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# JOURNAL OF EDUCATION,

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## AN UNWISE AND UNBROTHERLY AGITATION.

WE have noticed with regret an unjust and unbrotherly agitation against the younger and more active teachers assisting to provide a support for the old and faithful members of their profession in their feebleness and age, as well as providing for themselves, which is now being promoted by two small sections of the teachers of our Public Schools—those who do not intend to remain in the profession, but make use of it as a stepping-stone to something else, and those who are penurious or selfish. A third section, without due consideration, is, we fear, being unwarily drawn into the agitation, and to them, therefore, we would respectfully address a few words. To the other two classes we shall say nothing, as it would be useless to do so; but to the more thoughtful and devoted members of the profession, who have unwittingly given their countenance to this unwise and unjust agitation, we would venture to say a few words. The subject is worthy of their careful consideration and candid judgment. It should neither, on the one hand, be summarily pooh-poohed with a selfish shrug, nor, on the other, declaimed against in the unreasoning style which looks with contempt upon all argument.

Now, what we would ask and answer in illustration of this question is:—

- 1st. What is the object of the fund?
- 2nd. What is the necessity for it?
- 3rd. Who should sustain it?
- 4th. On what principle should it be supported?

## WHAT IS THE OBJECT OF THE SUPERANNUATED FUND?

And first, "What is the object of the fund?" This question is the easiest one to answer; but the answer itself is one which, in one respect, touches a tender chord in our nature; and cold, indeed, is that teacher's heart which does not respond with warm feeling to the desire shown by the Legislature (which deals rather with the abstract than with the sympathetic) to provide for the declining years of the venerable and faithful members of his own profession, who, in the earlier times of our educational history, provided the intellectual food for the youth of our Province, including the very teachers themselves—some of whom now indignantly refuse to provide a small pittance for their worn-out, but honorable instructors, and even try to prevent others from doing so.

## WHAT IS THE NECESSITY FOR THIS FUND?

Our second question is, "What is the necessity for this fund?" To this we reply, that so long as teachers devote their lives to a profession so generally underpaid as theirs is, so long will there be a necessity for either friends (if there be any, but who are often poor themselves), or the teachers themselves, to provide for the quiet and comfort of the declining years of their brethren, who, in less prosperous days, and with scanty remuneration, led the van in that calling in which they feel proud to follow. Even now, at the salary given to teachers (considering the increased cost of living) it is almost impossible to lay by a sum which would realize more than a few dollars a year. But by availing themselves of the provisions of the new Act they can, on the payment of the paltry sum of two dollars each half year, teachers secure an allowance for life, after their retirement from the profession, of six dollars a year for every year they may have taught school. For instance, if a teacher has been twenty-five years in the profession, and has complied with the law and regulations on the subject, he will, on his retirement, be entitled to an allowance of \$150 a year for life, should the fund permit it, although, at four dollars a year, he will have only paid \$100 in all into the fund; and if he has been twenty years teaching, he will secure an allowance of \$120 a year, although his total subscriptions for the twenty years have only been \$80 in all; if for fifteen years \$90, total subscription \$60 in all; and if for ten years \$60 a year, while he has only paid \$40 in all into the fund. In other words he will receive for his first year's pension, fifty per cent. more than he has paid into the fund altogether! These facts are irresistible, and only show what a boon the teachers are thought-

lessly throwing out of their hands in petitioning against their contributing to the fund, as provided by law. For it should not be forgotten that, if the clause of the new law on the subject is repealed, the entire law on the subject will, no doubt, be swept away, and teachers will be left to provide for their old age as they best can, or rather they will be left with no provision whatever for their retirement from the profession.

#### THE OLD TEACHERS KEEP DOWN THE GENERAL SCALE OF REMUNERATION.

There is another cause illustrative of the reason why, in the interests of the profession, the Superannuated Teachers' Fund should be sustained. Among the more than 5,000 teachers in Ontario, some hundreds are getting advanced in life, and many of them are even old and infirm. Because of their age and infirmity they find it difficult to get employment, and yet, for want of means of support, they cannot retire and make way for younger men. The consequence is, that they offer their services at a very low rate, and thus find employment, to the exclusion of better teachers at a higher salary. Thus, in their need they help to keep down the rate of remuneration, which would otherwise be paid to more active teachers, while they keep up a competition from which the other teachers are made to suffer. Would it not, therefore, be better for all parties concerned, that the younger teachers should provide for the honourable retirement of a section of their own profession grown grey in the service, and enfeebled by their sedentary life? This feature of the question has been pressed upon the attention of the Department, and we present it in the following extract from the letter of a highly respected inspector, who has felt the embarrassment arising from the existence of old teachers in his county. He says:—

"There are a few old teachers in this county who, perhaps, answered an important purpose in the teacher's calling twenty-five or thirty years ago, but whose stereotyped methods of procedure in the school-room are opposed to every kind of modern improvement in the art of teaching. It has become a serious matter with our Board of Examiners to know what is to be done with such teachers. They are poor, and have not yet made the necessary payments into the Superannuation Fund." He then asks if they can be placed on the Superannuation list, and desires other information on the subject, etc."

Now teachers will see that if (as they have done for many years, when the matter was left a voluntary matter with them), they refuse to sustain the fund in the manner provided by law, they can neither expect to superannuate their older, worn-out brethren, nor can they, with any show of justice or propriety, ask the Legislature even to do what it has done for the past few years, which, it is well known, is quite inadequate for the maintenance of the fund. The agitation has raised the question of the very existence of the fund itself; and, if the younger teachers refuse to make the small sacrifice, in the interests of their profession, of paying two dollars every half year into the fund (from which they themselves will derive a substantial benefit), and in the maintenance of which they are interested, how can they expect the Legislature—which has recently so greatly raised the standard of their qualification, and incidentally of their emoluments—to provide for their retirement from the profession and support when they are worn out? In this view of the case, we think teachers have not sufficiently weighed the matter in this agitation, but we trust that they will be induced to do so, when they consider the foregoing facts.

#### WHO SHOULD SUSTAIN THE FUND?

We think we have already anticipated the answer to the question "Who should sustain this fund?" and, therefore, need not dwell upon it. In fact, the teachers have themselves answered it, but in a form which, in practice, would be felt by them to be onerous, if not oppressive.

At a meeting of the Public School Teachers' Association of the Province of Ontario, held in 1869, a series of resolutions was passed, embodying certain amendments to the School Bill then before the Legislature. Amongst those agreed to by the Teachers' Association was the following one, which involved the very principle of *compulsion*, against which teachers now declaim:—"Each candidate, at his or her first examination for a certificate of qualification, shall deposit with the County Superintendent the sum of ten dollars, to be paid into the Superannuated Teachers' Fund, of which five dollars shall be refunded in case of failure." In other words that, before a teacher is in a position to earn one penny in his profession, he shall be compelled to pay ten dollars into the fund. How much easier to the teacher, more equitable in principle and better in every respect is the provision of the law (against which the agitation has been raised) that no one but members actually in the profession, who have derived their means of support from it, should be called upon to contribute to a fund intended for their own support

on their retirement from it? That this is felt by teachers to be the case, we learn from the following resolution, which was recently agreed to at a Convention of Teachers for the West Riding of the County of Durham:—

"Resolved that we hear with sorrow that an effort is being made to repeal the clause in reference to the superannuated fund, and that we feel a debt of gratitude to Dr. Ryerson for the introduction of said clause, believing it to be one of the most beneficial amendments in the New School Act."

We will add one more opinion on this subject, expressed in a paper read before the Teachers' Association at Elora, in 1869, by the late Mr. George Elmslie. He sent it for insertion in this *Journal*, but was suddenly called away before it was published. Of his merits in this matter, A. Dingwall Fordyce, Esq., Inspector of the County, thus writes:—"Mr. Elmslie's advocacy of this matter was certainly most unselfish, since about six months ago he was struck with paralysis, and although able subsequently, with his daughter's aid, to carry on the school till the day before his death, the evident effects of the first seizure must have made it apparent to himself that his hold of life was exceedingly precarious." After a few general remarks he says:—"The Board of Education, with a forethought at once wise, generous and just, established a Superannuated Fund, which chiefly through the poverty, and I may add in part by the inattention of teachers, is now almost swamped.

By what means are these serious evils to be remedied? The first step undoubtedly must be the raising of teachers' salaries to an equality with the wages of mechanics, artisans, clerks and clergymen—no unreasonable demand. This difficulty overcome, how is the Superannuated Fund to be reestablished, or re-created with a provision for widows and orphans? Chiefly, I think, in the way heretofore pursued by the churches named (*cujus rei pars magna fuit*):—

1. By a unanimous agreement of the whole body of teachers to pay annually from the time of their appointment the sum of dollars into the Superannuated Fund. This also to be a condition of their obtaining a certificate.

2. That the whole body of teachers respectfully request the Board of Education to recommend and enjoin upon Superintendents and School Trustees to pay over and above the teachers' salary into this Superannuated Fund, a sum equal to the teachers' subscription.

3. By a unanimous appeal of the whole body of teachers to the public, setting forth the justice and necessity of our case, and entreating their aid in the way of subscriptions, donations and bequests.

4. That the teachers petition Government for the extraordinary grant of \$ , or such sum as may be a sufficient nucleus or foundation for the Teachers' Superannuated and Widows and Orphans' Fund.

5. That the moneys arising from these or any other resources be vested in the hands of responsible Trustees—of the members of the Board of Education, to be by them invested in Government, Municipal, or other satisfactory securities. Principal and interest to be kept unbroken and allowed to accumulate for the space of — years.

Cases of necessity occurring within this period of accumulation must be met in part by the school section in which they occur, in part by a small contribution, say — from each teacher, and a like contribution from each School Section or Board of Trustees.

#### ON WHAT PRINCIPLE SHOULD THIS FUND BE SUPPORTED.

Our last question is, "On what principle should this fund be supported?" We answer, on the principle already laid down in its establishment, that of the mutual co-operation of the Teachers and the Government. This principle is one which commends itself to the judgment of teachers, and yet how have they carried it out? While the Government have faithfully and honourably contributed to the fund \$4,000 per annum, and have even increased it of late years to \$6,000 per annum, the teachers, as a body, have done nothing. An isolated case here and there of an expectant claimant on the fund who sends in his \$4 a year, but the teachers, as a body, have failed to do their duty in the matter. Low salaries, selfishness, and a temporary interest in a profession which they do not mean to follow, have operated to produce this state of things. Now, however, the country is prosperous, and salaries have been increased. The profession itself has been placed on a recognised footing, and it is right and proper for the Legislature, which has thus afforded facilities to elevate the teaching profession, to see that the old worn out members of the profession shall be provided for, and not remain as a hindrance to progress.

#### VIEWS OF THE CHIEF SUPERINTENDENT ON THIS SUBJECT.

In conclusion we will add the following remarks on the subject from a recent *Circular to the Public Press* by the Chief Superintendent of Education. In them he clearly points out who are the true authors of this unwise and selfish agitation. He says:—

"Under the new Act, additional provision is made which will more than double the fund for the assistance of disabled or worn-out teachers of public schools. Among the clergy of different religious persuasions, funds are established by required subscriptions for their relief or partial support in old age. In the Wesleyan body, for example, every one of the (now six hundred) ministers is required to pay five dollars per annum towards the support of superannuated ministers and their widows—a regulation which has been in force more than a quarter of a century. In the Civil Service in England, from two to five per cent. is deducted from the annual salary of each officer or clerk in the employment of Government towards the support of such officers and clerks in old age. The same principle is embodied in the School Act by requiring each licensed male public teacher to pay four dollars per annum into a fund for the support of superannuated teachers. In case a teacher dies, the whole amount of his subscription, with interest at the rate of seven per cent., is paid back to his widow or legal representative. If a teacher becomes superannuated, he receives a pension in proportion to the amount of the fund, according to the number of years he has taught; if he leaves the profession, he is entitled to receive back one-half of the sum which he has paid in towards the support of the worn-out members of it, which is even more than a Wesleyan minister could obtain who should abandon his work. The objectors to such an arrangement are those teachers who do not intend to make teaching the profession of their life, but who make teaching, for the time being, a stepping-stone to some other pursuit or profession. They wish to avail themselves of its license to make what money they can out of it, without paying anything in return, even in behalf of those who spend their vigour of life in the work. The subscriptions to this fund are paid through the County Inspectors and Chief Superintendent, and are deposited forthwith in the bank to the credit of the Treasurer of the Province, as are all the fees of the Model Schools, and the moneys received at the apparatus and library and prize book depositories, and paid out by the Provincial Treasurer to the parties entitled to receive them, on the certificate of the Chief Superintendent."

#### DEPARTMENTAL ALLOWANCE TO INSPECTORS.

The Note to Regulation 25 of the Duties of Inspectors, has been modified as follows:—

NOTE.—Each Public or Separate School House in use for a school in a legally established (or duly recognized) school section or division, within the jurisdiction of the Inspector, shall be counted as one school (whether such school be in actual operation or temporarily closed for not longer than six months); and each department of a school, with a register of its own, and taught in separate rooms, or a flat of a building, so as to involve the additional oversight and examination of an ordinary school on the part of an Inspector at his official visits, shall also be counted as one school; but a school with one or more departments, when closed, shall only be regarded as one school for the time limited above, beyond which time no school which is closed shall be counted.

### I. Papers on School Teachers.

#### 1. REMUNERATION OF SCHOOL TEACHERS.

A nation's weal depends upon the mothers and school teachers. This is an acknowledged fact in the matter of mothers, but is not so fully recognized in relation to teachers. The influence of those who have charge of the young, and the responsibility of such, cannot be over estimated nor too highly appreciated. Who can tell how much the nation's honour and glory now, and in the coming time, may have been enhanced by the influence shed by such men as the late Dr. Arnold, and the present Bishop of Exeter over boyish minds at Rugby? All that those boys, now in their collegiate or life's course, hold noble, pure, manly and Christian was implanted in their school days, and will remain with them and their children from generation to generation, to preserve the high and honorable name of the British Empire. Let good men have the training of our children and we need not be very careful of those who may exercise influence over them in their maturer years. It will be seen at once, then, that the calling of a teacher is a very high and responsible one; and a people who value their national status will estimate it as such, and will be very careful in their selection of men and women for that office; and, when selected, will pay them the respect due to them; and should, moreover, make them such pecuniary recompense for their labours as should enable them to maintain a position in accordance with their high vocation, and such as should enable them to pursue their onerous duties without one monetary anxiety. Many persons, in considering the position of teachers and

the reward due to them for their services, too often forget another important thing, and that is, the long, expensive and arduous course of training they have to undergo. It is not sufficient that teachers should be well educated in the subjects which they have to teach, but their knowledge and study must extend over a far wider and higher field. Before any subject can become one to form part of youthful education, it must be recognised by all the world as true. Truth, in this sense, must be reflected from the world to the schools, and not from the schools to the world. The teacher's thought, therefore, has to range over the wide world of knowledge, and his eye must watch every step in the progress of civilization.

Seeing how great the responsibility attached to this office is, and how manifold and elevated must be its culture, it would seem to follow, as a matter of common sense, that the remuneration accorded to it should be most liberal. But what is the fact? Let any one examine the newspaper advertisements, and he will see school authorities seeking teachers, and offering the munificent salaries of \$300, \$400 and \$500 per annum, and in some very rare cases as much as \$700. This is not right. We put a man with a responsibility second to none, and an education far above the requirements of ordinary occupations, on a level with second-rate clerks, with day labourers, with young men who are just commencing their career, and who would no more think of being contented with such salaries as a permanency than they would of flying in the air. How can an educated man unite himself to one who can be a true helpmeet to him and a support to him in his great mission, on such salaries as prevail in this country? It may be said that some schools are so small that more cannot be paid. This objection will not hold in the least; because, in the first place, small schools should never be made the standard of payment; and, in the second, the consideration should not be what the number of pupils may be but the great importance of the work. A few pupils may be under instruction at one time, but the master or mistress of even the smallest school will have a vast number of pupils under training in the course of twenty years or more. Let it be remembered, then, that all these are going forth into the world for good or evil, and if we desire it should be for good we must take care that those entrusted with their training are qualified to inspire them with nobleness of purpose. To attain this end we must increase our teachers' salaries to something far beyond what they are at present.—*Toronto Telegraph*.

#### 2. CHEAP TEACHERS.

The notions entertained by some rural school trustees with regard to the fitness of teachers may be gathered from the general tone of their advertisements for the fulfilment of a vacancy. The whole burden of their quest consists of an invitation to the pedagogic community to state the salary which would satisfy them. When a certain number of replies have been received, no doubt, they make a bargain with the presenter of the lowest tender. Cheapness, not moral or intellectual fitness, is what they want in the person to whom they entrust the education of their children. And yet, if their children do not succeed in acquiring a certain respectable amount of scholarship from the starveling who accepts their pittance, they complain loudly of the whole scholastic system, and send the "lowest tender" man untenderly adrift. So teacher succeeds teacher, till the "rising generation" has risen to take the place of its predecessors, and to pursue, in turn, the ancestral system. Is it any wonder that good teachers are badly paid, and that very often the best of the profession give it up in disgust. The only remedy would be to have a legal minimum for the salaries of all teachers, which should be a *sine qua non*, in every municipality, to the possession of school privileges.—*Gazette*.

#### 3. CONGRESS OF SCHOOL-TEACHERS.

A Congress of school-masters and school mistresses, consisting of about 2,000 persons, has recently been in session at Linz, in Upper Austria. The Governor of the Province opened the Congress with an Address, in which he said that the Austro-Hungarian Government continued to be animated by a progressive spirit in educational matters, and that it would never permit any retrogression. This declaration produced a very depressing effect on the few members who belong to the clerical party. The following resolutions were adopted: 1. The teaching of religion according to creed is opposed to the fundamental principle of popular education. 2. Religious teaching should develop as simply and spiritually as possible the knowledge of the original source of existence by means of science and history. 3. The teaching of morality should proceed by example as well as by precept. 4. It being admitted that the teaching of religion and morality is irrespective of creed, the necessity for an ecclesiastical teacher of religion in national schools disappears. The other speeches and resolutions were equally liberal in tone, and the Congress is regarded as an event of no small importance.

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

I. ABSTRACT OF MONTHLY METEOROLOGICAL RESULTS, compiled from the Returns of the daily observations at ten High School Stations, for August, 1871.

OBSERVERS:—Pembroke—James Smith, Esq., M.A.; Cornwall—James H. Coyne, Esq., B.A.; Barrie—H. B. Spotton, Esq., M.A.; Peterborough—Ivan O'Beirne, Esq.; Belleville—A. Durdon, Esq.; Goderich—Jam. s Preston, Esq., B.A.; Stratford—C. J. Macgregor, Esq., M.A.; Hamilton—A. Macallum, Esq., M.A.; Simcoe—James J. Wadsworth, Esq., M.A.; Windsor—J. Johnston, Esq., B.A.

Table with columns: STATION, North Latitude, West Longitude, Elevation, Barometer at Temperature of 32° Fahrenheit, Range, Monthly Means, Daily Range, Highest, Lowest, Warmest, Coldest, Monthly Means, Tension of Vapour.

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. n Inland Towns.

Table with columns: STATION, Humidity of Air, Winds, Number of Observations, Motion of Clouds, Amount of Cloudiness, Rain, Snow, Auroras.

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.

PEMBROKE.—Lightning on the 15th. Lightning with thunder, 4th. Lightning with rain, 30th. Thunder with rain, 29th. Lightning and thunder with rain, 3rd, 8th, 16th, 18th. Shooting stars numerous on 9th, 10th, 11th, and a few nights after. Wind storm, 12th. Fogs, 2nd, 3rd, 18th, 22nd, 24th. Rain, 4th, 6th, 8th, 9th, 11th, 17th, 18th, 20th, 21st, 23rd, 27th, 30th. CORNWALL.—Lightning on 16th. Thunder with rain, 29th.

19th. Rain, 4th, 8th, 15th, 16th, 20th, 26th, 27th, 29th, 30th. On 24th although no aurora at 9 P.M., about 10.12 P.M., observed zenith filled with streamers, forming a dome or corona, no motion in the streamers; 30th, observed for the first time that the swallows had gone. The first half of this month very dry; so much so that the leaves were withering and falling from the trees. Just rain enough during the month to keep root crops and vege-

tables from dying. Nights generally cool, sometimes quite cold. Daily ranges in temperature sometimes large. Atmosphere during the month very hazy and smoky. Grasshoppers very destructive to vegetables.

**BELLEVILLE.**—Lightning and thunder with rain on 4th, 6th, 15th, 16th, 20th. Wind storm, 8th. Rain, 6th, 15th, 16th, 20th, 26th, 27th, 29th, 30th. This month was characterized by a high temperature and by absence of rain. Fires raged especially in northern townships, and the cattle suffered from want of grass and water.

**GODERICH.**—Lightning on the 6th and 15th. Lightning and thunder with rain, 4th, 15th. Wind storms, 11th, 12th, 16th, 28th, 29th, 30th. Fogs, 24th, 26th. Rain, 4th, 11th, 15th, 19th, 26th, 28th—31st. A considerable number of shooting stars, some very brilliant, seen from 7th to 14th.

**STRATFORD.**—Lightning on 4th, and 8th. Lightning and thunder with rain, 15th. Frost (reported), 19th. Wind storms, 15th, 29th, 30th. Fogs, 10th, 16th. Rain, 11th, 15th, 19th, 26th—30th. Excess of mean monthly temperature over average of ten years = +0°.81.

**HAMILTON.**—Harvest pears ripe on 5th. Lightning and thunder with rain, 8th. Harvest apples ripe, 27th. Wind storm, 30th. Fog, 26th. Rain, 4th, 8th, 11th, 20th, 26th—30th. Ordinary meteor, on 17th, at 9 p.m., 45° high, fell South-west. The drought has this season, been exceedingly great, and of long continuance. Ordinary sources of water have all failed; the grass in the pastures has been dried up, so as to be almost useless for cattle; the ground has been dry to the depth of about four feet (rain on the 29th had penetrated one foot). Vegetation has languished to a very great extent. The following is a comparative statement of the amount of rain from 1st April to 19th August, at this station for the past six years:

	1866.	1867.	1868.	1869.	1870.	1871.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
August 1st to 19th.	3.3290	0.6238	0.8122	1.0095	1.4768	0.6620
April 1st to August 19th . . . . .	18.1743	9.6227	10.5419	17.4493	12.9454	9.1841

**SIMCOE.**—Lightning and thunder with rain, 20th, 24th, 29th. Rain, 24th, 26th—31st.

**WINDSOR.**—Lightning on 10th, 14th, 15th. Rainbow on 2nd. Lunar halo, 24th, 25th, 29th. Meteors, as follows: on 3rd, one in S. W., towards H.; 6th, one S. towards S. W.; 8th, one W. towards H.; 10th, one E. towards S.; one N. towards W.; one S. towards W.; 11th, one E. towards S.; 18th, two W. towards S. Wind storms, 3rd, 20th, 25th, 29th. Fogs, 9th, 10th, 22nd, 23rd, 24th. Rain, 2nd, 4th, 26th, 28th, 29th. Month characterized by the great height (98°.7) attained by the thermometer, by the extreme drought that prevailed, and by a total absence of thunder storms.

### III. Papers on Scientific Subjects.

#### 1. THE DAILY WEATHER REPORTS.

The meteorological reports from the office of the chief signal department, Washington, are now regularly received, and read with great interest; and when their importance is more generally known, our mariners of the lakes will regulate their movements by the "Probabilities" telegraphed from Washington. In order, however, to make these reports available to that class, they must be placed before them otherwise than through the columns of the daily press, which cannot reach them in time. In England, Admiral Fitzroy organized a system of drum signals, in connection with his observatory, at every port in the United Kingdom, and though the signals were at first laughed at, it was not very long before the captains of ships trusted completely in them and were not deceived. The consequence is the saving of an immense amount of shipping and many lives annually. The Washington Bureau has already established a great reputation for accuracy in its surmises of the coming weather, and it is only requisite to make them more widely known to secure their appreciation. We would be glad to see arrangements entered into with the Washington authorities by our Government, by which storm signals could be erected at all our principal lake ports. The saving of property in a short time would more than repay the first expenses. The ocean tide and the storms are under fixed rules, and though they have long baffled enquiry, Science at length has obtained the clue to their movements and can tell all their courses with considerable accuracy.—*Telegraph.*

The signal-office at Washington now has such telegraph facilities that at any hour, day or night, should reports of heavy storms be received, the regions over which the storm is likely to extend can be warned some hours in advance, the headquarters being in direct communication with all the principal cities of the country.

#### 2. THE LAW OF STORMS.

In the fourth meteorological report by Prof. J. P. Espy, of Washington, D. C., we find the following instructive generalizations:—

1. The rain and snow storms, and even the moderate rains and snows, travel from the west toward the east in the United States, during the months of November, December, January, February and March, which are the only months to which these generalizations apply.

2. The storms are accompanied with a depression of the barometer near the central line of the storm, and a rise of the barometer in the front and rear.

3. This central line of minimum pressure is generally of great length from north to south, and moves side foremost towards the east.

4. This line is sometimes nearly straight, but generally curved, and most frequently with its convex side toward the east.

5. The velocity of this line is such that it travels from the Mississippi to the Connecticut river in twenty-four hours, and from the Connecticut to St. John's, Newfoundland, in nearly the same, or about thirty-six miles an hour.

6. When the barometer falls suddenly in the western part of New England, it rises at the same time in the valley of the Mississippi, and also at St. John's, Newfoundland.

7. In great storms the wind for several hundred miles on both sides of the line of minimum pressure blows toward that line directly or obliquely.

8. The force of the wind is in proportion to the suddenness and greatness of the depression of the barometer.

9. In all great and sudden depressions of the barometer there is much rain or snow; and in all sudden great rains or snows there is a great depression of the barometer next the centre of the storm, and rise beyond its borders.

10. Many storms are of great and unknown length from north to south, reaching beyond our observation on the Gulf of Mexico and on the northern lakes, while their east and west diameter is comparatively small. These storms therefore move side foremost.

11. Most storms commence in the "far west," beyond our most western observers, but some commence in the United States.

12. When a storm commences in the United States the line of minimum pressure does not come from the "far west," but commences with the storm, and travels with it toward the eastward.

13. There is generally a lull of wind at the line of minimum pressure, and sometimes a calm.

14. When this line of minimum pressure passes an observer towards the east, the wind generally soon changes to the west, and the barometer begins to rise.

15. There is generally but little wind near the line of the maximum pressure, and on each side of that line the winds are irregular, but tend outward from that line.

16. The fluctuations of the barometer are generally greater in the northern than in the southern part of the United States.

17. The fluctuations of the barometer are generally greater in the eastern than in the western part of the United States.

18. In the northern part of the United States, the wind, generally in great storms, sets in from the north of east and terminates from the north of west.

19. In the southern parts of the United States the wind generally sets in from the south of east and terminates from the south of west.

20. During the passage of storms the wind generally changes from the eastward to the westward by south, especially in the southern parts of the United States.

21. The northern part of the storm generally travels more rapidly toward the east than the southern part.

22. During the high barometer on the day preceding the storm it is generally clear and mild in temperature, especially if very cold weather preceded.

23. The temperature generally falls suddenly on the passage of the centre of great storms, so that sometimes, when a storm is in the middle of the United States, the lowest temperature of the month will be in the West on the same day that the highest temperature is in the East.

Some of the storms, it is true, are contained entirely, for a time, within the bounds of my observers, and in that case the minimum barometer does not exhibit itself in a line of great length, extending from north to south, but it is confined to a region near the centre of the storm, and travels with that centre towards the eastward.

From these experiments it may be safely inferred, contrary to the general belief of scientific men, that vapour penetrates the air from a high to a low dew point with extreme slowness, if, indeed, it pene-



trates it at all; and in meteorology, it will hereafter be known that vapour rises into the regions where clouds are forced only by being carried up by ascending currents of air containing it.—*Scientific American*.

### 3. AN IMPORTANT WEATHER THEORY.

M. de Pastes, in a recent paper read at the *Academie des Sciences*, propounds a theory which, if correct, may be of service in the prognostication of weather. He intimates that the polar regions are not disturbed by storms, but are regions of calm, and quotes a communication to the Academy, in July, 1870, in which he wrote: "the next winter, 1870-71, will be one of the coldest in the whole century." It will be remembered that the peculiarity of the great gale in which the Royal Charter, with several hundred passengers and crew, foundered in sight of the Welsh shore, was its extreme coldness: it was due to a polar current. In a recent article on the meteorological arrangements of America, Professor Maury dwells upon the importance of enlarging the applications of the electric telegraph. In November, 1864, he says, while the Anglo-French fleet was operating in the Black Sea against Sebastopol, telegraphic communication was received in Paris that a great tempest was passing the western coast of France, and, according to barometrical indications was on its way eastward. Marshal Valliant telegraphed from Paris in time to enable this splendid fleet to put to sea before the cyclone could traverse the five hundred leagues and disperse the ships. The storm came with fatal fury at the predicted hour, and so ravaged the Crimea that the allied camp presented a scene of havoc and ruin such as the combined fire of all the Russian forces could not have wrought. The telegram saved the allied navies from a most destructive disaster, which might well have disabled them from sustaining the besieging armies, and possibly have changed the course of the great Eastern war. In a year the great plague of London destroyed 90,000 lives, in a single day, the 5th of October, 1864, the storm which swept over Calcutta destroyed 45,000 lives. It is even asserted that, with daily telegrams from the Azores and Iceland, two or three days' intimation could be had of almost every storm that visits Great Britain. The telegram from Iceland would give timely information of the Polar air-current, that from the Azores of the tropical air-current. The accuracy of Maury's cyclonic theory of storms has been demonstrated by Dove and Thorn for the Indian and China seas, and Mr. Stevenson has shown that, in cases where storms passing over the British Isles have appeared to deviate from the cyclonic law, the result may be demonstrated to be due to the collision of interfering cyclones—a phenomenon which will repay further investigation.

### 4. THE DECEMBER ECLIPSE OF THE SUN.

On the 12th of next December there is to be a total eclipse of the sun. It will be visible close by Arabia, first in the open sea. It will traverse the northern part of the Indian peninsula. It will thence pass across the northern extremity of Ceylon. It will not touch land again until it reaches the south of Sumatra and the western extremity of Java. Thence it will cross the northern part of Australia, and, except in some of the smaller islands of the Polynesian group, it will not be seen again on land. We notice that the Governments of Europe, particularly that of Great Britain, are preparing to send out expeditions to the available points of observation; and it is stated that some of the best astronomers of Great Britain and France, encouraged by the results of the experiments made on the occasion of the last solar eclipse, are determined at all hazards to find their way to Java, and, from that point of observation, to examine once more, with all the aid that science can give, the sun's corona. What the corona is, is as yet a puzzle to the philosophers. Theories are numerous. The spectroscope is again to be largely used, and every attempt will be made to procure accurate photographs. A Dr. Huggins has devised a telescope, by means of which one observer will be able to study the aspect of the corona, while another will study the spectrum of the light from the same part. This instrument is, we understand, to be taken out to some suitable point of observation.

## IV. Papers on the Condition of our Schools.

### 1. NECESSITY FOR PROPER "SCHOOL ACCOMMODATION."

The School Law Improvement Act of 1871 very wisely enacts in its second section, that

"Each school corporation [in city, town, village, or rural section,] shall provide adequate accommodations for all the children of school age resident in their school division or municipality."

The necessity for such an enactment has been for years fully demonstrated to every one familiar with the condition of the school premises, especially in many of our rural sections. The following remarks of an active Inspector, who has been inquiring into the matter, will excite a painful surprise that trustees could allow such a state of things to exist, especially in an old and prosperous neighbourhood. He writes:—

"The management of the schools, with a few exceptions, is deplorable in all the stages. Even the bodily comfort of young children is often shamefully neglected. Yesterday I examined a school in an old settlement. On entering, the first object that met the eye was a row of little boys, apparently about six or seven years of age, seated on a piece of scantling about six inches wide, and raised on two pieces of firewood, so as to elevate the seat to seven or eight inches above the floor, consequently they had their knees in proximity to the chin, and were shivering with cold,—the north wind blowing freely through the spaces between the logs of the miserable building. The teacher said she had remonstrated with the trustees, but in vain. None of the trustees can either read or write. I sent them a message through their secretary-treasurer, which I hope they will attend to. It is needless to say that the state of learning was of a piece with the building and its surroundings."

In order to give effect to the wise provision of the law requiring trustees to remedy such an inhuman state of things, the following regulations have been adopted by the Council of Public Instruction:

*Adequate School Accommodation.*—The law declares trustees "shall provide adequate accommodations for all the children of school age [i.e., between the ages of five and twenty-one years, resident] in their school division." (i.e., school section, city, town, or village.) These "accommodations" to be "adequate," should include

- (1.) A site of an acre, in extent, but not less than half an acre.
- (2.) A school house (with separate rooms where the number of pupils exceeds fifty), the walls of which shall not be less than ten feet high in the clear, and which shall not contain less than nine square feet on the floor for each child in attendance, so as to allow an area in each room, for at least one hundred cubic feet of air for each child. It shall also be sufficiently warmed and ventilated, and the premises properly drained.
- (3.) A sufficient fence or paling round the school premises.
- (4.) A play ground, or other satisfactory provision for physical exercise, within the fences, and off the road.
- (5.) A well, or other means of procuring water for the school.
- (6.) Proper and separate offices for both sexes, at some little distance from the school house, and suitably enclosed.
- (7.) Suitable school furniture and apparatus, viz.: desks, seats, blackboards, maps, library, presses and books, etc., necessary for the efficient conduct of the school. (See also note to (a) of regulation 4, of the "Duties of Inspectors," as follows):

[NOTE.—In his inquiries in these matters, the Inspector is especially directed to see whether the law and regulations have been complied with in regard to the following matters; (should he discover remissness in any of them, he should at once call the attention of the trustees to it, before withholding the school fund from the section, with a view to its remedy before his next half-yearly visit):

- (1.) *Size of Section.*—As to the size of the school section, as prescribed by the fifteenth section of the School Law of 1871.\*
- (2.) *School Accommodation.*—Whether the trustees have provided "adequate accommodation for all children of school age [i.e., between the ages of five and twenty-one years, resident] in their school division," [i.e., school section, city, town, or village] as required by the second section of the School Act of 1871.
- (3.) *Space for air.*—Whether the required space of nine square feet for each pupil, and the average space for one hundred cubic feet of air for each child, have been allowed in the construction of the school house and its class rooms.† (See regulation 9, *Duties of Trustees*, above.)

\**Size of School Grounds.*—The school grounds, wherever practicable, should in the rural sections embrace an acre in extent, and not less than half an acre, so as to allow the school house to be set well back from the road, and furnish play-grounds within the fences. A convenient form for school grounds will be found to be an area of ten rods front by sixteen rods deep, with the school house set back four or six rods from the road. The grounds should be strongly fenced, the yards and outhouses in the rear of the school house being invariably separated by a high and tight board fence; the front grounds being planted with shade trees and shrubs. For a small school, an area of eight rods front by ten rods deep may be sufficient, the school-house being set back four rods from the front.

† *Ventilation* becomes easy as soon as it is known that it is embraced in these two essential operations, viz.: 1st, to supply fresh air; 2nd, to expel foul air. It is evident that fresh air cannot be crowded into a room unless the foul air is permitted to pass freely out; and certainly the foul air will not go out unless fresh air comes in to fill its place. It is useless to open ventilating flues when there is no means provided to admit a constant supply of fresh air from without.

(4.) *Well; Proper Conveniences.*—Whether a well or other means of procuring water is provided; also, whether there are proper conveniences for private purposes of both sexes on the premises; and whether the regulations in regard to them, contained in regulation 6 of the “*Duties of Masters*” and regulation 9 of the “*Duties of Trustees*,” are observed.

Regulation 6.—*Duties of Masters in regard to School Premises, &c.*—The trustees having made such provision relative to the school house and its appendages, as are required by the fourth clause of the twenty-seventh section, and the seventh clause of the seventy-ninth section of the Consolidated School Act, and as provided in regulation 9 of the “*Duties of Trustees*,” it shall be the duty of the master to give strict attention to the proper ventilation and temperature,\* as well as to the cleanliness of the school house; he shall also prescribe such rules for the use of the yard and outbuildings connected with the school house, as will insure their being kept in a neat and proper condition; and he shall be held responsible for any want of cleanliness about the premises.

## 2. WHAT OUR SCHOOL-HOUSES SHOULD BE.

A “*Teacher*” in the *Chatham Planet* writes as follows:—

“There are four general points about a school-house which demand special attention, *viz.*, accommodation, heat, light and ventilation. \* \* \* In its strictest sense, these things belong to the *plan*, and as they are the most important, let them have our first attention; but let us not forget or neglect to associate with them a good design, for thereby we increase the value of the whole work, and form a combination of utility and beauty, which will have a powerful influence over the minds of all who are brought in contact with it.”

**ACCOMMODATION.**—The size of a school-house depends mainly on the number of pupils it is to accommodate, but trustees must remember that they must have a second room if there are more than fifty pupils attending the school; and further, there must be at least nine square feet of floor surface for each pupil, and the walls must be ten feet between the floor and the ceiling. This is a step in the right direction, but the limit of minimum size should have been greater. Why? Are not our school-houses large enough now? Most decidedly they are not. Why is it so many pupils who regularly attend our Public Schools are pale and feeble, troubled with nausea, sick-headache, &c.? On an average each pupil vitates at least eight cubic feet of air per minute, *i. e.*, makes it unfit for re-inspiration, on account of the carbonic acid gas, a deadly poison, thrown off from the lungs, which it contains. There are but few school-houses in the Province which contain more than sixty cubic feet of space for each pupil, and very many do not contain that much. In six or seven minutes nearly all that air is perfectly unfit for inhalation, but thanks to the cracks in the walls and floor, it is partly renewed, and the little sufferers are spared a little longer. There must be sufficient ventilation to carry off this impure air, a sufficient supply of fresh air must be introduced, and there must be sufficient space in the room to accommodate the air introduced, that it be not changed too suddenly, and the pupils thus subjected to equal danger from cold. The introduced air cannot be heated and diffused through the room by any ordinary heating apparatus in ten minutes, and in that time each pupil has vitiated eighty cubic feet of air; hence the minimum space required by the regulations of the Council of Public Instruction is too little. A room designed for fifty pupils should not contain less than seven hundred square feet, and be at least twelve feet between the floor and ceiling. This will leave sufficient space for aisles, cases for books and apparatus, platform for recitation, &c. The school-room should never be used for other objects than study and recitation; hence there should be accommodation provided for the pupils who, through distance, inclemency of weather, or other cause, have to remain near the school-room during the noon recess, and for those pupils who may arrive before the time of opening school.

**HEATING.**—The common mode of heating school-houses is very objectionable. There is generally but one stove in the room, which must be kept nearly red-hot, that the farther parts of the room may be occasionally allowed a breath of warm air; hence those near the stove suffer from heat and carbonic acid gas, for the red-hot iron is permeable by it, while those at a distance suffer from cold. In the locality of the stove there is generally a quantity of fuel, dust and dirt, and idly-disposed pupils who, through excuse of being cold, collect there to perform their mischievous tricks. The noise necessarily arising from this, and keeping up fires, together with smoke and other concomitant evils, are great annoyances, and greatly re-

\* *Temperature.*—In winter the temperature during the first school hour in the forenoon or afternoon, should not exceed 70°, nor 66° during the rest of the day.

tard the progress of the school. To avoid all this inconvenience, there should be a basement to every school-house, in which wood could be stored, and a furnace or heater, which would cost but little more than a large stove, erected; or a stove may be used, provided it is encased in zinc or tin, so as to force all the heated air into the room, instead of distributing it about the basement. Heated air thrown into a room at any point will distribute itself equally through every part; hence, if every part of the room is reasonably light, and double windows used, the room will soon be comfortable.

If circumstances will not permit of a basement, and a stove must be used, it should have a tin or zinc casing surrounding, and six inches from it, extending to the floor, the top perforated with small holes to let the hot air escape into the room, and the front closed in round the door so as not to obstruct putting in fuel. That there may be a constant supply of fresh air, a trunk or pipe should pass outside underneath the floor, and communicate directly with the stove. The room is thus constantly filled with fresh, warm air, while the impure air is carried off by the ventilator. When the room is large, two stoves should be used, one at each end of the room, in order to avoid heating them too much, because when heated red hot, iron is permeable by several obnoxious gases.

**VENTILATORS.**—All windows should be hung on pulleys. If the windows and doors are skilfully managed, a tolerably good degree of ventilation is obtained, but in such cases the windows should extend as near the ceiling as possible, which detracts from the beauty of a building.

A better plan is to have a ventiduct of about twenty-four inches by eighteen inches, passing from the ceiling through the roof, and supplied with a properly filling valve, with a cord attached, which can be opened or closed either wholly or partly, as circumstances may require. The ventiduct and flue might be built together, the former being in front, and separated from the latter by a sheet iron partition. The heat from the smoke in the flue rarifies the air in the ventiduct, causing a brisker current to pass out, while the emission of smoke is not retarded. It might be well to have the ventiduct extend to the floor, and have two registers, one at the ceiling, the other at the floor, because gases condense suddenly when brought in contact with a flat surface, hence some of those obnoxious gases abundant in the school rooms, will cool suddenly at the walls, and being rather more than one-half heavier than pure air, will fall to the floor, and there remain, unless some provision is made for their escape.

**LIGHTING.**—Light is necessary to health. Common observation shows that persons who live in well lighted houses suffer less from disease than those who, from various causes, have the light entirely or partially excluded from them. It is an unquestioned fact, that houses surrounded by dense shrubbery, or a room into which the sun never enters, is never healthful. Plenty of light, too, renders a room cheerful and inviting. School houses should be made so, therefore, they should be well lighted.

The best way by which a school room can be lighted is by a skylight, because the light is steady, equally distributed about the room, and free from shadow. If this mode is not always practicable, resort must be had to the next best method, which is by side windows. Windows should not be placed in the end of a school room, because the light from behind casts a shadow, while that from in front causes a glare. Light should be admitted on the left side only, because, when admitted from both sides, there is too much cross light, which is injurious to the eyes, and when admitted from the right, the pupil is working in his own light. All windows of a school room should have shutters on, those on the right side may be kept shut, and not injuriously affect the appearance of the building, while the desired effect is produced on the inside. Windows should be many, narrow and high, rather than few and wide, not less than four feet from the floor, provided with curtains, and the glass in the lower half either frosted or stained.

## V. Papers on Practical Education.

### 1. A POINT IN GRAMMAR.

To the Editor of the *Journal of Education*:—

MR. EDITOR,—There is one question in Grammar which has elicited a great deal of discussion, and which does not yet appear to have been very satisfactorily answered, which, to my mind, may be very easily settled. Considerable space is taken up with its discussion in the appendix in Bullions' Grammar, but still it is not made very clear. The question I refer to is this: Is it (more) correct to say, “the first two,” or, “the two first”?—“the last three” or, “the three last,” etc.? In Bullions' Grammar the preference is given to the latter form of expression; however, if I were allowed



to express an opinion on the subject, I would certainly give it in favour of the former, from the following considerations:—

There can be only *one* first, and *one* last. I should, therefore, consider it incorrect to say, "the *two* first," or "the *two* last," while in reality there can be only one of each. While, on the other hand, I would consider it quite correct to say, "the first *two*," or "the last *two*," in contradistinction to any other two. But it is said that, by saying the "first *two*," reference is made to another two following, and supposing the number to consist of only three, there is no other two to justify the reference. Now this appears quite plausible and conclusive by giving it only a passing thought, but, on examination, I think it does not necessarily imply this,—my idea is just this, that it all depends upon the *emphasis*. If the emphasis is placed upon the ordinal, "first," then it certainly implies that there is at least another two; but if it be placed on the cardinal, "two," it does not necessarily imply another two. If we say the *first two*, laying the emphasis on the ordinal numeral "first," we, of course, wish to distinguish them from some other two or twos; but if we say the first *two*, emphasizing the cardinal numeral, "two," we simply mean, not the first (one) only, but the first and second taken together, making two. Hence, the "first *two*," and "last *three*," if proper regard be had to the emphasis in pronouncing them, is, to my mind, quite correct.

JAMES LAWSON,  
Teacher.

Cataraqui, July 8, 1871.

## 2. TEACHING DRAWING IN ENGLAND.

At a meeting of the London (England) School Board, Miss Davis advocated the teaching of Drawing to girls in the Board Schools.—Prof. Huxley supported the proposal, and in doing so remarked that when looking into a shop window where the fashions were exhibited, he could not help thinking that if women had more art taste, the world would not have inflicted upon it the fashions, outraging all sense, by which a woman's form was displayed in the contour of a candle extinguisher turned upside down. At the same meeting Prof. Huxley carried a resolution that Algebra and Geometry should be among the discretionary subjects taught in the Board Schools. The stimulus given to educational matters by the bill of last session, under which the Boards have been created, bids fair to give to England at no distant day an educational system that will be without a superior in the world.—*Hamilton Spectator*.

## 3. WORK DURING MORNING HOURS.

The author of the "Piccadilly Papers," in *London Society*, says: "I know a remarkably able and fertile reviewer, who tells me that, though over his midnight oil he can lubricate articles with a certain sharpness and force, yet, for quietly looking at a subject all round, and doing justice to all its belongings, he wants the quiet morning hours. Lancelot Andrews says, he is no true scholar who goes out of his house before twelve o'clock. Similarly an editor once told me, though his town contributors sent him the brightest papers, he always detected a peculiar mellowness and finish about the men who wrote in the country. I knew an important crown official, whose hours were from ten to three. He had to sign his name to papers; and as a great deal depended upon his signature, he was very cautious and chary how he gave it. After three o'clock struck, no beseeching powers of suitors or solicitors could induce him to do a stroke of work. He would not contaminate the quality of his work by doing too much of it. He would not impair his rest by continuing his work. And so he fulfilled the duties of his office for exactly fifty years, before he retired on full pay from the service of his country. And when impatient people blame lawyers for being slow, and offices for closing punctually, and shops for shutting early, and, generally speaking, the wider adaptation of our day to periods of holiday and rest, they should recollect that these things are the lessons of experience and the philosophy of society and life."

## 4. GENERAL DISCIPLINE.

The principal of a very successful Boys' School in New York publishes the following as his idea of discipline and religious instruction. Some of his thoughts may prove instructive to other teachers:—

Complete obedience, cheerful and prompt obedience, truth in everything, and work—such are my rules, and I shall not fail to enforce them, even if pupils have to be dismissed for non-complying with them, or exerting a bad influence in the school.

It is a rule with my assistants and myself to accustom our pupils

to use their powers of reflection and of reasoning throughout the course of their studies. We do not ask them to work beyond their powers, but require strictly the performance of their task; in a word, we wish them to exert themselves.

The greatest drawback to a child's improvement is the frequent change of school, and I earnestly urge parents to examine well before placing their sons with me; but then to let them go through the whole course of studies although the "perfect" school is not yet found.

I attribute the success of my school, in a great measure, to the fact that most of my pupils have remained with me for years. Some of them are now in their tenth school-year here.

I consider it as my most important duty to instruct my pupils as I would my own children. Some receive that instruction at home; but the ignorance of most boys on matters connected with the Bible is perfectly astounding, and it is good for all to imbibe in common the liberal spirit of living, active Christianity. Anything denominational is omitted. I was born and brought up in the old French Huguenot Church, and the Bible, the whole Bible, and nothing but the Bible, is my religion.

Every Sunday morning, from nine to ten, I give to my boarding pupils a regular Biblical instruction; it is their Sunday-school.

## VI. Papers on Education of Women.

### 1. PRACTICAL EDUCATION FOR WOMEN IN ENGLAND.

Emma Marwedel sums up, in the *Washington Chronicle*, the opportunities which are now offered for the practical education of women in England:—

First.—The millinery and dressmaking establishment in London is founded on shares. It contains every comfort for 40 young ladies. They work never longer than eight hours daily. A piano, a large library, instruction in different branches of science, gymnastic exercise and visitors, fill their leisure time. Two French forewomen and two lady superintendents manage the business and the house. Their fifteen hundred customers, belonging to the highest ranks, are at the same time shareholders. The second year, 1868, when the writer visited London, gave a dividend of six per cent. to the shareholders; and, after distributing \$10,219 to the working women as their part of shares, a fund of \$600 was left. The general behaviour is excellent.

Second.—The institutions for the employment of needlewomen, established to abolish middle men. There are seven of them. The largest and oldest daily employs 350 women, while six other smaller ones altogether give work to 400 more. The women work socially in light, lofty rooms, with the best result. According to the annual report, wages are rising from forty to fifty per cent. above the customary wages in shops; they work no more than nine hours a day.

Third.—The institution to promote the employment of women, is a united group of different establishments, enlarging from day to day. They are for teaching hair dressing, glass cutting, ivory cutting, electroplating, book-keeping, watch-making, jewellery, law copying, nursing the sick, telegraphing, photographing (the most distinguished establishments of photographers are in the hands of European women), apothecary business (lately very much practised) and studying medicine. Besides these twelve establishments, it keeps a register for women's employment, without exacting pay for it. When necessary, money is lent to young women, and their later establishments are encouraged by the society and their different papers.

Fourth.—The Army Clothing Factory. This is a copy of a French institution founded by the State and entirely self-supporting.

Fifth.—A Female Art School, in connection with Kensington Museum, and practical illustration in lithography, designing patterns in sculpture, wood cutting and carving, and porcelain painting.

Sixth.—The Working Women's College. Its plan originated from the working men's saving schools in Germany, with the exception that Dr. Elizabeth Garrett lectures on physiology, and classes in mathematics and logic are taught.

### 2. FEMALE EDUCATION.

The Cambridge classes for females justify the expectations of their promoters to a very satisfactory extent. The class list for the recent examination for women has been issued for private circulation only. One hundred and twenty-seven candidates entered, as against 84 in 1870 and 36 in 1869, when the examination was instituted. The number of candidates actually examined was 107,

and of these 37 failed to satisfy the examiners. Last year the failures were 21 out of 72. The proportion of success in the compulsory subjects is less this year than last, but in all other subjects it is greater. The "languages" group attracted many candidates, and several were very successful; one lady obtained special marks of distinction in Latin, French and German. In mathematics and in moral sciences candidates have for the first time earned a place in the honor classes. Five gratuities of £5 each have been awarded to persons engaged in tuition or preparing for that profession, and exhibitions of £34, £20 and £19 have also been awarded. The same gratuities and more exhibitions are promised for next year, when the examination is to be held in the third week of June.—*Toronto Express.*

3. HIGHER EDUCATION FOR WOMEN.

The *Montreal Gazette*, contains a learned and instructive lecture, entitled "Thoughts on the higher education of women," delivered by Principal Dawson, of McGill College, at the opening of the course of lectures instituted there by the "Ladies' Educational Association." In this the learned Principal pays a just tribute to the leading part taken by the Professors of our own University in setting an example to the Dominion at large in this important movement. So far, we are gratified to see this important movement sustained in our midst. It remains to be seen how far the facilities thus renewed to the ladies of Toronto will be appreciated by them. But while Montreal is now only following the good example set by Toronto three years ago, the movement is there conducted in a way which holds out a promise of permanence, which we should gladly see imitated here. A Ladies' Educational Association has been formed; shares have been issued; a substantial fund raised; and such remuneration guaranteed to the lecturers as is calculated to secure the endurance of the good work when the first blush of novelty is over. We commend this example to all who are interested in the movement here. For it has hitherto owed its success to the voluntary exertions of a few zealous workers; and has been carried on at considerable sacrifice by them; in the hope that when its value was clearly recognised there would be no lack of practical support, in lady students, in funds, and all other requisites.—*Globe.*

VII. Papers on Agriculture.

1. THE DUTY OF A FARMER TO HIS SONS.

The farmer should endeavour to make his calling attractive to his children; he should introduce a little taste into his surroundings; it is not enough to own a house merely, but something should be done to make that house pretty, pleasing and attractive—a nucleus around which would gather the affections and sympathies of the entire family. The old homestead should be a thing of beauty as well as use; shady trees should overtop its rafters; bright flowers and fruit should find their place in the indispensable garden plot; in short, the whole should point it out as the well-loved home of a rational, civilized, Christian man, and not the abode of a mere animal. The children playing around the door-step formed their impression from their surroundings. The bleak and barren birth-place can produce no feeling of love, no wish to live the homely life of the farmer, but rather drives them from it, and throws them into other pursuits.

Farm architecture is well deserving of greater attention than it receives in this country. In England, where properly constructed buildings are not absolutely indispensable, as they are here, it has almost assumed the proportion of a separate branch of the profession; and it may now safely be said that Canada and her agricultural interests have reached that point when the farmer should abandon the hap-hazard measure of construction which places his buildings as fancy or the convenience of the moment dictate, the inevitable result being a confused and irregular mass, unsightly to the eye, and but ill adapted to the purposes for which they were originally intended; a constant source of annoyance, causing more trouble and expense to the owner in the care of his stock and the supervision of his farm duties than would have sufficed twice over to have reduced the whole, in the first instance, to a well-digested and organized plan pervading every department, lightening his labours, and gladdening both heart and eye—a source of profit as well as pride.—*From Address of the President of the Provincial Association.*

2. THE FARMER'S PROFESSION.

Progress should be the farmer's aim. He should study how to obtain the greatest possible yield from the least quantity of land

with the least possible expense; he should educate himself to that intent, and not alone himself, but those who may come after him in the same occupation. The son should be taught that the occupation of the father is not the mean ignoble one it is the somewhat common error to suppose it to be; he should be shown that properly till the soil requires all the intellectual faculties men are commonly endowed with; that it is not merely a question of brute force and ignorance, but requires also head and intelligent effort. The true farmer is a member of one of the noblest professions; he is a chemist, a mechanic, an astronomer, a botanist, and in fine, an intelligent observer of God's works in nature; a man of intellect as well as of action. It is the great mistake of the day to imagine that the farmer's son who gives the smallest possible evidence of brains is altogether a too superior being to tread in the footsteps of his father, but must perforce be thrust into some one or other of the so-called learned professions; whereas, in reality, he forsakes the avocation he was most suited for by nature.—*Ibid.*

3. A VALUABLE FARM TABLE.

The following table will be found very useful to farmers, and to many others who are not farmers, and we advise our readers to preserve it for reference. It may be proper to add that many farmers advocate a much heavier seeding of grass than is indicated in the table, and think an increase of from 25 to 50 per cent. would be advisable in most cases:—

Kind of Seed.	Seed per acre.	Pounds per bush.
Clover (Red)	6 to 10 lbs.	60
Clover (White)	4 to 6 lbs	60
Timothy	8 to 10 lbs.	45
Redtop	8 to 15 lbs.	14
Lawn Grass	1½ 1½ to 2 bush	14
Kentucky Blue Grass	8 to 15 lbs.	14
Millet	½ to 1 bush.	50
Hungarian Grass	½ to ¾ bush.	48
Flax Seed	½ bush.	56
Buckwheat	½ to ¾ bush.	52
Turnip Seed	1 bush	
Turnips		57
Wheat	1½ to 2¾ bush.	60
Oats	2 to 3 bush.	32
Rye	1½ to 1½ bush.	55
Barley	1½ to 2 bush.	70
Corn in ear		50
Corn Meal		50
Irish Potatoes	12 to 15 bush.	60
Sweet Potatoes		50
Corn (large yellow)	6 to 8 quarts.	56
Corn (small)	4¾ to 6 quarts	56
Peas (field)	2 to 2½ bush.	60
Split Peas		60
Beets (field)	4 lbs.	
Beans (white)	16 lbs	60
Castor Beans	3 quarts	46
Carrots	3 to 4 lbs	
Onions	4 to 5 lbs	67
Top Onion Sets	30 to 60 lbs	27
Hemp	44 to 100 lbs	44
Upland Cotton Seed	10 to 12 lbs	33
Rape Seed	10 to 12 lbs	56
Kale Seed	10 to 20 lbs	56
Osage Orange Seed		33
Sorghum Seed		42
Bran		20
Dried Peaches		33
Dried Apples		24
Malt Barley		34
Salt		50
Coal		80
Lime		80
Cement		80
Plaster Paris		80
Hair		83

4. THE COLORADO POTATO-BEETLE.

The Colorado Potato-beetle, regarded as a mere specimen, and not considering its destructive qualities, is a very beautiful insect indeed; its wing-covers are cream colour, with five longitudinal black stripes on each; its head, thorax, and under side orange-red spotted with black; when flying, its expanded wings are of a bright rose colour, giving it a beautiful appearance as it flies in the sun-

light. There are about three broods of larvæ in the year, each of which goes underground to pass into the pupa state, the two first broods coming out of the ground in the beetle state about ten or twelve days afterwards, while the last one stays under ground all winter, and only emerges in the beetle state in the spring, just in time to lay its eggs upon the young potato leaves. The eggs are of a yellow colour, and are laid in patches of twenty or thirty on the under side of the leaves. The larvæ are of a deep orange-red colour, with a black head, black margin to the thorax, and two rows of black spots along each side; they are, when fully grown, about half an inch long, and have the body much humped up about the middle of the back. The larvæ are quite as voracious feeders as the beetles themselves. The insect belongs to the same family (*Chrysomelidae*) as our common Three-lined potato-beetle (*Lema trilineata*, Oliv.), but is larger and very much more destructive.

The depredations of the Colorado beetle are almost entirely confined to the potato plant, though it occasionally feeds upon the egg plant, horse-nettle (*Solanum*), tomato, ground-cherry (*Physalis*) and Jamestown weed or thorn-apple (*Datura*), all of which belong to the botanical family Solanaceæ. Its original food-plant in the Rocky Mountains is a species of wild potato (*Solanum rostratum*), to which it was confined until the advance of civilization brought the cultivated potato within its reach.

It is satisfactory to learn that this creature has many insect foes which tend to keep it in check and prevent it from having everything entirely its own way, though they are as yet quite insufficient to stop its progress from one part of the country to another. In the *American Entomologist* for November, 1868, there are enumerated about a dozen different species of insects that prey upon the Colorado beetle in some one or more of its stages, viz, a parasitic two-winged fly (*Tachina*), which lays its egg on the living larvæ, from which a maggot hatches out, burrows into the body of its victim, and eventually destroys it; from different kinds of Lady-birds—the Spotted (*Hippodamia maculata*, De Geer), the Nine-marked (*Coccinella 9-notata*, Herbst), the 13-dotted (*H. 13-punctata*, Linn.), and the Convergent (*H. convergens*, Guér.), all of which are common in Canada—these little beetles, which are so useful in destroying the plant-lice or aphides of the hop, devour, both in their larval and perfect states, the eggs of the Colorado beetle, and thus, as we may say, “nip the evil in the bud;” the Spined Soldier-bug (*Arma Spinosa*, Dallas), which thrusts its beak into the enemy's larva, sucks his body dry and throws away the empty skin; the Bordered Soldier-bug, (*Strictus fimbriatus*, Say); the Many-banded Robber-bug (*Harpator cinctus*, Fab.); a large species of Tiger-beetle, and several species of the Common Ground-beetle, to which we sometime ago drew attention as being thoroughly beneficial insects. All of these, and many others, assist in the good work of keeping the enemy in check, but as they are not sufficient to cause his complete rout, man must come forward and lend his aid also.

**Remedies.**—The following are the remedies that we have already recommended:—“When the insect makes its appearance, make a few small heaps of potatoes here and there in your field: the beetles will be attracted to these for food, and you can then easily kill them by going round every morning and crushing under foot all that you can find. This will prevent them laying their eggs and producing a fresh brood. Again, plant your potatoes, if possible, in a field surrounded by timber; or, if that is impracticable, surround it with a wide border of Indian corn. If all these means prove insufficient, then you will have to resort to the use of ‘Paris Green,’ which, being a preparation of arsenic, is a deadly poison. Be very careful then how you use it; never leave it for a moment within reach of children or careless grown people. Mix it with eight or ten times as much flour, ashes, plaster, or slacked lime, and dust it over the affected plants through a coarse muslin bag or sieve attached to the end of the stick. Keep to windward of it, when at work, and apply it when the dew is on the foliage.”—*Globe*.

Mr. E. B. Warner communicates to the *Denver Tribune* some curious statistics in relation to the potato-bug, that will perhaps explain its multitudinous visitation in the States East. From careful observation he finds that 33 days complete the cycle of one generation, from fertilization to the pupa state, or about three crops annually in this latitude. Seven hundred of these bugs are the average product of a single female, from which the family grows, in the second generation, to 245,000, and in the third to 85,000,000, which must be considered as a very respectable increase. A further calculation shows that one female bug can thus expand itself into total production of 1,666 bushels of averaged sized bugs in a little over three months!

The easiest mode of exterminating the Potato Beetle yet suggested, if it be an effectual one, is light bright fires after dark, in the vicinity of the infested fields.

## 5. EXTRAORDINARY VITALITY OF ORGANIC GERMS.

One of the most curious facts in connection with chemical research is the remarkable vitality of the lower organisms in nature. In vegetable subjects, for instance, vitality may lie dormant for a period which is almost inconceivable. Stramonium seeds, according to Duhamel, can develop after remaining twenty-five years under ground. Friewald observed the generation of melon seeds after they had been kept more than forty years. Pliny goes so far as to say that corn grew after it had been kept a hundred years, and there seems no reason to doubt the fact, for Desmoulin obtained plants from seeds found in a Roman tomb of the third or fourth century. Moreover, it is well known that corn found in some of the tombs of ancient Egypt has germinated and grown to perfection; and the result of the experiment of sowing some of this mummied corn in this country has been the production of new ears, larger and far more prolific than those of our modern wheat. A squill-bulb, too, found in the hands of a mummy, has, when planted at the present day, and in this country, grown and blossomed as readily as the last year's hyacinth-bulb from Holland, which flowers in our windows every spring.—*Once a week*.

## VIII. Papers on Education in Canada.

### 1. EDUCATIONAL AND SCIENTIFIC NOTES.

Professor G. T. Kingston, of Toronto University, who has been appointed General Superintendent of the Meteorological Department recently established by the Dominion Government, has proceeded to the Lower Provinces to put the system adopted into working operation.

Toronto has received a great acquisition in the Reverend Dr. David Inglis, of Hamilton (formerly of Montreal), who has been appointed Professor of Divinity in Knox's College by the General Assembly of the Presbyterian Church of Canada. Few men in any country are worthier of the high character given him at a meeting to present a testimonial of \$1,500 to him, which took place at Hamilton, and was composed of the members of all churches, not excepting, even, the Roman Catholic, and presided over by the Hon. Isaac Buchanan.

The Rev. George Paxton Young, M.A., has been appointed Professor of Ethics and Metaphysics, in Toronto University, in room of Rev. Dr. Beaven, resigned. The appointment is a most excellent one.

The Galt Grammar-school boys have organized a boating club, and the other day had a very successful regatta on the river.

J. Howard Hunter, Esq., M.A., has tendered his resignation as head master of the Dundas High School, and has been appointed to a similar position in the St. Catharines High School. Mr. Seath succeeds him at Dundas.

A Chair of Political Economy and Commercial and Mercantile Law has recently been established in the University of Edinburgh by the Merchant Company of that city.

In their capacity for unremitting labour the Germans seem to surpass every other nation. Dr. Daniel Sanders, a philologist, has just published a dictionary of the German language, on which he spent 35 years.

In the Hagenau forest, in Alsace, an oak tree is to be seen, whose age is estimated to be 1,300 years. The trunk and main branches are hollow from decay, but the tree stands firmly, and continues to put forth fresh foliage every year. Near Grönenberg, in the Prussian province of Hanover, a beech tree is to be seen, which was planted in 1668 in remembrance of the peace of Westphalia, concluded in that year, by which the Thirty Years' War came to an end.

Hon. Henry W. Sage, of Brooklyn, has just made a munificent offer to Cornell University, which is thought may be accepted. He will give \$250,000 to found a department for female students in that University, and has not hampered the gift with any conditions, as heretofore indefinitely asserted.

The Woman's School of Horticulture at Newton, Mass., had eight pupils last season, all of whom worked in garden and greenhouse. Now two of the fair graduates are about setting up in the business for themselves, and will raise flowers and “sass” for Boston.

Among the results of the California election may be counted an endorsement of the compulsory education principle. The Republican platform declared in favour of a “common school system that shall not only extend its benefits to all but be compulsory on all.”

## 2. QUEEN'S UNIVERSITY.

In the course of his address at the opening of the present session of Queen's College, in the Convocation Hall, Wednesday afternoon, Principal Snodgrass spoke as follows:—The second Conference of Committees of the Supreme Courts of the Presbyterian Churches, negotiating for Union, commenced its sittings in Montreal on the afternoon of Tuesday, the 26th ult., and brought them to a close on the evening of Monday last. The matter of Collegiate Institutions formed a prominent subject of discussion and arrangement. On the evening of Friday, there was passed a resolution, founded upon the deliverances of the General Assembly of the Canada Presbyterian Church, and of the Synod of the Church in connection with the Church of Scotland, and providing generally that the Institutions of the negotiating Churches should stand to the proposed United Church in relations like to those which they have hitherto held to the several Churches with which they are connected. Upon a motion for reconsideration, the subject was again taken up on Monday morning, and occupied the attention of the Conference until the close of its sittings. Proposals were submitted, which, after consideration and amendment, came to be of this effect:—That Queen's University at Kingston, with the same relations to the United Church as it now stands in to the Church with which it is connected, should have affiliated to it, for the conferring of Degrees in Divinity, and for the preparatory training of students for the Ministry, the two Theological Colleges at present situated in Halifax and Toronto, and also the Theological College at Montreal, with the Theological Departments of Queen's and Morrin Colleges united to it; that tutorial work in relation to literary and scientific studies should not be carried on in connection with the Theological Institutions of the United Church, but that provision should be made by the United Church for this kind of work in connection with Queen's College, Kingston, and Morrin College, Quebec, and it is recommended that, inasmuch as the Canada Presbyterian Church has resolved to endow their Theological Colleges at Toronto and Montreal, the Church in connection with the Church of Scotland shall fully endow the Arts Faculty in Queen's College. It was further proposed that the present Principal of Morrin College should be invited to become the Principal of the Theological College at Montreal, and that failing to obtain a Professor from Queen's College, the Church in connection with the Church of Scotland shall nominate a Theological Professor for that College. The formation of opinions with respect to this scheme will depend very much upon the particular point of view from which it is regarded, upon the bearing which it is seen to have on the various interests affected by it, and upon the extent to which permanency and utility are associated with the scheme considered as a whole and with the several parts of which it consists. The final acceptance or rejection of it rests with the authorities of the several Colleges referred to, and with the Supreme Court of the Churches with which they are connected. It is expected that by the end of the next month the decisions of these bodies shall be arrived at and made known. I have deemed it my duty to take the earliest public opportunity to make this statement. And, in concluding, I think it right to say that I have declined to commit myself to it until I am satisfied of the practicability of carrying out the recommendation which has been made by obtaining a much larger endowment and fuller equipment of this Institution than it has at present, and also of its noninterference with the honourable fulfilment of pledges given and responsibilities assumed in connection with the scheme for endowment which was begun in January, 1869, and which has been attended with such gratifying success.—*Kingston Chronicle*.

## 3. CANADIAN LITERARY INSTITUTE.

The report of the Trustees was of the most cheering character, and the Treasurer's report shewed a most favourable state of affairs. The following is the balance sheet:

<i>Receipts for the year.</i>	
From Board and Tuition.....	\$11,707 61
From Ministerial Education aid.....	2,808 97
From Subscriptions for Debt.....	287 00
From Subscriptions for Entertainment....	1,581 00
<b>Total.....</b>	<b>\$16,385 08</b>
<i>Expenditure.</i>	
Paid for General Account.....	\$14,436 99
Paid Municipal Aid.....	470 00
Paid Enlargement Account.....	1,099 32
Balance on hand.....	378 77
<b>Total.....</b>	<b>\$16,385 08</b>

The report of the Trustees is worthy of more than a passing notice. It is now pretty well known the funds obtained for the erection of the building, and a great portion of the current expenses of the school, are by voluntary contributions. Nearly \$80,000 have been given by the denomination the last twelve years for buildings, furnishings, grounds and ministerial aid. The first building was destroyed by fire in 1861, but a simultaneous effort was made, and a more costly structure erected on its ruins. Two years ago the denomination was asked for \$7,000 for removing a debt and enlarging the accommodation. The money was subscribed and the work done. Now the same cry comes to the trustees—"Give us more room"—and they have no alternative but to make another appeal. This time it is to be on a more permanent basis and more extensive plants. The Hon. W. McMaster, and F. J. Claxton, Esq., with their usual liberality, offered to give \$6,000 for the purchase of the farm surrounding the Institute, provided the denomination pledge the sum of \$12,000 for the enlargement of the buildings. On the strength of this liberal offer the trustees purchased the farm, and took immediate steps to secure pledges to the amount named. Dr. Fyfe, who has had the principal part of the work to do, reported that about \$9,000 had been pledged, and that he had no doubt about the balance being found. The plans are not yet adopted for the changes required.—*Woodstock Times*.

## 4. EDUCATION IN NEW BRUNSWICK.

The report of the Chief Superintendent of Schools, for the year 1870, contains much useful information in reference to the common, superior and grammar schools of the Province of New Brunswick, and shows the incongruity and unshapeliness of the present wretched system better than could be done by argument. We learn from it of whole counties in which the pre-Adamite system of "boarding round" is still so general that many of the schools have to be closed in the winter on account of the scarcity of male teachers and the inability of female teachers to endure the hardship involved by the practice. It reminds us of the wretched, ill-ventilated rooms in which children are huddled together in this city and other populous places, because the teachers are obliged to furnish the rooms, and their income will not permit them to rent suitable buildings. It tells of the districts where ignorance that will cost them a dollar or require the time of their children. In cities where "seminaries" are held in the family dining-rooms, and in country districts where children are regarded as nothing more than potato droppers and wood choppers, the educational status of the poor is daily becoming more lamentable. We are happy to learn from the report of the commendable progress of some portions of the Province, of the new school-houses that have been erected, of the successful competitive examinations that have been held during the year, and the successful operations of the Provincial Training School. This is all very well, but we find that all the progress that was made was in the most intelligent districts where progress is least required, and there is nothing in the report to show that the darkness that envelopes so many districts has been illuminated by a single ray of light.

The Chief Superintendent complains of "the constant withdrawal of teachers from school service." He may lament the fact, but he is certainly an unreasonable being to complain that it exists. The youth who teaches one term and then is forced to go all over the village collecting his pay, taking homespun for a pair of trousers from one, half a dozen pairs of socks from another—fair promises from one easy-going impecunious father of a family, and abuse from another on account of having punished his children—after enduring all this he buys a buck-saw and goes to work to earn his living independently; and a man of the intelligence of Dr. Bennet has the effrontery to complain of him for not teaching longer.

We learn from the report that the sum total of subscriptions, tuition fees, assessments, lands, donations and board for the year is \$115,578 51.

"Only this and nothing more." About forty cents a head contributed by the generous people of New Brunswick towards the education of their children. The Provincial expenditure for school purposes was \$88,390 50. This brings the whole expenditure for schools to the enormous amount of nearly seventy cents a head. Even this amount, if properly expended in graded schools, would do twice as much as is done by it at present. One hopeful sign of the times is that the superintendent has really awoke to the conviction that Lennie's grammar is not just what a grammar for our schools should be. This is progress. But it is all nonsense to endeavor to establish authorized text books or improved school apparatus of any kind so long as the present system is in vogue. The efforts of the superintendent and his inspectors have been in

vain, simply because they have been altogether powerless for good or evil. It is this powerlessness that has made these officials looked upon as worthless eaters out of the public crib. Give them authority to enforce the wise rules and regulations that may be established by a council of advanced educationists—to coerce teachers into imparting a fair knowledge of English before attempting to teach the classics, to see that their pupils are able to demonstrate the multiplication table before attempting to demonstrate the problems of Euclid, and to weed out the formalists who develop no capacity for teaching and are capable of no higher intellectual effort than hearing recitations. When we are blessed with a system that makes teaching respectable, and offers promotion to the successful, and sends the stupid and unqualified to other occupations, that establishes schools in which one head master can preside over the doings of a half dozen assistants,—when efficiency and economy are secured by means like these, all the children in the Province may be educated, and the tax required for the purpose would not be found oppressive.—*St. John Telegraph.*

## IX. Biographical Sketches.

### 1. JAMES PRESTON, ESQ., B.A.

Much regret is felt at the death of Mr. James Preston, B.A., head-master of the Goderich High School. Mr. Preston was, three weeks previously, attacked with bleeding at the lungs, and gradually sank. He was only thirty-two years of age, and was the third son of the late Lieut-Col. Alex. Preston, of the Durham Battalion. He studied at Bishop's College, Lennoxville, intending to enter the Church, but, changing his mind, became grammar-school-teacher at Millbrook, Owen Sound, and Goderich. He was highly successful in his laborious vocation, and was universally esteemed and beloved.

### 2. THE BISHOP OF HURON.

The Right Reverend Dr. B. Cronyn, Bishop of Huron, was born in the year 1802, in the city of Kilkenny, Ireland, and was consequently in his 70th year, at his death. Very early in life he set himself apart for the ministry, entering Trinity College, Dublin, when he was only 15 years of age. Here he greatly distinguished himself and took his B.A. in 1824, and three years after was made Master of Arts, winning also in the same year the Regius Professor's prize for Divinity. In the subsequent year he was ordained deacon, and soon after officiated in the Diocese of Chester. In 1826 he was ordained priest, and did duty in the county of Longford, Ireland, up to the middle of the year 1832. About that time a large number of Irish gentlemen of good family emigrated to Canada, making their way to the township of Adelaide, then newly thrown open to settlement, under the especial patronage of Sir John Colborne, the Lieutenant Governor of that day. He took up some land there with the intention of settling in that township, but having favourably impressed the people of London—at that time comprising 150 souls—he was made rector of this parish. The cholera had just swept through the town, carrying off a large number of people, and many had left for the bush—for there was little in the way of settlement hereabouts at that time. Mr. Cronyn at once threw himself into active duties and became the most popular and successful preacher of the day, and for many years afterwards. Nor did he confine his labours to this immediate locality. He became a missionary as it were, and went through the country preaching, and officiating as he went. And his services were most acceptable. People who would have been glad to have been married had had no opportunity of conforming to the ceremony, and the baptism of children had been neglected from the same cause. He thus became the most influential among the clergy in the west, and his name was a "household word" in all this region. As population poured in, and other clergy became stationed, the duties of his position were confined more strictly to his parish. The church then in use by the congregation stood on a plot of ground now covered by the Royal Exchange Buildings. But a more suitable site being obtained, a new one was erected on the present cathedral plot, which was, however, burned down in 1844,—the present structure having been erected in 1847. In company with Col. Askin, Mr. Cronyn obtained a grant of 400 acres as a glebe from the Crown, to be used for rectory purposes, and this, like other rectory lands, was not swept away when the great Clergy Reserve reform took place in 1855. The diocese of Huron having been created, public attention was at once directed to the Rector of London as the one best suited and most entitled to fill the office of Bishop, and he was elected to that office in 1857; the Rev. Dr. Bethune, now Bishop of Toronto, being also a candidate. At that time no consecrations were pos-

sible in Canada, so that a journey to England was rendered necessary, and the new Bishop was consecrated in Westminster Abbey, in October of the same year. About the same time, an effort was made by him, in conjunction with the then Rev. Dr. Hellmuth, to establish a Theological College in London. This proved to be successful, and that useful institution was founded and endowed. Latterly, declining health and increasing years prevented the Bishop from taking any very active part in the duties of his office, so much so that quite recently a Coadjutor was appointed in the person of Dean Hellmuth, who now assumes full functions. Those of us who have been acquainted with the deceased during the past fifteen years, have formed, perhaps, but a partial idea of the valuable qualities which marked the young minister when, full of life and ardour, he threw himself into the work of the Church in Canada. His services were unremitting, and all objects of a religious kind, whether Bible societies, missionary societies, Sunday Schools, or other benevolent efforts, found their friend and earnest advocate in him. He was a favourite platform speaker on such occasions, and was willing to accept the hand of fellowship on the part of any helping to further such good works. Hospitality to the clergy was also a leading habit with him. The rectory was made the home of any of them that chose to present themselves. He paid considerable attention to the natural sciences, and had an inventive faculty which, under other circumstances, might have been usefully developed. In theology he ranked with what is known as the Low Church Party, and he was decidedly averse to the introduction of any usages that trenched upon simplicity. Strongly Protestant in his feelings, he never omitted a proper opportunity to uphold that branch of the Christian Church.—*Free Press.*

### 3. SIMEON MORRILL, ESQ.

Mr. Morrill was a native of the State of Vermont; was born in 1793; removed while yet young to Maine, thence to Kingston, Canada, in 1815, where he engaged in business as a tanner. In 1828 he removed to London, then a small village, where he erected a tannery, and continued in the tanning business until some two or three years ago. A man of considerable enterprise, he soon became one of the leading manufacturers as well as one of the leading citizens of the place, and has ever since been more or less intimately identified with movements having the advancement of the city in view. When London became incorporated as a town, in 1847, Mr. Morrill was elected its first Mayor, a position to which he was re-elected on several subsequent occasions. When the Great Western Railway was being built, Mr. Morrill took a very active interest in its behalf. Associated with several philanthropic movements, he was well known and highly respected all over Canada. "Father Morrill" is a familiar name in thousands of Canadian as well as American homes, and his sudden demise will carry sorrow to many Canadian hearts.—*Hamilton Spectator.*

### 4. THE HON. LOUIS JOSEPH PAPINEAU.

Mr. Papineau was born in Montreal in October, 1789, and was therefore in his eighty-second year at the time of his death. He belonged to a family which emigrated from the South of France in the seventeenth century. Educated in the Seminary of Quebec, and after studying for the law, he was called to the bar of Lower Canada in 1811. Previous to this he had taken an active interest in politics and was elected in 1809 to the Legislature of the Province for the County of Kent, afterwards called Chambly. After representing this constituency for two sessions, he was for twenty successive years representative of the west division of the city of Montreal. In 1817, he was elected Speaker of the Assembly; a position which he managed to occupy for twenty years at the comfortable salary of \$4,000 per annum. During all this time he was identified with the Opposition in the Legislature, to which the Government of the day was not responsible, and the majority, his party controlled in that body ensured his tenure of office as Speaker, notwithstanding the hostility of the Government and the refusal of Lord Dalhousie, in 1827, to acknowledge or sanction his election. Throughout his career in the Assembly he was a violent opponent of the Government and an agitator of the first quality. He sought to obstruct in every way the administrations of Lord Dalhousie and Lord Aylmer, and displayed a degree of discontent with British rule in Lower Canada that ultimately led him to republicanism and rebellion. In 1836 he made the famous declaration, which by a certain class is regarded as prophetic, that "not only were republican institutions to prevail throughout the whole of this continent, but America was destined to furnish at some future day republics to Europe." The history of those days is the history of a constant struggle between the ad-



visers of the Lieut.-Governor on the one side, supported by the Legislative Council, and the popular chamber, the Legislative Assembly, on the other. The Government sought to control the public expenditure, and to exercise nearly all the functions of administration without reference to the Assembly—a proceeding which naturally excited the strongest objections among the dominant party in that body. This struggle culminated in 1837, when, the Imperial Parliament having undertaken to seize upon money which the Provincial Assembly refused to vote, an open rebellion broke out. This movement was headed by M. Papineau, although he afterwards repudiated the leadership. As every body knows, the insurrection proved a complete *fiasco*, and M. Papineau took refuge in the United States. In 1839, he went to France, and after living eight years in quiet in Paris he was allowed to return to Canada, together with a number of others who had been exiled for their share in the rebellion. He was afterwards elected to the Parliament of old Canada, and led the opposition against the Baldwin-Lafontaine Government, which, however, he was quite powerless to overthrow. The people of both Upper and Lower Canada had obtained concessions from the Imperial Government which satisfied them; the two Provinces had been happily united; and there was no longer a pretext for agitation such as had brought M. Papineau into prominence. He found himself without support in the country, without sympathy in his declared hostility to the Union, and, in 1854, he retired from public life. From that time to the day of his death he lived in perfect seclusion at La Petite Nation Seignory, in a beautiful chateau on the banks of the Ottawa river. M. Papineau was a man of talent, with a keen literary taste, a cultivated mind, and a gentlemanly bearing. He doubtless did much good in directing attention to the evils which existed in the Government of these Provinces forty years ago, and, remembering that good, posterity will judge his weaknesses charitably.—*Leader*.

#### 5. LIEUT.-COLONEL. BOOKER.

Colonel Booker was born in Nottingham, England, in 1824, and removed with his father to Canada in 1840, and settled in Hamilton. While yet a very young man he took a great interest in the Volunteer movement; and, in 1852, he organized and equipped the No. 1 Company of the Hamilton Independent Artillery—purchasing and paying for two field pieces with carriages and limbers, uniforms, side arms and accoutrements for gunners and drivers. From that date up to 1866, when he removed from that city to go into business in Montreal, he was prominently connected with military matters, being gazetted 8th June, 1858, Lieut.-Colonel commanding the whole of the active force in Hamilton, and having received several complimentary notices in general orders from the Governors and others in authority during the whole period. At the breaking out of the Fenian difficulties in 1866, Colonel Booker was ordered to call out his battalion and proceed at once to meet the enemy. The orders were received from the Adjutant-General at half-past five in the morning, to proceed at once to Dunnville, and so energetic were his movements that by half-past nine he left with his corps by the Great Western, arriving at Port Colborne by eleven that night, where he took the command of all the Volunteers. The circumstances attending his engagement with the Fenians at Ridgeway on the 2nd June, 1866, are now historical.

#### 6. JAMES MCGILLIVRAY, ESQ., OF SABREVOIS, C. E.,

Was born in 1790, in the Parish of Devot, in Inverness-shire, Scotland, and, was therefore, in the 81st year of his age. He came to this country in 1817, and passed the first portion of his life at Isle aux-Noix, where he carried on the lumber business; after which he turned his attention to agricultural pursuits, and was one of the first settlers in Sabrevois. In fact, he was a pioneer, and being a man of strong resolution, and having many resources within himself, he soon cleared the forest and made a comfortable home, where his numerous friends always received a Highland welcome from the large-souled Scotchman. The deceased also took a very active part in the unfortunate Rebellion of '37 and '38. He enrolled and commanded a company of volunteers, and being a man of powerful frame and constitution, did some hard frontier service uncomplainingly, for which he received the thanks personally of the commander and Governor, then Sir John Colborne. Mr. McGillivray was the first to plant trees on the first Concession Road, and so beautified his old homestead that his French neighbours soon followed the example, and, by the way, there was no road when Mr. McGillivray commenced operations; he had to reach his land by canoe. He was also the first Justice of the Peace in the district, and was appointed by the Earl of Dalhousie.

#### 7. CANADIAN PIONEERS.

A Mr. G. Pontbriant recently died at St. Ours, on the River Richelieu, at the patriarchal age of 105 years. He has a brother living at Sorel, who is no less than 108, and is probably the oldest man in Canada. When he was born, George III. sat on the throne, the United States were colonies, and the last French soldier had scarcely returned to France from Canada. He was 13 years old when the Declaration of Independence was proclaimed in 1776; 49 years old when the War of 1812 broke out; 74 when his countrymen rose in arms, in '37, and 104 when Confederation went into effect. The population of all Canada when he first saw the light did not exceed 80,000 souls; it now exceeds 4,000,000! Upper Canada was a trackless wilderness; the furthest settlement under the British Crown was at Detroit; Ontario now blossoms like the rose, and the time-honoured old flag has crossed Lake Superior, the Mississippi, the Saskatchewan, and the Columbia and now floats on the waters of the Pacific. We have recently recorded many instances of Canadian longevity in the *Gazette*, but Mr. Pontbriant's great span with its many incidents far exceeds them all.

#### X. Miscellaneous.

##### 1. LITTLE LIFTERS.

"Bear ye one another's burdens."

Did you know, my darling child,  
There was work for you to do,  
As you tread life's flowery pathway,  
'Neath skies of brightest blue?  
Your tiny hands so feeble,  
May powerless appear,  
But they often lighten burdens,  
The stronger scarce can bear.

You all are "Little Lifters."  
Who with loving zeal will try  
To help the weak and weary,  
And dry the tearful eye;  
And though you can but lift but little,  
Faint not, but lift again,  
The hardest rock is worn  
By the constant dripping rain.

And when you sing to baby,  
Till he gently falls asleep.  
Or comfort little sister,  
Till her blue eyes cease to weep,  
Or tie up Johnnie's shoe strings,  
And brush his tangled hair,  
You are lifting mother's burdens,  
And shielding her from care.

And when father, tired, weary,  
Comes home to rest at night,  
Draw up for him the easy chair,  
And make the fire burn bright.  
Though small the deeds of kindness,  
And low the words of love,  
The recording Angel writes them,  
In glowing lines above.

Then love and help each other,  
For to you this charge is given;  
And in lifting others' burdens,  
You lift your souls to heaven.

##### 2. WILL HE SUCCEED?

###### A VALUABLE CHAPTER FOR YOUNG MEN.

In nine cases out of ten no man's life will be a success if he does not bear burdens in his childhood. If the fondness or the vanity of father or mother have kept him from hard work; if another always helped him out of the end of his row; if, instead of taking his turn at pitching off, he moved away all the time—in short, if what was light always fell to him, and what was heavy about the same work to some one else; if

###### HE HAS BEEN PERMITTED TO SHIRK

till shirking has become a habit—unless a miracle is wrought, his life will be a failure, and the blame will not be half so much his as that of the weak, foolish parents. On the other hand, if a boy has been brought up to do his part, never allowed to shirk any legitimate responsibility, or to dodge work, whether or not it made his heart ache, or soiled his hands—until bearing heavy burdens became a matter of pride, the heavy end of the work his from choice—parents, as they bid him good-bye, may dismiss their fears. His life will not be a business failure. The elements of success are his, and at some time and in some way the world will recognize

his capacity. Take another point. Money is the object of the world's pursuit. It is a legitimate object. It gives bread and clothing and homes and comfort. The world has not judged wholly unwisely when it has made the position a man occupies to hinge comparatively, more or less, on his ability to earn money, and somewhat on the amount of his possessions.

#### IF HE IS MISERABLY POOR

it argues either some defect in his expenditure, or a lack of fitness to cope with men in the battle for gold. When a country boy leaves home it is generally to enter upon some business, the end of which is to acquire property; and he will succeed just in proportion as he has been made to earn and save in his childhood.

If all the money he has had has come of planting a little patch in the spring, and selling its produce after weary months of watching and toil in the fall, or from killing woodchucks at six cents a head, or from trapping muskrats and selling their skins for a shilling; setting snares in the fall for game, and walking miles to see them in the morning before the old folks were up; husking corn for a neighbor on moonlight evenings at two cents a bushel; working out an occasional day that hard work at home has made possible—he is good to make his pile in the world. On the contrary, if the boy never earned a dollar; if parents and friends had always kept him in spending money—pennies to buy candies and fish-hooks, and satisfy his imaginative wants, and he has grown to manhood in the expectancy that the world will generally treat him with similar consideration, he will always be a make-shift; and the fault is not so much his as that of those about him, who never made the boy depend on himself—did not make him wait six months to get money to replace a lost knife. Every one has to rough it one time or another. If the roughing comes in boyhood, it does good; if later, when habits are formed, it is equally tough, but not being educational, is generally useless. And the question whether a young man will succeed in making money or not, depends, not upon where he goes or what he does, but upon his willingness to do "his part," and upon his having earned money, and so gained a knowledge of its worth. Not a little of his valuable experience and knowledge the country boy gets on the old farm, under the tutelage of parents shrewd enough to see the end from the beginning, and to make the labor and grief of children contribute to the success of subsequent life.—*Hearth and Home.*

#### 3. WHY SHOULD I NOT SMOKE?

This question is so often asked by boys, especially of their fathers who do smoke, that it is well to have a few good answers at hand. We find in the *Nation* the following list of derangements which tobacco may produce. It would, of course, be useless to maintain that tobacco produces all of these in any one of its devotees; yet, if we felt that there was a probability of becoming afflicted with any one of them, we would for ever let alone the luxury which might cause such an affliction.

1. Headache over the eyes.
2. Nervous headache without sickness.
3. Nervous headache with sickness of the stomach.
4. Deafness.
5. Partial blindness, or amaurosis.
6. Running at the eyes.
7. Cancer of the lips.
8. Consumption, preceded for years by a cough.
9. Asthma.
10. Dyspepsia.
11. Palpitation of the heart.
12. Paralysis of the upper part of the body.
13. Neuralgia, especially of the face, head, and neck.
14. Swelling of the gums and rotting of the teeth.
15. Enfeeblement of the lymphatics.
16. Enlargement of the glands of the face and neck, making them thick about the cheek and lips.
17. Lethargy.
18. Morbid appetite for spirituous liquors.
19. Morbid appetite for food, especially high-flavoured food.
20. Indistinct taste.
21. Indistinct smell.
22. Imperfect sense of touch.
23. Obtuseness of the moral sense.
24. Uncleanliness of person.
25. Stentorian or snoring sleep.
26. A sense of deadness and of great debility, on first waking from sleep, until one has had a chew or a smoke.
27. Confirmed and incurable disease, and premature death.

To these we would add the mischief done to the salivary glands by the abominable habit of spitting, and the horrible appearance of

floor, car, or steamboat-deck where a smoker has been liberally distributing his saliva, without regard to the comfort of those who are around him.

#### 4. EVILS TO BOYS OF TOBACCO.

A physician of great note has said: "Tobacco has a tendency to soften and weaken the bones of young people; it greatly injures the brain and spinal marrow, and, in fact, the whole nervous fluid. A boy who smokes frequently, or in any way uses tobacco constantly, is never known to make a man of much energy, and generally lacks muscular, as well as mental, power."

### XI. Educational Intelligence.

—UNIVERSITY COLLEGE—ANNUAL CONVOCATION.—The annual convocation of University College, Toronto, took place on the 15th ult., Dr. McCaul presided; the first part of the proceedings was the formal introduction of new students to the College by the President. There were forty-seven students admitted—two *ad eundem statum*, forty-one matriculated and four non-matriculants. They were loudly cheered on coming up to the platform, and were welcomed to the college in a few appropriate words by the President.

THE PRIZE POEM.—Mr. J. L. Stuart was then called on to read the prize poem, which was entitled

#### THE ST. LAWRENCE.

WHERE, unto the world of waters,  
Old St. Lawrence rolls his flood,  
From those lakes, proud Ocean's daughters,  
Skirted by Canadian wood.

Fed by many a distant fountain,  
On, through fields of waving grain,  
Past Cape Diamond's rocky mountain,  
Pouring onward to the main.

Britons there, in battles gory,  
And in nobler, peaceful art,  
To the tide of Albion's glory  
Proud have been to add their part:

Proud to wreath the red cross banner  
With our maple chaplets green,  
While Britannia's field of honour,  
Joining ocean, rolls between.

Noble river! bear thy burdens,  
Bear them proudly to the sea!  
Loyalty's and labour's guardons  
Are the freight embarked on thee.

Bear the islands of the raftsmen,  
With their forest-conquered prize;  
Soon, by hands of cunning craftsmen,  
They shall into navies rise.

Bear the West-land's harvests golden;  
Bear the North-land's furry spoil;  
Bring back, from the East-land olden,  
Wealth to cheer, and hands to toil.

Bind our Provinces together  
With indissoluble chain;  
Bind them firmly to each other  
And the Empire of the main.

Lovely art thou in thy childhood,  
As thou sportest, robed in smiles,  
'Mongst the flowers, and rocks, and wild-wood,  
Of the beauteous Thousand Isles.

Noble art thou, dashing, leaping,  
In thy pride of youthful might,  
Down the foaming rapids sweeping,  
Swift as arrow in its flight.

And a calm majestic river  
Art, though rolling in thy prime;  
Like to thought that flows for ever,  
Vast, resistless, and sublime.

Countless are the generations  
Thou hast marked upon thy sands;  
We are youngest of the nations,  
And the oldest of the lands.

Thou and Time, with tresses hoary,  
Ages have together rolled;  
Thou couldst tell to us a story,  
Such as volumes have not told.

Tell us of the vanished races,  
Forest-lords of other days,  
With their dim and dusky faces,  
Peering through the fields of maize:

How the *Nodowa*, so noiseless,  
Like a serpent, near thee crept;  
Made the Huron's hamlet voiceless,  
Broke his hatchet while he slept:

How Jacques Cartier from St. Malo,  
Came across the distant sea;  
And there shone a sacred halo  
Round his cross and fleur-de-lis:

How the people brought their ailings  
For the pale-faced shief to save,  
And, the prayer of faith availing,  
Blessed the healing that he gave.

How the sailors, in amazement  
Saw, and named Quebec afar;  
Oft hath, since, its rocky basement  
Rolled back the tides of war

How a people, brave and loyal,  
BUILT their white-faced homes by thee,  
E'en to where the Mountain Royal  
Towered above the Ville Marie:

Tell of Montcalm, bravely fighting,  
Dying bravely, but in vain;  
And the smile of triumph, lighting  
Wolfe's last gaze on Abraham's plain.

Bravely, by thy silent river,  
Climbed the hardy highlandmen—  
Well I ween that foemen never  
Shall ascend those heights again!

Ah! methought thee half a traitor,  
Favouring their silent oars—  
Or didst thou foresee a greater  
Empire rising on thy shores?

Was thy freedom for another  
And a greater destiny?  
Did it need a foster-mother  
Better far than France could be?

Tell us how thy children bore them—  
One to three, they scorned to yield;  
When they drove the foe before them,  
As on Cryster's bloody field:

How the slave looked Northward to thee,—  
Never bondman breathed by thee,—  
How, escaped, his glad eye knew thee  
As the river of the free.

Ay, we love thee, noble river!  
Love thee with a jealous love!  
Thou art ours, and ours for ever,  
E'en through death our title prove!

Welcome kindly every stranger,  
If 'tis peace his white sails bear;  
But let him that threatens danger  
Of thy sturdy sons beware.

Heaven bless thy sons and daughters,  
Till they fill thy banks with song;  
Gliding o'er thy summer waters,  
Or thy frozen breast along!

Send the husbandman his guardons,  
In the fields of golden grain!  
Send thee ever costly burdens,  
As thou rollest to the main!

Distribution of prizes came next in order. The prizes were presented by the Professors in their respective branches, with the exception of the late professors, Dr. McCaul presenting the prizes in these departments. The successful students were highly complimented by their Professors, and were enthusiastically applauded on receiving their prizes. After the prizes were distributed, Dr. McCaul said it was usual to terminate the proceedings of Convocation by an address from the President. On this occasion, however, he would dispense with that ceremony, because he was anxious that they should all have an opportunity of hearing the inaugural addresses of the two new Professors, which were to be given immediately after the Convocation. There were two points, however, which it was necessary he should refer to. The first was the usual statement regarding the matriculation examinations of the University. The candidates came from Upper Canada College, Hellmuth College, Canadian Literary Institute, and fifteen High Schools. Upper Canada College, with four candidates, obtained four scholarships, five first-class honours, and nine second-class honours. The Canadian Literary Institute, with four candidates, obtained three scholarships, ten first-class honours and one second-class honour. Hellmuth College, with one candidate, obtained one scholarship and one first-class honour. Galt High School, with one candidate, obtained one scholarship, two first-class and two second-class honours. Galt and Whitby High Schools, with one candidate, obtained one scholarship, one first-class and two second-class honours. Brantford High School, with one candidate, obtained one scholarship and one first class honour. In the senior matriculation, St. Thomas Grammar School, with one candidate, obtained two scholarships and three first-class honours. In this examination there was the unprecedented result of a self-taught candidate obtaining two scholarships, three first-class honours, and one first-class honour in the senior matriculation. (Cheers.) Harstone, of the Upper Canada College, obtained three scholarships; Clark, of the Canadian Literary Institute, Embro, of the St. Thomas High School, and Clarkson, self-taught, obtained each two scholarships. There was one feature in the examination that we must not overlook. They had two candidates from Chatham, in the State of Georgia, who had passed the examination. (Cheers.) He sincerely trusted that they would be able to keep up the renown that that State had given to the University by the remarkable success of one of her sons, Mr. Montgomery Cumming. (Cheers.) The other matter which he wished to speak of was the recent changes in the faculty. Referring to the resignation of Prof. Beaven, he said he wished to avail himself of this opportunity to bear his testimony to the conscientious exertions of Dr. Beaven during the whole time he was in connection with the University. (Cheers.) They had been colleagues for the long period of 29 years, and he spoke from personal knowledge of Dr. Beaven's abilities and efforts. With regard to his successor, the Government had conferred on the College the great advantage of appointing a gentleman, (Rev. Mr. Young), who had already obtained high reputation in the department over which he was to have charge. (Loud cheers.) Referring to the death of the late Rev. Professor Hincks, Dr. McCaul said that the late Professor had the disadvantage of entering the College when he was past sixty years of age; but yet he (the President) was satisfied that the students and Professors would unite with him in the expression of the opinion that Professor Hincks had discharged the duties which devolved upon him with all the zeal and alacrity of youth. (Cheers.) Up to a very recent period, when illness compelled him to withdraw, he was ever foremost in endeavouring to give information to the students. He was sure they would all feel with him that the memory of Professor Hincks would ever be cherished in the College as that of one who had adorned it by his abilities and benefited it by his exertions. And now he had nothing more to say than to express his confident expectation that the new Professors that had been added to the staff of the institution would maintain and extend its reputation—a reputation, he was glad to say, not confined to Ontario or even Canada—a reputation that had been acquired under circumstances of no ordinary difficulty, for they had not all the advantage of any professional teaching whatever, but were

limited to the faculty of Arts, with the nominal addition of Civil Engineering and Agriculture. When he said the nominal, he did not mean to say, or even to suggest, that they had not the means of giving high instruction in Agriculture, for they had a Professor in that department eminently qualified. But so it happened that that very branch which, when it was established, it was thought would fill their halls with students, had but very few students. The President's address closed the proceedings of Convocation. Cheers were given by the students for the Queen, for the ladies, and for the professors. The audience then retired to the chemical lecture room, where the newly-appointed Professors (Dr. Nicholson and Rev. G. P. Young, M.A.,) delivered their inaugural addresses.—*Globe*.

— UNIVERSITY OF TORONTO.—The following are the names of the successful candidates for scholarships at the recent examinations for Matriculation in the University of Toronto:—Law—D. M. Christie, from Guelph Grammar School and University College; Medicine—J. McLean, from Galt Grammar School. Arts, Senior Matriculation:—Classics—L. E. Embree (double), private tuition and St. Thomas Grammar School. Mathematics—C. Clarkson (double), self taught. General Proficiency—1st, Clarkson; 2nd, Embree. Arts, Junior Matriculation:—Classics—1st, F. L. Boyd, Hellmuth College; 2nd, L. Harstone (treble), U. C. College, and J. Kerr, U. C. College. Mathematics—1st, L. Harstone; 2nd, W. Britton (self-taught). English, History and French—1st, M. S. Clark (double), Canadian Literary Institute, Woodstock. General Proficiency—1st, L. Harstone; 2nd, M. S. Clark; 3rd, A. P. McDiarmid, Canadian Literary Institute, Woodstock 4th, J. Muckle, Galt and Whitby Grammar Schools.

—KNOX COLLEGE—INDUCTION OF REV. DR. INGLIS.—On the eve a numerous assemblage met in Knox's Church to witness the induction of Rev. Dr. Inglis as Professor of Systematic Theology, Knox College. Rev. Mr. Dick, Richmond Hill, Moderator of the Presbytery, presided, The preliminary religious exercises were conducted by the Moderator; after which he introduced Rev. Dr. Inglis to the members of the Toronto Presbytery. Rev. Dr. Topp, at the instance of the Presbytery, delivered an address to the newly-inducted Professor. He reminded him of the importance of the office he had accepted, and of the responsibility which was attached to the discharge of its duties. He (Rev. Dr. Topp) was satisfied, and he believed—all who knew Rev. Dr. Inglis were satisfied—that the latter had undertaken the work to which he had been called, with a strong conviction of its responsibility, and with a resolve to act with all fidelity, earnestness and zeal. Science was in many cases throwing doubts on matters never questioned before, and if in any age a minister should be well equipped, it was in the present one; and, therefore, on the teachers of the theological institutions of the Church rested a work of great value and importance. It had always been the practice with the Presbyterian Church to prepare ministers who should be well equipped; and he trusted the people would feel themselves called upon to see that the theological institutions of the Church would in the future be better furnished than in times past. He would say, in conclusion, that Rev. Dr. Inglis would be welcomed as a resident of the city by the Presbytery, the people, and his brother professors. Rev. Dr. Inglis then came forward and delivered an admirable lecture on "Faith in relation to the theories and discoveries of modern science."

— The East Middlesex Teachers recently held a Convention. S. P. Groat, Esq., was called to the chair, and W. L. Brown appointed Secretary *pro tem*. The chairman opened the Convention in a few appropriate remarks on the subject of the meeting. The session was taken up in discussing different subjects pertaining to educational matters, and appointing committees on organization, resolutions, petitions and entertainment; by discussions, an essay by Mr. Finchamp, and a reading by the Inspector, Mr. Groat. Mr. Manville, of the London School Board, made a few remarks on corporal punishment. A constitution was adopted, and the following officers elected—President, S. P. Groat,

Esq. ; 1st Vice-President, W. L. Brown ; 2nd Vice-President, A. Black ; Sec., J. Finchcamp ; Treas., Jas. Grant.—*Com.*

—**EAST DURHAM TEACHER'S CONVENTION.**—On the 29th September, a highly successful meeting of the Educational Association of East Durham was held in Port Hope—Mr. Montgomery, of Millbrook, presiding. The Port Hope *Times* thus refers to it :—There was a large sprinkling of lady teachers among those in attendance, and much of the success of the Convention is due to their assistance. Our efficient and indefatigable County Inspector, Mr. J. J. Tilley, is deserving of great credit for the energy and ability he has displayed in bringing the Association, in so short a time, to such a state of efficiency. Mr. Montgomery, President, Mr. P. N. Davey, Vice-President, and Mr. Hughes, Secretary, have shown themselves excellent officers, and deserve high praise. The Association is one that cannot fail to be highly beneficial not only to the teachers themselves, but to the great cause of education. We feel certain that all who attended the late meeting were highly satisfied with the proceedings, and went home with more expanded ideas, and much useful knowledge not possessed by them before ; and we think it very unlikely that any of them will be found absent at the next "roll call." We were most agreeably surprised at the amount of ability displayed in debate upon the various important subjects discussed, and the forensic skill of some young men who have barely attained their majority. Mr. Montgomery, of Millbrook ; Mr. P. N. Davey, Perrytown ; Mr. G. A. Irwin, Bethany ; Mr. Percy Davis, Springville ; Mr. S. Hughes, Lifford ; Mr. James Browne, Millbrook ; and one or two others, proved themselves to be eloquent and forcible speakers. The vocal and instrumental music of Miss Sharpe, Miss Walsh, and Miss Taylor, was most creditable to those ladies and added much to the interest and enjoyment of the proceedings. When the Convention opened, Mr. J. J. Tilley delivered an able address upon the subject :—"To what extent, and in what way, should teachers render assistance to pupils ?" Mr. S. Hughes delivered an excellent address upon the subject—"Some of the prominent causes of failure in Teaching." A discussion ensued thereon, in which Messrs. Davis, Harris, Elliott and Tilley took part. The next subject—"The best method of treating stubborn and refractory pupils, and the policy of dismissing the same from School," was opened in an able and eloquent speech by Mr. Percy S. Davis. In the discussion which followed, able and sensible speeches were made by Messrs. Kerr, Brown, Johnston, Hughes, and Tilley. Mr. W. L. Johnston opened the next subject—"Spelling," in a neat speech—Mr. Johnstone (Cobourg,) and Messrs. Cameron, Davis and Hughes taking part in the ensuing discussion. A meeting to which all friends of education were invited, was held in the Hall in the evening. The chair was taken at 7.30 by the President, Rev. Dr. O'Meara, after singing and recitations. Mr. A. Purslow, Port Hope High School, followed with an essay upon the subject—"The teacher should be a constant reader," which was listened to with attention and applauded. On motion of Mr. Johnston, seconded by Mr. P. N. Davey, a vote of thanks was tendered to the Ladies for their valuable assistance, and to Messrs. Purslow, Farewell, Thornhill, and Harris, for their services, after which the National Anthem was sung. Mr. Johnstone, of Cobourg, made a suggestion relative to a union between the teachers of East Durham and West Northumberland. He said that a meeting of Northumberland teachers had decided in favour of a union between the two counties for an annual convention, but no arrangement had been completed. In the meantime he thought the scheme he proposed would be found advantageous, and he would like to see a committee appointed to meet a committee from Northumberland for the purpose of arranging the matter. On motion of Mr. Tilley, seconded by Mr. Percy S. Davis, it was unanimously decided to accept the offer from Northumberland and to appoint a committee to meet the teachers from Northumberland, at the examination in Cobourg, relative to the question of Unions. Messrs. Davey, Tilley and Hughes were appointed a committee for that purpose. Mr. P. N. Davey then opened the subject—"The best course to pursue in organising a School,"

Messrs. Evans, Perrytown ; Johnstone, Cobourg ; Purslow, Port Hope ; Davis, Springville ; Montgomery, Millbrook ; Cameron, Port Hope ; the Inspector taking part in the discussion thereof. "The best exercises and amusements for the playground in connection with our schools," was opened by Mr. G. A. Irwin ; and discussed by Messrs. Hughes, Osborne, Johnstone, Armour, and Tilley. Miss Jeanie Sharp then favoured the audience with a song, and received deserved applause. Miss Christie of Millbrook, was then called upon to read an essay upon "Patriotism," which she had prepared for the occasion. She read clearly, distinctly, and with much feeling, and held her hearers spellbound from the beginning to the close, when she was again rapturously applauded. It was resolved on motion of Mr. Cameron, seconded by Mr. Tilley, that Miss Christie be requested to allow the Essay to be published in the local journals. At the close, after singing the National Anthem, this successful meeting adjourned.

—**ST. JOHN'S COLLEGE, MANITOBA.**—The subscriptions, up to the present, from all quarters in Ontario and Quebec, amount to \$7,000, and before the Archdeacon closes his mission, the total will be swelled to \$10,000 or \$12,000. At the convocation, held at Lennoxville, P.O., on the 29th ult., the University of Bishop's College conferred the degree of Doctor of Civil Law on the Venerable Archdeacon McLean, of Manitoba. By request of the Chancellor, Dr. McLean addressed the convocation, and afterwards assisted at the distribution of the prizes awarded to the pupils of the Collegiate School.

**XII. Departmental Notices.**

**AUTUMN ADMISSION OF PUPILS TO THE HIGH SCHOOLS.**

With respect to the regulation as to the admission of pupils to the High Schools, it has been decided by the Department, in accordance with a general desire to that effect, that pupils duly admitted to the High Schools at the beginning of the autumn term, for the present year, will be reckoned in the apportionment of the grant.

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In 13 sheets, 50 cents ; or by post, postage paid. 57 cents ; mounted on cardboard and varnished, per set, \$2.25.

**XIII. Advertisements.**

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 Took Two First Prizes at the Western Fair for Penmanship.  
**SCHOOL TEACHERS** who intend to abandon their profession can fit themselves for more remunerative positions by taking a course with us. Address for circular, &c.,  
**JONES & McCHARLES,**  
 London, October, 1871. London, Ont.

*In the Press.*

**FIRST LESSONS IN CHRISTIAN MORALS.** By Rev. Dr. RYERSON.  
 Toronto ; COPP, CLARK & Co.  
 October, 1871.