country; that the lower orders of the people, the peasantry, the workmen in the factories, and miners in the coal pits, were generally without education, and in a very low and debased condition, 60 years ago, before I left England.

Now, it should be borne in mind, that Sunday Schools, at their first establishment, were designed to change this state of things, by teaching the first rudiments of education to the children and youths of those families that could not attend the day school, either from poverty or from being employed on the week day. I may mention here the historical fact, that the first institution of Sunday Schools originated in the defeat of Mr. Brougham's Bill in the House of Commons to appropriate a small sum for the education of the masses of the people. The failure of this benevolent and enlightened measure opened the eyes of the Christian public. The churches took the business in hand, thousands of pious men and women came forward and gratuitously taught the population on the Sabbath; the result we all know.

In this country, from our excellent system of public common schools, where all, however poor, can receive an education, the Sabbath School has grown into an institution of religious instruction. In this point of view, their importance cannot be too highly estimated by every well constituted Christian mind, as these schools have in a great measure taken the place of family and parental instruction. On this account great conscientiousness and a sense of responsibility should rest on the minds of Superintendents and Teachers of Sabbath Schools.

I may further be permitted to remark that the reception of knowledge, and especially of religious instruction, if drawn from a right source, creates independence of mind and thought; and, bringing as we do into the Sabbath School the rich and the poor, the children of every class to sit together on the same form, learn the same blessed lessons from the same blessed book, uniting in singing the same beautiful hymn. And as the discipline of the Sunday School is confined to love, gentleness and kindness, administered with loving hearts and smiling faces.

It is in this way we break down the prejudice of ignorance and illfeeling, and thus a way is opened for the reception of divine light to illuminate the mind, and divine grace to change the heart, to save the soul from sin, and to qualify the redeemed sinner by Christ for eternal happiness in heaven.

In this way parents and children, neighbourhoods, and future generations may be blessed by the successful operations of one Sunday School.

Who can calculate the influence of Sabbath Schools, either to the world, or to the Church of God? The Sabbath School children returning home with books of the well selected library in their hands, are like so many John the Baptists, carrying the awful and interesting news to all their homes and households, "Repent for the Kingdom of Heaven is at hand."

As Sabbath Schools were unknown in Canada, (and by the *New York Evangelist* unknown in any part of America) on my arrival (1811), their astonishing increase forms one of those green and bright spots in my retrospect of now 60 years of labour and travel in this and various parts of Canada. And now at the advanced age of 83 years, I look forward,—O, I lift the veil!—Heaven opens! and behold I see a great multitude before the throne, that no man can number, clothed in white robes, and palms in their hands, and crowns on their heads, and with harps sweetly strung, they sing the praise of Him who loved them, and washed them in his own blood, and made them Kings and Priests unto God.

I see in a vision of my faith, a world redeemed, for the kingdoms of this world are become the kingdoms of our Lord and Christ for ever!

"Alleluia for the Lord God omnipotent reigneth." Am I to be charged with wildness of thought, that when this multitude unite in their song of praise to him that sits upon the throne, and to the Lamb, the voices of Sunday School children will swell the volume and pathos of their praise, "as the voice of many waters and as the voice of great thunder."

Blessed thought! That God our Redeemer so largely employs Sabbath Schools as one of the important Agents to people his kingdom, and to exalt his praise.

But to return to the question, where was the first Sabbath School in America? And who formed it?

It will be no doubt gratifying to your readers, Mr. Editor, to learn, that you can settle the question now agitating the Christian public in the United States.

The *New York Evangelist* says, "doubtless the honour belongs to the Rev. Burr Baldwin, of Montrose, Pennsylvania. He commenced his school on the 1st Sabbath in May, 1815, in the old Newark Academy, New Jersey. Mr. Baldwin it appears is still living, and in the 80th year of his age.

Now, sir, I came here, sent by the London Missionary Society, and arrived in what is now called Brockville, and preached my first sermon in the old Court House, on the 1st Sabbath in October, 1811, and organized the first Sabbath School in Canada, the last Sabbath in October, 1811, in the old Court House. Adriel Sherwood, Esq., who is still living, was the first Teacher.

The school continues to this day, and is now under the superintendency of D. Wylie, Esq., editor of the *Recorder*, and is in a flourishing state.

From this Sabbath School in Brockville, have gone into the world some of our highest officers in the administration of the Government of Canada. As also several missionaries and ministers of the gospel of our Lord Jesus Christ, some in the Province, some in the United States, and some in foreign countries. Some have gone to their everlasting rest and reward in heaven, and some are still faithfully labouring in the vineyard of the Lord.

I am now within a few months of the 83rd year of my age, and the 63rd year of my Ministry in preaching Christ as the only way

of salvation, and was thirty-seven years Pastor of the first Presbyterian Church in Brockville.

My labours, however, are now pretty nearly closed, and I am only waiting to join my beloved ones in heaven.—*Brockville Recorder*.

**PROVINCIAL SABBATH SCHOOLS.**—At the recent convention at London, the General Secretary, Rev. W. Millard, presented his Annual Report, from which we gather that it is not the present wish of this Association to organize schools, yet the Association can but rejoice in the fact that in no year has there been a greater number of new schools established. The Wesleyan Methodists report an addition of 117; Episcopalians, 29; Canada Presbyterians, 50. The increase in other branches the Secretary was unable to report. The Canada Sabbath School Union, during the last year, planted 30 schools; the Ontario Sabbath School Union, in six months, 31 schools; Hamilton, 3; showing a very great increase. It cannot be doubted that conventions, both provincial and local, have stimulated the work. Special efforts had been made to obtain statistics of Sabbath Schools in Ontario and Quebec, and 5,000 schedules were mailed to the county secretaries and others, but the result has been a failure. Almost every one reported inability to make a return. It is considered that nothing but personal application to every Sabbath School Superintendent will secure correct statistics. There has been a large correspondence between the General Secretaries and with persons in counties, who could further the cause. Several counties had not yet held conventions. Many counties had, however, and in several cases a number of counties had united. At Ottawa a meeting was held which might have passed for a Provincial Convention, and occupied four days. Much had been done in holding conventions in municipalities, particularly in Oxford, Lincoln and Welland. In Montreal the Canadian Sabbath School Union assumed the work, formerly carried on by the Sabbath School Teachers' Association. Monthly meetings were held in six of the churches. In Toronto the Sabbath School Teachers' institute were occupying most of the evenings of the week, led by the Rev. Alfred Taylor. These meetings are characterized by life, intelligence and instruction. The churches are getting together in Sabbath School work. The clergy and Diocese of Toronto met in November last, and an association was organized. The Sabbath School Association of Canada, sent a deputation consisting of Hon. J. McMurrich, Rev. Septimus Jones, Messrs. D. W. Beadle, J. Gillespie, T. Nixon, and the general Secretary. Dr. Hodgins introduced the deputation, and an address was presented to the association by the general secretary, and the Bishop most graciously replied. Progress is reported in the equipment of Sabbath Schools. In the county of Waterloo, seventeen used object and pictorial illustrations and twelve maps of Bible lands. Mayor Chisholm of Hamilton, says twelve schools in that city use object and pictorial illustrations, and 11 maps of Bible lands, and 7 out of 25 in the city use blackboards. The number of teachers' meetings for the study of lessons had greatly increased; 37 in Toronto are among these, and in Waterloo county 23 out of 25 schools reported teachers' meetings for the study of lessons. Little had been done in building special houses for Sabbath Schools. In cities and large towns alone had this been done. Libraries are general. Many counties report no contributions of money for Sabbath School Association work. Toronto gave \$252 to the funds of the Association. While no correct report could be afforded as supplied by county secretaries, from the most reliable sources, the denominational returns reach nearly 4,000 schools. There is a proportionate number of teachers and scholars. The secretary thankfully acknowledges the valuable assistance of the Hon. John McMurrich, Rev. Messrs. F. H. Marling, J. Wood, T. Griffiths, Joel Briggs, John Scott, H. Christopherson, Septimus Jones, W. C. Allen, Dr. J. George Hodgins, and Messrs. D. McLean, George Harcourt and others. The report was formally received and adopted by the convention.

#### 7. DR. RYERSON'S FIRST LESSONS IN CHRISTIAN MORALS.

**FIRST LESSONS IN CHRISTIAN MORALS;** for Canadian families and Schools. By Egerton Ryerson, D.D., LL.D., (Toronto, Copp, Clark & Co.)—Is published by authority of the Council of Public Instruction for Ontario, and so will probably find its way into the majority of our Common Schools. It is no easy thing to prepare a book of religious instruction which will be generally acceptable to the different communions represented in the schools of this country, yet the Chief Superintendent in this little book has successfully accomplished this difficult task. He has given a large amount of definite religious teaching which cannot but exercise a wholesome

influence on the pupils who receive instruction therefrom. It is not a book to be committed to memory, but rather one which the pupils may carefully read, and upon the general teaching of which they may be examined. The members of the Church will of course bear in mind that this book does not profess to be a full and complete course of instruction, and will therefore supplement its teaching by requiring their children to commit accurately to memory the Church Catechism, and giving them such explanations of this admirable summary of necessary truth that they will be well grounded in the faith, and able to give to every man a reason of the hope that is in them. If our Church people will thus train their children in those distinctive principles of the Church which have been handed down to us from the earliest days, they will find in these "First Lessons in Christian Morals" useful explanations of many practical duties which are too much forgotten in the present day. And while the children at the public schools are taught those general principles of faith and practice which all acknowledge, at their homes and in the Sunday School the parents, sponsors and teachers will give them further teaching in those divine truths which we hold dear, but which could not be expressed in a work intended for all Christian bodies in common. With this restriction we commend the work to the public, in the assurance that it will be the means of great usefulness to the children of our public schools, and that it will in no small degree meet the demands of those who have advocated religious instruction in our educational institutions.—*Church Herald*, Dec. 21st, 1871.

The object of this little treatise is to supply for our public schools a text-book containing the elements of moral and Christian truth. We have perused it with a good degree of interest and pleasure, and regard it as on the whole a safe and useful hand-book of religious instruction. There can be no doubt that it will supply a want that has long been felt in our Common School system. We rejoice that its venerable author is spared to bring forth fruit like this in a green old age; and we have good hope for the future of our country, if the minds of the rising generation are imbued with the important truths contained in this valuable little work, which gives evidence of wide research, vigorous thought, and judicious arrangement.—*Canadian Baptist*, Jan. 11th, 1872.

"This little book is one of the series of school books authorized by the Council of Public Instruction for the use of schools. It contains a comprehensive but condensed summary of the leading principles of Christian morals, in the form of question and answer, and will be found to contain in an abbreviated form the substance of much larger works. As far as we have found time to examine the definitions are of an unexceptionable character, being based upon the teaching of Holy Scripture."—*Christian Guardian*, 20th Dec. 1871.

"We hail this little book from the pen of Canada's veteran Educator and Divine, as filling an important place in our "Canadian Series of School Books."—We regard that kind of education which cultivates only the intellect, leaving the heart and conscience untouched, as fundamentally defective; and we are glad that a text book has been prepared, which, while carefully avoiding even the appearance of Sectarian teaching, presents the grand obligations of Christian morality in a light both clear and strong. We hope Dr. Ryerson's little manual will be introduced forthwith into all our schools."—*Pure Gold*, Jan. 5th, 1872.

#### 8. THE CLERGY IN THE SCHOOLS.

The appearance of a new school book on "Christian Morals," a notice of which recently appeared in this journal, suggests some considerations as to the position which religion occupies in the Ontario Public School system, and how far it may be practicable to supplement the secular training received by the scholars with the religious instruction which it is so essential to the welfare not only of the Church but of the State that the rising generation should receive.

There is a prevalent impression abroad that the schools are necessarily and purely secular in their teaching, but it is worthy of examination whether the existing system of public instruction does not afford facilities for the inculcation of religious truth—even for the distinctive teachings of the Church. It is our own conviction that this peculiarity of the school system has never received the thoughtful attention of religious men which it deserves, and that there is work for the clergy, for the candidates for orders, for lay readers and catechists, in connexion with the Public Schools of the country, which can be accomplished with the most beneficent results, not only as respects those who are to be taught, but also as respects the experience to be gained by those who are qualifying themselves as teachers in sacred things.



In the first place, we find the Holy Scriptures and Daily Prayers have a recognized place in the Public Schools, and we are informed that recent returns show that in the High Schools 88 out of the 101 have daily prayers, and 60 use the Scriptures, while in the Public Schools, out of a total of 4,566, there are 3,246 in which prayers are said, and 3,097 using the Scriptures. It is further provided that the Ten Commandments be taught to the pupils weekly. Next, we see that the clergy are recognized by the law, and are invited to perform the functions of School Visitors. No clergyman visiting a Public School is an intruder, but is expressly desired to advise and examine, and to exert his influence in order that the tone of the school may be pervaded with a right spirit. He can also do much to induce a due and profitable observance of the above-mentioned religious acts.

But, in addition to this, the principles of Christian Morals are now to form a part of the prescribed course of instruction, with the provision, however, which the law enacts for the protection of the various phases of conscientious conviction, that no child can be obliged to participate in any religious teaching of which his parent may formally signify his disapproval. We are therefore of opinion that the State may in all fairness say to the Church authorities:—"I have done my part. I have provided efficient secular instruction. I have enthroned God's Word in my schools. I have inculcated the duty of prayer to Him that His blessing may accompany my teaching. I have provided suitable times when His Scriptures may be read and worship offered, and even approved forms of prayer are placed in every school. I have provided for the teaching of the moral law, and I have extended an invitation and given opportunities to every clergyman in the land to aid me in the holy work of rearing a race of good citizens. I recognize the need of this help. But I am no longer allowed to be the nursing mother of the Church, and I must throw upon the people and their pastors the responsibility, if there still be a lack of Christian teaching."

It does appear to us that, if the Church holds aloof, and will not come in and do this work in the schools, a great and serious fault will lie at her door. It may be objected that practically difficulties would arise in carrying out the system. If so, let us see what they are and get them removed. Let us see the thing tried. There are already some examples. In Hamilton, the trustees set apart an hour, from three to four, every Friday, when ministers of the various persuasions are provided with facilities for teaching the children of their respective communions. The same is the case in two of the Toronto schools, which are thus served by clergymen of our Church, and the trustees, in acceding to the arrangement in 1863, expressly stated their desire to bring the clergy "into immediate association with the city schools." If this can be accomplished, and the clergyman who meets with his children in his Sunday School were again to meet them in their day school some day in the week, he would be enabled to retain and increase his influence with them, and through them with the parents; and how immensely important is it that the clergyman should be in frequent contact with and be the friend of the children of the parish.

It may be truly said that the clergy are already full of work and overworked, and we gladly bear witness to the zeal and self-denial which characterize their lives; but if we are not mistaken, the regulation which provides for their systematic visitation of the schools, enacts that the clergyman may appear by his "authorized representative." If there be lay readers or catechists, as it is to be hoped there soon will be in all parishes, they might be sent, but the clergyman himself would do well to attend when he can; and whoever goes must remember that his rights extend only to the children of his own communion. In cities and in towns, divided as they are into territorial parishes, there should be no great practical difficulty in apportioning this work among our clergy, whatever may be the case in the country. There is another point worthy of consideration: among the teachers in the Public Schools are 868 members of the Church of England; cannot a goodly number of these be admitted as catechists and enlisted in this good work? It must not be forgotten that our position must be, to a great extent, that of a missionary Church. When a door is open, let us go in. If it requires some gentle pressure, let it be applied; but let us not let slip opportunities of propagating the faith.

We have spoken from a layman's point of view, but may enforce our statements by an appeal to the following decided and weighty words from a "Report, by the Rev. James Fraser, M.A., to the Schools Inquiry Commission." Mr. Fraser, as is of course known to our readers, is the present distinguished Bishop of Manchester:

"I have little doubt that if the clergy as a body were to throw themselves into the system and support it, instead of standing aloof from it as they now mostly do, the Council of Public Instruction would be ready to receive from them any suggestion calculated to make the Minute of 22nd April, 1867, a really effective provision for 'securing that proper commingling of the religious element in

the secular training' of the young, which even the most earnest supporters of the Canadian system seem to feel is the 'one thing' lacking to it. But, as yet, no steps likely to lead to an accommodation beyond the isolated action of one or two individuals, or a single community, have been taken on either side. And thus, while the quarrel turns mainly on points of theory, which might perhaps be adjusted in conference, the great practical interests of religion and Christianity, which all are equally concerned to preserve, are lost sight of, or fall to the ground. For my own part I cannot understand the apparent desire that exists on so many sides to thrust this religious question in the great matter of education into corners of theoretical difficulty which it is easy to construct in a moment by injudicious and unnecessary Minutes, and intemperate, intolerant resolutions. Even if religious instruction were absolutely forbidden, and the whole system of National education so far secularized, I should still consider it part of my duty as a clergyman to visit my parish school, in the hope that even the occasional presence of a minister of the Gospel might impart to the instruction given a tone that else, haply, might not be there. 'They talk of separating religious and secular teaching.' I remember to have heard once said by the earnest Arnold: 'I can't understand them. Give me a lesson to teach in geography and I will make it religious.' If the Canadian system is 'Godless'—an epithet which I myself should be sorry to apply to it—it does not become less so from the fact that it invites, but does not receive, the countenance and co-operation of the clergy."

We have not left much space for one particular aspect of this question to which we would draw especial attention, namely, with respect to its relation to the training of our theological students. We can now merely say that if the students, in the capacity of lay readers, under the direction of the Bishop and the parish clergy, could be sent into the schools, and get to work at the children, their experience thus gained would be of immense after-value. In addition to the positive good they could do at the time, they would become acquainted with methods of teaching and organization which would materially aid them when they are placed in charge of parishes.—*L. in Toronto Church Herald.*

#### IV. Miscellaneous Educational Information.

##### 1. VALUABLE ART COLLECTION FOR MONTREAL.

Some time ago, says the *Minerve*, the Abbe Chabert, one of the professors in the School of Design in connection with the Board of Arts and Manufactures, went to Paris to see his former professors, men most distinguished in the world of art. He had during his visit an opportunity of meeting the Minister of Public Instruction and Fine Arts, and to speak advantageously of the natural talent of the Canadian for those studies. His Excellence, on being thus informed, gave the Abbe Chabert to understand that he would be happy to place at the disposal of the school some treasures which the French Government possesses in its museums and libraries for instruction in design and sculpture. The Abbe had to return in haste to Montreal, and some days after his arrival he received a letter from the office of the French "Ministry of Public Instruction, of Worship, and the Fine Arts," announcing that the French Government puts at the disposal of the Abbe Chabert for the artists and artisans of Montreal objects of art worth from \$6,000 to \$8,000. The collection comprises models of colossal dimensions, and others of natural proportions, groups and busts, all objects of very great value.

##### 2. DALHOUSIE COLLEGE, HALIFAX.

The Governors of Dalhousie College, Halifax, have issued an appeal for an increase to their annual revenue of \$1,000. They make the following statement respecting the college. "Eight years have now elapsed since it was reconstructed on a basis which was not only unsectarian and thoroughly Provincial in its character, but which at the same time gave it a support in men and money that enabled its Governors to realize the ambition of its founder, and model it, not only in theory but in fact, on the University of Edinburgh. Six Professors in Arts and a Lecturer in Modern Languages were appointed, and a course of instruction provided for, that we could point to as worthy the confidence of the public, and the best study of the flower of our youth. Since that time the college has done its work well. The Professors have not only shed lustre on the institution, but they have always acted as an unit in the common cause. There has never been a jar between them and the Governors. And against not one of the Students in all those years has a single word of reproach been publicly heard. On the contrary, they are becoming more and more appreciated, and receive a

warmer welcome from our citizens every session that they return to their studies. We offer no money inducements to students to come to us, and yet they come in increasing numbers every year, so that this winter about seventy, of whom thirty are Freshmen, are enrolled in the Faculty of Arts, a number unparalleled in the history of colleges in the Maritime Provinces, or in the Upper Provinces either, with the exception of Toronto, and perhaps McGill College, Montreal. This gratifying result has been obtained, although in what is called the "stimulating power" of colleges (*i. e.* scholarships and other money inducements to students) we are so weak that richer colleges, in other parts of the Dominion, have attracted some of our students. In fact as far as this "stimulating power" goes, we are simply the poorest college in the Dominion and far behind one or two of the colleges in our own Province. It is only right to mention, in connection with this, that when our students go elsewhere, they distinguish themselves; two of them this year taking two scholarships each, of the value of \$205 per annum at McGill College. And at the competition last summer for the Gilchrist scholarship of £100 sterling a year for three years, open to students from every college in British America, the winner was James Gordon McGregor, a Dalhousie College man.

### 3. NOVA SCOTIA UNIVERSITY EDUCATION.

The establishment of a Nova Scotia University, on the model of the University of London, is just now engaging a great deal of attention in the Maritime Provinces. The plan, which seems to meet with most general favour, is not to found a new institution, but to form Boards of Examiners, working under a Council consisting of members from the several Boards: second, to have a specified number of faculties, for Arts, Medicine, Law, Science, Navigation, Mining, Agriculture, Surveying and Civil and Mechanical Engineering—and endow any teaching body instituting any of these faculties, with a proper staff of instructors and necessary appliances; third, to have a uniform standard of attainment to qualify for graduation, the examination to be made and the degree conferred by the University, not by the institution in which the candidate has pursued the course of study. It is high time that some such scheme were adopted, not only in Nova Scotia but in every Province in the Dominion, for very little value attaches to a degree conferred by a small obscure college, however thorough the instruction given in it.

### 4. BRITISH EDUCATIONAL ITEMS.

OXFORD.—Convocation at Oxford has passed a statute allowing the "Encenia" to be held elsewhere than in the Sheldonian Theatre. This severe rebuke of the riotous and ungentlemanly proceedings of late years on the part of the Under-graduates is in itself a stigma so deep that nothing could make it deeper. The natural champions to guard the dignity of the University are obliged to confess that warning is of no avail, and that they dare not trust the young men of Oxford to assist at her most solemn and picturesque celebrations. We will not attempt to add one word to the condemnation thus pronounced. It is deserved—that is enough to say? The disgraceful uproar which the presence neither of ladies nor of learned men could stay, must at all cost be rendered impossible, and hence, if necessary, the impossibility must be secured by the step now taken. But we hope that the Vice-Chancellor may yet find some other resource than to quit the historic building; since in the change there is an element of rude triumph for the offenders which might well be avoided.—*London Telegraph*.

ENGLISH UNIVERSITIES are now thrown open to all, and recently, for the first time since their institution, the degree of Master of Arts has been conferred upon a Roman Catholic and a Jew.

FEMALE STUDENTS.—The senatus of the Edinburgh University have therefore decided to admit female students to examination for a medical degree. The University of Leipzig has also opened its doors to women. Two courses of scientific lectures are to be delivered to ladies this winter in Edinburgh. The one course, on physiology, will be delivered in the University by Professor Hughes Bennett, and the other course, on chemistry, will be given elsewhere by Dr. Stevenson Macadam. All ladies are invited to enter their names as students for either course at a fee of about three guineas.

### 5. ARCHBISHOP MANNING ON EDUCATION.

Preaching on Sunday, at St. John's Church, Islington, for the schools of the district, Archbishop Manning said: The education

of the people of England is at this time passing through a crisis which, for good or for evil, will determine the future of this country. We are wasting our time in political contests and public dissensions about theories and schemes of second and third-rate importance, while the question which is vital to the well-being of the country is passing beyond our control into the hands of those who are undermining the foundations of our national character. England is a Christian people, and the education of England, in an unbroken tradition from our forefathers, is Christian still.

### 6. MULLER'S ORPHAN HOUSES.

Most of our readers have heard or read of Muller's Orphan Asylum, on Ashley Down, near Bristol, England. The work has been carried on now for many years and with great success. The peculiarity of its management is that no subscriptions are solicited, but the whole support is derived from donations either of goods or money voluntarily sent in to Mr. Muller. Under this system there has always been a sufficient amount supplied to meet all demands, it being another principle rigidly carried out from the first to take nothing which cannot be paid for in ready cash. For thirty-seven years Mr. Muller has continued at the work on Ashley Down, with ever increasing resources, and on a continually enlarged scale. During that period, FIVE HUNDRED THOUSAND POUNDS STERLING OR TWO MILLION AND A HALF of dollars have been placed at his disposal without any one having been solicited for a farthing; and the yearly amount now needed to carry on operations has reached the large sum of forty thousand pounds. With these funds thus committed to Mr. M.'s stewardship, twenty-three thousand children and grown-up persons have been taught in the schools entirely thereby supported, besides tens of thousands in schools partially maintained from the same source. Sixty-four thousand Bibles, eighty-five thousand Testaments, and one hundred thousand smaller portions of the Scriptures have been circulated, as well as thirty-nine millions of tracts and books. More than one hundred missionaries have been more or less supported, while 3,775 orphans have passed through the hands of those in charge, and five large houses have been built and fitted up, at an expense of £115,000, which are capable of accommodating 2,050 orphans.

During the past two years two new orphan houses, capable of accommodating 900 children, have been erected and of course paid for. All the donations sent in are mentioned in each yearly report, and apparently they are from all quarters of the world, New Zealand, Canada, Singapore, China, etc., as well as Britain; from all classes, from countesses to charwomen, and of every sort of valuable, from artificial teeth set in gold to the produce of apple trees and barrels of currants for the orphans' Christmas dinner. Mr. Muller calculates that for 1871 he will require about £46,000, and he is quite confident that he will get that sum and more.

Altogether the history and present position of these orphanages are singularly interesting, and give very conclusive evidence of how much can be accomplished by persevering effort and simple-hearted trustfulness in benevolent and religious effort.—*Globe*.

### 7. AMERICAN EDUCATIONAL ITEMS.

The United States Commissioner of Education has completed some valuable statistics illustrating the relation of education to crime in the New England States. His statement shows: first, that 80 per cent. of the criminals in these States have no education, or not sufficient to serve their available purposes in life; second, 80 to 90 per cent. of the criminals have never learned any trade, nor are they master of any skilled labour; third, not far from 75 per cent. of the crimes committed are by persons of foreign extraction; fourth, 80 to 90 per cent. of the criminals are intemperate; fifth, 95 per cent. of the juvenile offenders come from idle, ignorant, vicious and drunken homes.

The Washington (D.C.) Board of Education are seriously debating the question of corporal punishment. A series of resolutions introduced at a recent meeting provide: first, that punishment shall only be inflicted after school has been dismissed; secondly, that another teacher shall always be present; thirdly, a report must immediately be sent to the sub-board, stating "the name and age of the pupil, nature of offence, the instrument, extent and severity of the punishment, apparent effect produced, and the name of the witness present."

The *Golden Age* newspaper, referring to the increased call for school books in Brazil since emancipation, says that liberty and the spelling book are "one and inseparable."

An educational agent, sent by the Japanese Government to

San Francisco for the purpose of procuring information regarding the Common School system and the art of printing, left there for home a fortnight since, taking with him English and Russian phrase-books to be used by the Japanese merchants, as both these languages are coming into general use in Japan among the mercantile classes. The leading classes of Japan evidently recognize that their principal commercial relations, in the near future, will be with the two great powers whose influence they have already so beneficially felt.

In the last Anglo-French and Chinese war, the foreign settlement at Canton was destroyed, and the American Minister at Peking demanded indemnity to the Americans for their losses. About \$700,000 were paid. This was found more than sufficient to meet all just claims. There was no proviso to return what was not needed. That surplus, with interest, has now reached the sum of \$400,000. It has been long a question what ought to be done with this money; the general feeling being in favour of a college in Peking. This idea is, after long delays, likely to be realized, as a Bill to effect such a disposition of the fund is about to be introduced into Congress. The object of this College is especially to afford facilities to the Americans for learning Chinese and *vice versa*, letting the Chinese have good opportunities for learning English and other foreign languages.

### 8 R. C. INDUSTRIAL SCHOOL.

A movement is making in St. Louis to erect and endow an institution in the nature of an industrial school for abandoned Catholic children. The building will cost upwards of \$100,000, of which some \$18,000 has already been raised, and it is the design to locate it in the county outside the city limits, where, in connection with a good farm, agricultural operations can be carried on. The inmates will also be instructed in various trades and occupations.

### 9. SCIENTIFIC NOTES.

**ART INSTRUCTION IN SCOTLAND.**—Efforts are being made for the promotion of science and art instruction in Scotland. The local papers report a series of meetings in the large towns, which appear to have been fairly successful. Mr. Buckmaster has forcibly pointed out what is required in the education of working men, and their employers; instead of teaching boys abstractions and metaphysical ideas, as if they were all to be parish ministers, they must be taught things. A knowledge of the laws and properties of matter by which the earth is subjugated to our use, is the proper education of men who have to work on matter. Several local committees have been appointed to co-operate with the Science and Art Department in promoting scientific instruction in Scotland.

**LECTURE ON INDUSTRIES AND JOURNALISM.**—A series of lectures has been organized by the professors of the University of the City of New York, designed to give the most recent discoveries in science and the latest ideas in philosophy, literature and criticism, in a popular form. The lectures are to be free, and the range of subjects extends from "The Industries of the Romans" to "Journalism."

**SCHOOL OF JOURNALISM.**—The establishment of a school of journalism as one of the departments of Yale College, has already called forth many comments from the press. The *New Haven Journal and Courier* regards the undertaking as eminently appropriate, in view of the rapid growth of the influence of the press in this country. It points out that many more millions form their opinions from the *dicta* of the press than of the pulpit; that the extension of the means of conveying intelligence by telegraph and otherwise has carried with it an increase of these influences, so that the capacity for good or for mischief of a great journal can hardly be overestimated. Having so recently emerged from the shock of a great conflict, it is scarcely surprising that doctrines subversive of a society and even of government find more readily than usual a wide hearing among our countrymen. At such a time the intervention of a conservative element in the thorough education of the rising generation of journalists in social and political ethics, as well as in the outlines of law, history, and literature, should be hailed with satisfaction by all who have at heart the true welfare of the community which these writers must so largely influence.

## V. Biographical Sketches.

### 1. HON. JUDGE AYLWIN.

The deceased judge, who was a native of Quebec, was called to the Bar in 1828. He first entered public life as member for the County of Portneuf in 1841; and in 1842 he became a member of

the Executive Council, as Solicitor-General for Canada East, a post which he held until December 1843; and again in March, 1848, until April, 1848, when on the 26th of that month he was appointed a judge of the Court of Queen's Bench; and no Canadian statesman ever deserved that high honour better than the learned gentleman. He was twice elected to Parliament to represent Portneuf, and three times for the city of Quebec. Being a terse and lucid speaker and a gentleman of great merits and abilities, he was regarded as a great acquisition to his party and was extremely popular with the people. In the Opposition, in whose ranks he was numbered for some years, he became one of the most eloquent and indomitable of its members—a man that never flinched from his purpose but pursued his line of conduct to the last. After the elevation of the departed Judge to the Bench, people had more opportunities to witness the greatness of his abilities and attainments; and his arguments were always conclusive, and excited much admiration. Judge Aylwin bore the reputation of being the best debater in the House of Assembly, a man of infinite adroitness and lawyer-like sagacity, skilled in making the worse appear the better reason, and in exposing the weakness of an adversary's case. His death will be deeply regretted by his judicial brethren, and we feel assured also by the Bar and the people generally of the Province of Quebec.

### 2. PETER O'RIELLY, ESQ.

The deceased gentleman was born in Westport, County Mayo, Ireland, in 1791, emigrated to Canada in 1832, and settled in Belleville, where he carried on business as a merchant for several years. When the rebellion of 1837 broke out, he was Captain in No. 2 Company of Hastings Militia. His was the first company called out, and he served as Captain the Active Militia for two years under Baron de Rottenburgh. He came to Kingston in 1848, the year after his son Mr. James O'Reilly commenced the practice of the law here. Shortly afterwards he was appointed Clerk of the Crown and of the County Court, which office he filled up to the time of his death. Mr. O'Reilly took a deep interest in politics; he was a warm friend of the late Robert Baldwin, by whom he stood in many a hard fought contest for Constitutional Government.—*Whig*.

### 3. MRS. DAVIS.

The death of this amiable lady has severed an important link in the past history of the country, and leaves us with scarcely a single individual who could narrate any of the stirring events she remembered so well. She was probably the oldest native Canadian in this part of the country, and had seen it rise from a wilderness trodden only by the red man, to a smiling and fruitful land, dotted over with flourishing towns and villages. Her mother was stolen by Indians when a child, and brought from the United States to Canada, and was restored to her parents after being kept in captivity for several years. Her father was in the Indian service, and died at the post of duty, having received his death wound while fighting in defence of his country. Mrs. Davis was seventeen years old at the time of the last American war, and could give graphic descriptions of the occurrences of that eventful period. She had seen the brave General Brock, and described his appearance with wonderful minuteness. Her accounts of the battles of Queenston, Lundy's Lane and Stoney Creek, as given by her from hearing them from the lips of those who had been eye-witnesses were more vivid, clear and connected, than we read them in the country's annals. She had seen Hamilton grow from a wooded plain into a city of twenty-five thousand inhabitants, and remembered when Toronto had scarcely the old name it once bore. Gradually the old landmarks are being removed, and soon we shall have none "to tell the tales of other days," when the whole of this Western Peninsula was little better than a howling wilderness. Mrs. Davis was the type of a true woman, and among the last of her heroic race who did so much to ennoble the character of her sex, as exemplified in the dangers, difficulties and suffering through which they passed in the perilous times which "tried men's souls." She was a fine specimen of the cheerful, kind and generous-hearted matron one loves to meet with, and her goodness of heart and sweet disposition will be long remembered by all who knew her.—*Hamilton Spectator*.

### 4. CAPT. JOHN DENCH.

Was born in West Hothly, Surrey, England, in 1830, so that at his demise he was in his 42nd year. When seven years old, in 1837, he came with his father to Canada and settled in Trenton. He started in life as a sailor and sailed as a captain at 15 years.



He sailed his own vessels for some time until the Messrs. Gilmour induced him to take command of the "Trenton." He loved the Bible, and never undertook anything without consulting his Heavenly Father. To this he often attributed his good fortune in sailing, having never had an accident worthy of notice. He was the first to sail a vessel up through Conseccon harbour. In 1867 he gave up sailing, a calling he loved so much, and thought had he continued he would not have been in poor health. In that year he rented the Trenton foundry from Mr. Cooley, after one year he sold out his lease and material to Mr. Shea. In 1869 he and James Marsh opened a hardware store; dissolving this partnership he started in the business in Mr. McCabe's new building. Health failing he sold out this a few months ago and wound up his affairs in life. He served several times as a councillor; was a Grammar School Trustee till he died and a lieutenant in the militia.—*Trenton Courier*.

#### 5. RECENT CANADIAN DEATHS.

When these gentlemen first located themselves in this county, it was an almost trackless forest, and it is by them and such as them, that it has been rendered the happy and comfortable home of thousands. Mr. Scott was from Scotland and was one of the pioneers of the township of Asphodel. The late Emmanuel Mann came to this country from Yorkshire, England, just fifty years ago, and after remaining but a short time in the neighbourhood of Cobourg he made his way to the township of Smith, where he settled, not far from the shores of Chemong Lake. During the long period of his residence there, he has ever been a kind and faithful friend and neighbour, and valuable citizen, who had earned the respect of every one who knew him.

JACOB HILLIER.—Another veteran favoured with life far beyond the allotted span has passed away. Jacob Hillier, who died on Monday, in Ernestown, is said to have been born on the Mohawk Flats, New York, in 1764, thus making 107 years of age. He came to Canada after the revolution, and lived in the township of Ernestown.

J. C. BALL.—The *St. Catharines Times* records the death of Mr. John C. Ball, one of the oldest citizens in that part of Canada. He was the oldest magistrate in the district, and in 1812 commanded a company at the battle of Queenston Heights.

#### 6. SIR RODERICK I. MURCHISON.

This distinguished man was born in Taradale, Scotland, in 1792, and was educated at Durham School and the Military College at Marlow. He served in Spain and Portugal with the 36th Regiment from 1807 to 1816, and afterward became Captain in the 6th Dragoons. About 1822 he was induced by Mrs. Murchison and his friend, Sir Humphrey Davy, to devote himself to those scientific pursuits which have since conferred such merited distinction on his name. In 1831 he began a systematic examination of the older sedimentary deposits in England and Wales, and after seven years labour he succeeded in establishing what he termed the Silurian System, comprehending a succession of strata, previously unknown, which lie below the old red sandstone. In 1830 he gave the result of his researches in the elaborate work entitled "The Silurian System," which was illustrated by five geological maps (one map alone cost £7,500), and 166 plates of fossils, and fine woodcuts. This work at once placed him in the foremost rank of geologists, and gave a strong impulse to geological science. In 1840, Captain Murchison, in company with M. de Verneuil and Count Keyserling, began, at the request of the Czar Nicholas, a geological survey of the Russian Empire. The results of this survey were published in 1845, in two large volumes, profusely illustrated, which were translated into the Russian language by Colonel Obersky. The Czar signified his appreciation of Captain Murchison's services by presenting him with a colossal vase of Siberian aventurine, mounted on a column of porphyry, and by conferring on him, with other marks of distinction, the Grand Cross of the Order of St. Stanislaus. In 1846, upon his return to England, Captain Murchison received the honour of knighthood, and continued to take a leading part in diffusing knowledge regarding the formation of the earth. In 1854 he published a second edition of "Siluria," with a brief sketch of the distribution of gold over the earth. In 1855, he succeeded Sir H. De la Beche in the office of Director-General of the Geological Survey of the British Isles. Sir Roderick served four terms as President of the Geological Society, and has been over twenty years President of the Royal Geographical Society. He contributed upwards of 120 papers to the Transactions of various scientific

bodies, and during a number of years delivered anniversary addresses to the Geographical Society which were valuable reviews of the progress made in geographical and geological knowledge. Sir Roderick was the first who publicly expressed the opinion that gold must exist in Australia. He received numerous honours from scientific bodies, and was a member of all the principal Academies of Europe. An admirable trait in his character was the deep interest he felt in the fate of Dr. Livingstone. He was unwearied in his efforts to learn tidings of his distinguished friend, and to the last had firm confidence in his safety.

### VI. Miscellaneous.

#### 1. SABBATH IN THE COUNTRY.

A Blessed Day, which rest to labour brings !  
A Sabbath's calm upon the hamlet lies,  
As if an angel came on noiseless wings,  
And o'er it breathed the quiet of the skies.  
No more is heard the clatter of the mill ;  
The blacksmith's forge is hushed, the plough is still.

The horse in the green paddock seems to know  
He too must rest ; the brook that steals along  
Doth surely lave its banks with gentler flow ;  
And birds greet heaven with softer, mellower song ;  
The very flowers look up, and seem to say  
They'll breathe their sweetest on the holy day.

Breaking the stillness, hark ! a solemn sound ;  
It passes o'er the hamlet like a wave,  
Swings o'er the woods, even the moorland's bound,  
And dies in echo by the far sea-cave :  
Chime, chime. From yon grey tower the slow winds bear  
The church's silvery call to praise and prayer.

Now forth from cottage doors, in trim array,  
The rustics come ; old age with thoughtful mien,  
And youth with sobered spirits, wend their way  
To the old church that stands beyond the green ;  
And still the bell its music sprinkles round,  
Something of heaven soft murmuring in that sound.

Ye rich and great, who meet to worship God,  
Scorn not the poor man's prayer ; for He who rears  
High mountain-tops, shapes daisies of the sod,  
And simplest cry of lowliest creature hears.  
The thunders of the orators arise  
Not speedier than poor whispers to the skies.

Dear boon to man ! O priceless blessing given—  
This Sabbath to the weary and oppressed.  
Converse to hold with God, and think of heaven !  
'Mid leaden hours, O golden day of rest !  
'Mid discords, music ; to the good, the wise,  
A gentle link between us and the skies.

#### 2. SUNDAY IN THE WILDERNESS.

Among the temptations, which beset the backwoods farmer is, to neglect the day of rest. Accustomed in his native land to attend church, and feel the spur of the good opinion of his neighbours, there existed little inclination to desecrate the Sabbath Day. In his new position things are changed and principles tested. To multitudes in the woods, the sound of the church-going bell is music unknown, the voice of the preacher is rarely heard, and the stimulus of example is wanting to prompt in the way of duty. Inattention to dress is often the beginning of lax practice. Hunting and fishing are apt to follow, and ordinary labour eventually be performed by persons who, before emigrating, would have exclaimed, "What ! is thy servant a dog that he should do this ?" The temptation to indifference in the isolation of the bush is great ; but if yielded to, the danger of temporal as well as spiritual damage is certain. All experience goes to prove that in keeping the Sabbath Day holy, there is great reward. One good man, who felt severely the trying situation of bush experience on the Sabbath, persisted in the practice of dressing as he had been accustomed to do, frequently making the remark, "We honour God by honouring the Sabbath." His example of Sabbath Day observance influenced a whole settlement, and he lived to see, not only much of the wilder-

ness become fruitful fields, but a spiritual transformation, in multitudes of his neighbours being turned from darkness to light, and from the bondage of Satan to serve the living God.

Another temptation lurks in the hearts of some to abstain from a religious service conducted by ministers of a different denomination from the one they have been accustomed to attend. Denizens of the forest consult their own best interests by willingness to hear all who proclaim truth, of whatever name. Nor are the differences among Evangelical bodies so great as to justify people in fencing themselves apart, and practically exclaiming each to the other, "I am holier than thou." Let the claimants to the purest faith fix things as they will, there is but one Church, of which every true Christian is a member.—From "*Rustic Jottings from the Bush*," in *New Dominion Monthly* for October.

### 3. OPINIONS OF GREAT MEN ON THE SABBATH.

"If Sunday had not been observed as a day of rest during the last three centuries, I have not the smallest doubt that we should have been at this moment a poorer and less civilized people than we are."—*Lord Macaulay*.

"There is no religion without worship, and no worship without the Sabbath."—*Count Montalembert*.

"The more faithfully he applied himself to the duties of the Lord's day, the more happy and successful was his business during the week."—*Sir Matthew Hale*.

"A corruption of morals usually follows the profanation of the Sabbath."—*Blackstone*.

"The Sabbath, as a political institution, is of inestimable value, independently of its claims to divine authority."—*Adam Smith*.

"Sunday is a day of account, and a candid account every seventh day is the best preparation for the great day of account."—*Lord Kaimes*.

"Give to the world one half of the Sunday, and you will find that religion has no strong hold of the other. Pass the morning at the church, and the evening, according to your taste or rank, in the cricket field or the opera, and you will soon find thoughts of the evening hazards and bets intrude themselves on the sermon, and the recollections of the popular melody interfere with the Psalms."—*Sir Walter Scott*.

"I feel as if God had, by giving the Sabbath, given fifty-two springs in the year."—*S. T. Coleridge*.

"A Sunday given to the soul is the best of all means of refreshment to the mere intellect."—*Isaac Taylor*.

"Where there is no Christian Sabbath, there is no Christian morality; and without this, free institutions cannot long be sustained."—*Justice McLenn*.

"The religious character of an institution so ancient, so sacred, so lawful, and so necessary to the peace, the comfort and the respectability of society, ought alone to be sufficient for its protection; but, that failing, surely the laws of the land, made for its account, ought to be as strictly enforced as the laws for the protection of person and property. If the Sunday laws be neglected or despised, the laws of person and property will soon share their fate, and be equally disregarded."—*Attorney General Bates*.

"We are to account the sanctification of one day in seven a duty which God's immutable law doth exact for ever."—*Richard Hooker*.

"The very life of religion doth much depend upon the solemn observance of the Sabbath; consider, if we should but intermit the keeping of it for one year, what a height of profaneness would ensue, in those that fear not God?"—*Archbishop Leighton*.

"We never, in the whole course of our recollections, met with a Christian friend, who bore upon his character every other evidence of the Spirit's operation, who did not remember the Sabbath day to keep it holy."—*Dr. Chalmers*.

"The Sabbath must be observed as a day of rest. This I do not state as an opinion, but knowing that it has its foundation upon a law in man's nature as fixed as that he must take food or die."—*Willard Parker, M.D.*

"As a day of rest, I view the Sabbath as a day of compensation for the inadequate restorative power of the body under continued labour and excitement. One day in seven, by the bounty of Providence, is thrown in as a day of compensation, to perfect by its repose the animal system."—*John Richard Farre, M.D.*

"So far as my observation extends, those who are in the habit of avoiding worldly cares on the Sabbath are the most remarkable for the perfect performance of their duties during the week. I have a

firm believe that such persons are able to do more work, and do it in a better manner, in six days, than if they worked the whole seven."—*John C. Warren, M.D.*

### 4. "STAND UP FOR YOUR SUNDAYS."

A WORD FOR OLD AND YOUNG.

Stand up for your Sundays; let nothing have power  
To take from God's children their birthright and dower,  
The rest-day appointed in Eden's fair bower  
Ere sin had yet clouded earth's glad morning hour.

Stand up for your Sundays, the Sabbath of rest,  
God's solemn commandment from Sinai's crest,  
When awed by the thunder, by darkness opprest,  
Their sin and their weakness His people confest.

Stand up for your Sundays; the Saviour arose  
In triumph on Sunday, and scattered your foes,  
His labours all ended, and borne all His woes,  
That you might have pardon and faith's sweet repose.

Stand up for your Sundays; the Spirit came down  
On Sunday, and gave it a glad some renown;  
On calm Christian Sabbaths no thunder-clouds frown;  
Grace, peace, and rejoicing are Sunday's bright crown.

Stand up for your Sundays; earth's business and care  
In six weary work-days have more than their share;  
Then comes the blest Sabbath: of labour beware  
Which steals from the rest-day to which you are heir.

Stand up for your Sundays; of pleasure take heed  
Which seeks from God's worship your footsteps to lead:  
Oh, pause Sabbath-breaker, that flower is a weed  
Which stings as you pluck it and bears deadly seed.

Stand up for your Sundays, the earnest and sign  
Of "rest" that "remaineth" in mansions divine;  
With streaks of heaven's glory our Sabbaths now shine,  
Some grapes they now yield us from Eschol's rich vine.

Stand up for your Sundays; these happy Lord's-days  
On wings as of eagles your souls shall upraise,  
While faith's joyful worship and hode's cheering lays  
Ring in the grand Sabbath and thunders of praise!

*Richard Wilton, M.A.*

These verses can be sung to the popular hymn-tune *Hanover*, or old 104th, by the addition of a note in the middle of the first and second lines.

### 5. A TRIBUTE TO THE QUEEN.

RT. HON. ROBERT LOWE ON DILKE'S SPEECH.

In his speech at Halifax the Chancellor of the Exchequer said:—A member of Parliament has seen fit in the exercise of what he believes to be his duty—to call the attention of a public meeting, held in the north of England, to the manner in which the Government has dealt with the Civil List, to the constitution of the Royal household, and to the conduct of the Queen with reference to the income tax. \* \* \* Of course it is very easy to go before an audience not versed in such matters, and to create cheers and hisses by reading over the old and antiquated names of the officers that have come down to Her Majesty's household from a Monarchy that has lasted a thousand years. \* \* \* I think you will say that this is not the way in which matters of this high importance, touching the compact between the Queen and her people, and touching the conduct of Her Majesty herself, should be treated in this country.

The Queen is no stranger amongst us. She is no novice in government. For four-and-thirty years she has reigned over us. She has maintained during that time a high and stainless character, which is honourable. (Great cheering, which interrupted the speaker. Three cheers were called for the Queen, and heartily given. Groans followed for Sir Charles Dilke, and the audience rising, and led by a choir in the orchestra sung the National Anthem.) The right hon. gentleman continued: I was saying, when you were so kind as to interrupt me—(laughter)—that Her Majesty, during the thirty-four years over which she has occupied the throne, has maintained a high and stainless character which has been an honour to herself and her Court, and to the nation that has the

happiness of living under her auspices. And those who, by virtue of their office, have been brought in contact with the Queen well know that if there is any feature in her character more remarkable than another it is her strict adherence to her word under all circumstances and under all conditions. Of her it may be truly said—

"Her memory is her honest thought,  
And simple truth her only skill."

In all the time that this great Sovereign has reigned over us no one has ever tried or ventured for a moment to point out that she has stepped one hair's breadth beyond the prerogative the law has assigned to her, or done anything in any way to violate the letter of spirit of the Constitution. No one can ever allege that she has ever made a promise that she did not fulfil. No one can even say anything ever dropped from her lips or from her pen that was not absolutely true, without the slightest intention in the world to mislead, deceive, or to conceal. (Hear, hear.) It is because I feel and know this so thoroughly, and all those who have the honour of anything to do with the affairs of the State know it too—that I really feel almost ashamed to say what I am going to say with regard to the statement that this promise to pay income-tax has not been fulfilled. I am not going into details, but I state to you, in the person from whom such statements would come with the proper official authority, that the sums which Her Majesty has contributed to the income-tax since 1842, when the income-tax was imposed, are counted in hundreds of thousands. (Cheers.) I have selected that single instance, and shall deal no further with the matter, but leave it to your conviction. If it should be the decision of the Honourable Gentleman in question to bring the matter before the House of Commons I shall be most happy to give the fullest explanation, and I do not doubt that the country will be satisfied in this as in all other things relating to Her Majesty and her office—the high, honourable office which she holds over us. Her Majesty has been true to herself, and a worthy representative of the feeling of the honest and truth-speaking people of England. (Cheers.) As for the rest of this matter, I shall certainly not discuss it. I should think it degrading to myself—I should think it insulting to you—if I were to be led, for one moment even, into any discussion on the relative merits of a Monarchy or Republic. Politics are not speculative or metaphysical, but a practical and inductive science. The test of what is politically right is what has answered and worked well. (Hear, hear.) The English Monarchy, beginning under William the Conqueror with the sternest and most cruel tyranny, has, in the course of eight hundred years, advanced until under it we have obtained in this happy country more of order connected with liberty, and more of ancient tradition connected with the springing power of boundless improvement than has been granted to any people on the earth. I think I do not misread the feelings of my countrymen when I say that they will not be disposed to consider for a moment the propriety of changing an institution under which they have derived so many and so great benefits.

## 6. QUEEN VICTORIA AND HER PEOPLE.

Now that His Royal Highness the Prince of Wales is steadily recovering—the latest telegram stating that he continues to gain strength and that the swelling above the hip subsides slowly—Her Majesty has, in a letter to the London papers, the substance of which is telegraphed, promptly and gracefully expressed her "deep sense of the touching sympathy exhibited for her family by the whole nation during the illness of her dear son." Her Majesty further states that a deep and ineffaceable impression has been made upon her heart by the general joy manifested at the improvement of His Royal Highness' health. This painful experience—happily not going down to the depths of desolation, with its wide awakening of national sympathy—reminds Her Majesty of that inexpressibly sad occasion when death removed "the mainstay of her life—the best, wisest and kindest husband that ever lived." Her Majesty expresses deep affection for and gratitude to the Princess of Wales, who has been most devoted in the attendance in the sick room, and is devoutly thankful for the recovery of the Heir Apparent.

## 7. A PLEASING ROYAL PICTURE.

The Berlin *Cross Gazette* takes the following account of the life of Her Royal Highness the Crown Princess at Hamburg, from a private letter: Our Crown Princess has now been here four weeks. Her sister, Princess Alic of Darmstadt, often comes with her children to visit her. At such times the sight of the family excursions from the old castle is very pleasant, as there are then eleven children together; and they are all very lively. Several of them lately

rode out on donkeys, and two pushed a chaise from behind, which was drawn by two small horses, and in which some of the children were also seated. The Crown Princess is exceeding simple in her tastes and manners. She herself carries refreshments in a basket to the patients in the Lazareth. She has had everything there arranged in the most excellent manner. She has had the beds covered with white sheets and coverlets, and neat curtains put up. By her orders, flowers were placed in the rooms, and a concert was given by the band of the Kurhaus, on which occasion the wounded were carried in their beds into the court of the barracks. The Crown Princess, beyond all doubt, possesses a great deal of energy, and she is fond of simplicity and good order. The fire guard here desired to place a guard of honour at the castle, but she refused the honour with thanks. She arrived with her children in a carriage. No one recognized or saluted her; a splendid entrance had been expected, but she was past. She has generally one of her children on her lap when she drives out. It is no wonder she has gained all hearts, especially those of the mothers.

## 8. CANADA'S SUBSCRIPTION FOR THE CHICAGO SUFFERERS.

As far as heard, from the subscriptions from Canada, towards the relief of Chicago's sufferers, are as follows:

Montreal .....	\$33,000
Toronto .....	15,000
Hamilton .....	7,000
London .....	4,000
Kingston .....	2,000
Brantford .....	1,000
Belleville .....	500
Miscellaneous .....	7,500
Total .....	\$70,000

## 9. TABLE OF FORMER GREAT FIRES.

Norfolk, Va., destroyed by fire and the cannon balls of the British. Property to the amount of \$1,500,000 destroyed. January 1, 1776.

City of New York, soon after passing into possession of the British; 500 buildings consumed. September 20, 21, 1776.

Theatre at Richmond, Va. The Governor of the State and a large number of the leading inhabitants perished. December 28, 1811.

City of New York; 530 buildings destroyed; loss \$20,000,000. December 16, 1835.

Washington City. General Post Office and Patent Office, with over ten thousand valuable models, drawings, &c., destroyed. December 15, 1836.

Philadelphia. Fifty-two buildings destroyed. Loss, \$500,000. October 4, 1839.

Quebec, Canada; 1,500 buildings and many lives destroyed. May 28, 1845.

Quebec, Canada; 1,300 buildings destroyed. June 28, 1845.

City of New York; 300 buildings destroyed; loss, \$6,000,000. June 20, 1845.

St. John's, N. F., nearly destroyed; 6,000 people made homeless. June 12, 1846.

Quebec, Canada; Theatre Royal; 47 persons burned to death. June 14, 1846.

Nantucket; 300 buildings and other property destroyed; value, \$800,000. July 13, 1846.

At Albany; 600 buildings, steamboats, piers, &c., destroyed; loss, \$3,000,000. August 17, 1848.

Brooklyn; 300 buildings destroyed. September 9, 1848.

At St. Louis; 15 blocks of houses and 23 steamboats; loss estimated at \$3,000,000. May 17, 1849.

Fredericton, N. B.; about 300 buildings destroyed. November 11, 1850.

Nevada, Cal.; 200 buildings destroyed; loss, \$1,300,000. March 12, 1851.

At Stockton, Cal.; loss, \$1,500,000. May 14, 1851.

Concord, N. H.; greater part of the business portion of the town destroyed. August 24, 1851.

Congressional Library, at Washington; 35,000 volumes, with works of art, destroyed. December 24, 1851.

At Montreal, Canada; 1,200 houses destroyed; loss, \$5,000,000. July 8, 1852.

Harper Brothers' establishment, in New York; loss over \$1,000,000. December 10, 1853.

Metropolitan Hall and Lafarge House, in this city. January 7, 1854.  
 At Jersey City, thirty factories and houses destroyed. July 30, 1854.  
 More than 100 houses and factories in Troy, N. Y.; on the same day a large part of Milwaukee, Wis., destroyed. August 25, 1854.  
 At Syracuse, N. Y., about 100 buildings destroyed; loss, \$1,000,000. November 8, 1856.  
 New York Crystal Palace destroyed, October 5, 1858.  
 City of Charleston, S. C., almost destroyed, February, 17, 1865.  
 At Quebec, Canada; 2,500 houses destroyed; loss, \$2,500,000.

## VII. Educational Intelligence.

—GRAND DUKE ALEXIS.—While in Toronto the Grand Duke, accompanied by Lieut. Governor Howland, proceeded from the Queen's Hotel to visit the places of interest in the city, among which were the University and the Normal School, where he was received by the Rev. Dr. Ryerson; from thence he proceeded to Osgoode Hall.

—TRINITY COLLEGE UNIVERSITY.—At the recent convocation the following degrees were conferred B. A.:—John Austin Worrell, John Hamilton, Arthur Jarvis, Thomas Armstrong, John Warren Burnham, Charles Benson Dundas, John Edgar Reginald Gourlay, Rev. Wm. Massey, Llewellyn Geo. Morgan, Richard Barrington Nevitt, Thomas William Read, James White, Robert Wm. Hillary, James Hackett, J. M. Hart, A. L. McLaren, Henry Moorhouse, and James A. Robertson. M. A.:—Rev. Ephraim Horace Mussen, Rev. Alexander Shaw. M. D.:—Henry Orton. D. C. L.:—The Right Rev. the Lord Bishop of Huron, and the Venerable the Archdeacon of Assiniboine. Prizemen.—Robert Gregory Cox—Prince of Wales' Prize for 1870. 1st class in classical and mathematical honours, and the Chancellor's additional prize for double first prize. Pulteney Ford Ogden—Hamilton Memorial prize for 1871, and the Bishop's prize in divinity for 1871. John Austin Worrell—Classical prize in 3rd year, 1871, and Mathematical prize in 3rd year, 1871, and Prince of Wales' prize for 1st class in classics, 1871. William Cartwright Allen—Classical prize in 2nd year, 1871. John Hamilton—Prize in French, 1871. Reginald Gourlay—Prize for English Verse, 1871. A prize poem, on "The Isthmus of Suez" was recited by Mr. J. E. R. Gourlay. Admitted to the Divinity Class:—Robert Doherty, John Woodburn, Joseph Fennell, Percival Lawson Spencer. The following were admitted to Matriculation:—Francis Stewart Checkley, Charles Edmund Sills, Charles Cortes Fessenden, Sutherland Macklem, Richard William Garrett, Joseph Fennell, John Alexander Hannan, Herbert Bethune Patton, Percival Lawson Spencer, Morse Stewart, William H. Young. After a speech by the Chancellor touching the flourishing condition of the University, the proceedings were terminated by the Benediction, pronounced by the Bishop.

—LINDSAY SEPARATE SCHOOL.—A gymnasium has been built in connection with the Lindsay Separate School—104 feet long by 38 feet wide. Bishop Horan, of Kingston, visited it recently and expressed himself much pleased at the attention thus paid to physical training.

—SOUTH HASTINGS TEACHERS' ASSOCIATION.—The regular meeting of the South Hastings Teachers' Association was held in Belleville. The President, Mr. John Johnston, Inspector, occupied the Chair. After the usual routine of business was disposed of a discussion was introduced by Mr. Macoun, on the definition of the word "Teaching," and under this head the different methods of teaching were discussed, the general opinion being that all teaching, as far as practicable, should be by induction. The President, Mr. McGann, Irwin and others, taking part in the discussion. The President introduced the further consideration of the Limit Table, showing its superiority over the old Limit Table, and how admirably it was adapted to meet the present requirements. The Inspector also stated that as to all the schools he had visited since vacation, he had invariably classified them according to it, and that in those schools in which it had been introduced, it worked admirably; and that he hoped all the schools of South Hastings would soon be working by it.

A discussion on its merits followed, when it was moved by Mr. Macoun, seconded by Mr. Osborne, that "We, the Teachers of South Hastings, in Convention assembled, do hereby express our high approval of the 'Limit Table,' for the use and benefit of the Public Schools of the Province, as conducive to the best interests of our System of Education, and productive of beneficial advantages to the Teacher, in the faithful discharge of his onerous duties." Carried. Mr. Sprague, of Smithville, explained his method of teaching the first part of the first book. This method was objected to by Mr. McGann and Mr. Huntly, upon which an animated and lengthened discussion of the merits of the different systems of teaching followed, in which nearly all the teachers present took part, proving most conclusively the superiority of the new system (of teaching the word forms first and the letters at the head of each lesson afterwards,) to the old system of teaching the whole alphabet first. All those who had tried both stated decidedly that the new was one hundred per cent better than the old system. The President then proceeded to explain his method of teaching young children the rudiments of Grammar, and plainly showing how to make what is generally considered an irksome task, a pleasant exercise. In answer to the question, what Grammar was required, he replied Davie's Smaller Grammar; as the Larger Grammar was not intended for use in the Public Schools. The meeting was in every respect a most interesting, instructive, and pleasing one. The subjects for the next meeting are: "The difficulties of the Infinite Mood," to be opened by Mr. Goman. Mr. Squier is to show his method of teaching Object Lessons. "To what extent shall the Teacher assist the pupil?"—Mr. Macoun. "Grammar to advanced classes."—Mr. McGann. "The Rudiments of Arithmetic to young children."—Mr. Osborne:

—UNION TEACHERS' ASSOCIATION.—The quarterly meeting of this Association took place in Galt on the 2nd Dec., 1871. Mr. J. Suddaby elected President; Mr. S. L. McRae, Vice-President; Mr. H. Dickenson, Secretary and Treasurer. Moved by Mr. Fullerton, seconded by Mr. Munro, "That the retiring officers, Messrs. Grey, Rodgers and Dickenson, receive the thanks of the Association for their services during the past year." Carried. Moved by Mr. Dickenson, seconded by Mr. McWilliam, "That Messrs. Grey, Suddaby, McRae and the mover be appointed as Committee to take into consideration the advisability of holding a conversazione for the purpose of raising funds necessary for the getting up of a Competitive Examination, open to the pupils of teachers who are members of this Association." Carried. Mr. McWilliam then gave his method of teaching the simple rules of arithmetic. The remaining exercises were allowed to stand over till next meeting. Business for next meeting: "A Lesson" by Mr. Beattie. Subject—Phonetic Method of teaching Reading. "An Essay" by Mr. Suddaby. Subject optional. "A Reading" by Mr. Dickenson. "A Lesson on Music" by Mr. McRae.

## VIII. Departmental Notices.

### THE NEW ACT AND SEPARATE SCHOOLS.

In reply to a question frequently asked, we desire to say that the new School Act and Regulations do *not* in any way affect the Separate Schools. It was not intended to affect them when the Act was passed; and it would be unjust to the supporters of these Schools thus to legislate for them indirectly, and without their knowledge. The Inspectors will, therefore, be particular not to apply the Act, or any of the new Regulations to Separate Schools.

### TRUSTEES' INCOMPLETE RETURNS.

Some Inspectors complain of the very great incompleteness of many of the annual reports received from Trustees of rural sections, and ask what they should do with them? By reference to the reports themselves, Trustees will see that the Inspectors are directed to return to them all incomplete or incorrect reports.

The law declares that a School Section shall forfeit its share of the School Fund, should its Trustees fail to furnish the Inspector with a full and satisfactory report at the end of the year. It will, therefore, save the Inspectors a good deal of time and trouble, and the Department some delay, if the Inspectors will promptly return to the Trustees all imperfect reports, so as to have each column correctly filled up. Should an Inspector's Reports to this Department be incomplete, they will have to be returned to him so that the desired information may be obtained.

#### COLLEGIATE INSTITUTES AND HIGH SCHOOLS.

His Excellency the Lieut.-Governor has been pleased to confer upon the undermentioned High Schools, the name and privileges of Collegiate Institutes, in accordance with the provisions of the School Law of Ontario, viz. :—

1. Galt High School, 12 Masters and an average attendance of 120 boys, in classics.
2. Hamilton High School, 4 Masters and an average attendance of 74 boys, in classics.
3. Peterboro' High School, 4 Masters and an average attendance of 73 boys, in classics.
4. Cobourg High School, 4 Masters and an average attendance of 65 boys, in classics.
5. Kingston High School, 4 Masters and an average attendance of 63 boys, in classics.
6. St. Catharines High School, 4 Masters and an average attendance of 62 boys, in classics.

His Excellency has been pleased to authorize the establishment of the following new High Schools,—suitable accommodation and the employment of two Masters having been guaranteed, viz. :—

- Parkhill, in the County of Middlesex.  
Campbellford, in the County of Northumberland.

#### ASSISTANTS IN HIGH SCHOOLS A NECESSITY.

Trustees of High Schools will bear in mind that they are required to employ an Assistant Master, in order to give effect to the new programme. The qualifications of these assistants are, that they shall either hold a Public School Teacher's certificate, or at least be certified as an undergraduate in the faculty of Arts, of good standing in some university in Her Majesty's dominions.

The Trustees of each High School, now being established, are required, and freely consent to employ *two* masters in their School, whatever may be the number of pupils in attendance. In justice to these new Schools, and in order to carry out the prescribed programme of studies in High Schools, this rule will, at the close of the current six months, be applied to all the High Schools in Ontario. When the application of the new principle of "payment by results," (authorized by the Act of last year), will come into force, it will necessitate a more thorough and satisfactory system of instruction than at present exists in many of the High Schools.

#### TEACHERS SUPERANNUATION FUND MANAGEMENT.

As most contradictory and erroneous views are put forth by certain Teachers as to the management of the Superannuation Fund, we desire to say that under our system of Responsible Government, the management of such a Provincial fund by private persons would be a violation of a sound principle of public policy, and could never be permitted. The moneys for the Superannuation Fund received through the Inspectors (as it is well known) are at once transferred to the Treasury Department, into the custody of a responsible Minister of the Crown, to be managed by him. If he fails in his duty the remedy is simple; but no proof has been offered to show that he, or any other person having to do with the fund, has thus failed, and yet a good deal has been thoughtlessly said and reiterated in favour of the pernicious system of private control, to which we have referred.

#### RECEIPTS BY THE PROVINCIAL TREASURER, FROM EDUCATION DEPARTMENT.

For the year ended 31st December, 1871. (From the Public Accounts.)

SERVICE.	PARTICULARS.	\$ cts.	\$ cts.
Normal and Model Schools.	Fees, Pupils.....	4,924.00	
	Interest on \$1,100 Dom. Stock, to 30 Sept., '71.	66.00	
Depository.....	Sales of Maps, Apparatus, Prizes and Libraries during year.....		4,990.00
Superann'd Teachers.	Subscriptions during year.....	5,309.00	
	Interest on \$2,000 Dom. Stock, to 30 Sept., '71.	120.00	
Journal Education.	Subscriptions and advertisements.....		5,429.00
Museum.....	Sale of Photographs.....		180.66
Contingencies Ed. O.	Postage stamps.....		7.94
			72.39
	Total.....		35,450.65

W. R. HARRIS, *Accountant.*  
Treasury Department, Ontario,  
Toronto, December 30th, 1871.

A. MACKENZIE,  
*Treasurer.*

#### FIRST LESSONS IN AGRICULTURE.

To the Editor of the *Journal of Education.*

SIR,—A scurrilous article having appeared in the *Globe* newspaper of this city, on "First Lessons in Agriculture," by the Rev. Dr. Ryerson, attacking, among other matters, the orthography of parts of the work, we at once sent an explanation to the Editor (which he refused to insert,) to the effect that the author was not in any way responsible for any errors in the book. In the original MS. the words are all spelt as the *Globe* writer states that they should have been, (except some few words which the latter, in his ignorance of scientific terms, spells wrongly). The proof was not read by Dr. Ryerson, as he was absent during the time the book was being printed—but by a gentleman of great scientific ability, well known throughout the Province; and for any changes in the orthography of scientific terms he is responsible. With regard to other typographical errors, we may state that they only occur in the *Second Edition*, and arose from the fact that the Electrotypes plates which we had prepared for that Edition, broke up when placed on the press, involving the necessity of resetting many pages, and in our anxiety to have the book ready in time for the schools, these proofs were not so carefully read by us as they ought to have been, this we very much regret; but the edition was small and is nearly exhausted. We are having the whole work carefully read, and if the utmost vigilance can secure it, we promise Teachers and Students that the third Edition shall be faultless.

Your obedient servants,

COPP, CLARK & Co.

Toronto, January, 1872.

#### IX. Advertisements.

**NOW READY:**  
**First Lessons in Christian Morals, and**  
**First Lessons in Agriculture.**  
BY REV. E. RYERSON, LL.D.

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#### LECTURES ON THE SCHOOL LAW AND REGULATIONS.

Relating to Rural School Trustees; Selection of School Sites; Public School Meetings; Masters, Teachers, &c. Delivered to Normal School Students, by J. George Hodgins, Esq., LL.D., Barrister-at-Law. Price, 50 cents; by post, 55 cents.

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Toronto, Jan., 1872.

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