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CONTENTS OF THIS NUMBER.

EDUCATION IN THE EASTERN PROVINCES.

1. PROVINCE OF NEW BRUNSWICK.

(Extract from the Report of Henry Fisher, Esq., Chief Superintendent, for the year 1858.)

INTRODUCTION OF THE NEW LAW—PUBLIC MEETINGS.

In presenting the seventh Annual Report of the state of the Training, Model, and Parish Schools, throughout New Brunswick, I feel that there are circumstances which render the performance of this part of my duty peculiarly difficult. The Law under which the School Service is conducted, came into operation on the 15th April, and two days subsequently I received my appointment as Chief Superintendent. One of the terms of the year had already expired, and my sphere of duty has been limited to the other. The new Law having made important changes in the general management of the Schools, as well as in the duties of my own particular office, it became necessary at once to prepare to give effect to its provisions.

The change made in the system of inspection was a necessary one, and will, I believe, in various respects prove of immense benefit. Besides other advantages, the Chief Superintendent and the Inspectors can now move with a full understanding of each other's views, and all the operations of the Department be conducted more effectively and more harmoniously.

The duties of the Chief Superintendent were greatly increased, and one of the most important and necessary of these duties was, "that he should collect information on education, and hold public meetings in different parts of the Province, and address such meetings on the subject, using all legitimate means to excite an interest therein." In accordance with this provision, as soon after my appointment as other engagements would permit, I officially announced a series of public meetings in all the different counties, and in the most important places in each county. Such meetings were a novelty in the Province, and were generally largely attended. I found the most hearty concurrence on the part of the Trustees, Teachers, and the public generally, both in giving publicity to these meetings, and in securing convenient places for holding them, as well as a large and respectable attendance.

My design was to explain to the people everywhere our real educational position; to show them what our system had been, and what we are striving to make it; and especially to urge certain advantages which may be attained under the present Law, which could not be attained under any former Law. *I was determined to keep the movements of my department above and beyond the party differences which exist in the Province, feeling that education is a work which requires the co-operation of all.* I believe that I was successful in this effort, and I can gratefully record my acknowledgments for the kindness with which I have been received on every occasion, as well as for the assistance rendered me by gentlemen holding different opinions on less important subjects, and for the disposition generally manifested to promote my personal comfort, and to render my labors agreeable. The importance of establishing Superior Schools, and School Libraries; the advantages to be derived to education throughout the Province from adopting the principle of assessment; the necessity of improving the character of the School Houses; the importance of adopting a uniform set of School Books, Maps, &c.; the necessity of Teachers possessing sound moral as well as educational qualifications, were the topics on which I mainly dwelt at my public meetings.

SUPERIOR SCHOOLS AUTHORIZED IN EVERY PARISH.

The Section of the Law authorizing the establishment in every Parish of a Superior School, which is entitled to receive an additional grant from the Provincial funds, offers to each Parish educational facilities not heretofore enjoyed. To guard the Province against imposition—against an expenditure of money for what might prove only a nominal advantage, and to secure to the people superior education, the regulations for such Schools were necessarily made very stringent. The policy of these regulations is, that every parish shall have one School where the different branches of a sound and thorough English education must be taught, and also, if desired, the elementary classics; it being left to the opinion of the Trustees to require the latter, if necessary. Another object to be attained by the establishment of these Schools, is to improve the condition of the School-master—a most important object, as the elevation of the School-master is absolutely necessary to the elevation of the system. The regulations therefore require that his local compensation shall be paid in cash, and shall be so certified by the Trustees and Inspectors before the Provincial allowance can be drawn. It is probable that these Schools will ultimately supersede, in most instances, the County Grammar Schools; and, if judiciously established, may be made to form a connecting link between the ordinary Parish Schools and the University. Experience may suggest the importance of some change in the Law, both with respect to the style of the building in which the School should kept, and the standard of qualification necessary for the Teacher.

ESTABLISHMENT OF PUBLIC SCHOOL LIBRARIES.

The section authorizing the establishment of a library in every School District is also very valuable and important. I have at every meeting urged the necessity of such institutions. Throughout the whole of the rural districts their introduction would be most beneficial. In several places preliminary arrangements have been made to establish Libraries, although as yet but one formal application for the Provincial grant has been forwarded to the Department. The regulations of the Board, with respect to these Libraries, were cautiously made, in order that difficulties which would probably occur might be provided against at the outset. These regulations prohibited "works of a licentious, vicious or immoral tendency, and works hostile to the Christian religion, and works involving religious controversy;" and it was made the duty of the Chief Superintendent "to prepare a Catalogue of Books, subject to these exceptions and guards." The Catalogue, containing a list of about eight hundred volumes, embracing works in the various departments of human knowledge, was duly prepared, and has been made available to School Committees, and other parties engaged in providing Libraries.

I trust that, during the present year, Libraries will be established in various parts of the Province, as they are not only desirable but necessary. One of our most distinguished writers has closed a very eloquent address on the subject, with the following language:—"To instruct men, to indoctrine them in the principles of science, to edify them, to impart a knowledge of the theory, and persuade to the practice of virtue, to stir the imagination profoundly, and to achieve the highest triumph of Art, men must read books, children must read books, and Schools must furnish free Libraries.

PRINCIPLE OF SCHOOL ASSESSMENT.

The provision of the Law by which "any County, Parish, District, or Municipality can determine to provide for the support of the Schools therein by assessment," next requires attention. The principle involved is one which has been on our Statute Book since 1852, and has been frequently discussed in these reports, but has not yet been extensively adopted throughout the Province. Undoubtedly great efforts have been made to misrepresent it, and to excite prejudice against it, especially amongst the ignorant.

As I regard this principle as ultimately necessary to such a system of education as we should have, I have made it a prominent topic of discussion at every meeting which I have held. I have found, however, as I became better acquainted with the state of public feeling respecting it in different places, that the subject was one which required to be dealt with very carefully. There are unquestionably many who intelligently approve of the principle, and who are prepared to accept it at once; but, on the other hand, observation has convinced me that there is a far larger number of persons who, from various causes, are directly opposed to it, and who will resist any effort which may be made to introduce it. I have become, therefore, thoroughly satisfied of the wisdom of the policy pursued by the Legislature, both in 1852 and 1858, in leaving the principle to the voluntary action of the people. I am persuaded that any other course would be ruinous to the principle itself, in the public mind, and would excite an antagonism to it, which would render its introduction impossible for a long time to come. A few School Districts have adopted it, and are already reaping its advantages.

CONDITION OF THE SCHOOL HOUSES.

In remarking on the condition of the School Houses, it will be admitted that there is no branch of the service which has been more neglected than this. Many of the buildings now used for this purpose are utterly unfit. Besides their outward disreputable appearance they are inconveniently small; the ceilings are low; they are badly lighted and ventilated; "too cold in winter—too hot in summer;" without proper desks and benches; while external conveniences are seldom thought of. It is not to be expected that every School House should be complete in point of beauty and attractiveness, but it should at least be decent. If constructed of logs, (as may be necessary in some of the back settlements, where the people are poor,) it should nevertheless be made large enough to adapt it for the usual School exercises. I may add that proper out buildings, and a play ground, ought to be provided wherever practicable. Independently of the disgraceful appearance of such erections in a community, they are connected with certain positive disadvantages, both as to the influence which an educational establishment—the very smallest and least pretending—should have upon the minds of the pupils, and also as to their health and comfort. The evils which follow the habitual violation of the laws of health, in the construction of many of our School Houses, are not sufficiently considered. In my addresses to the people, I have urged these considerations, and have been pleased to find that my views and recommendations have been appreciated. During the last summer a number of new School Houses have been erected, most of them on improved models.

PHYSICAL EDUCATION—VOCAL MUSIC.

Connected with this is another subject of importance, to which I shall hereafter, as I have opportunity, call attention—Physical Education. This subject is one which is fully dealt with by some of the leading Educationists of the present day. It is admitted—that "if we wish to develope the mind of a pupil, we must develope the power which mind has to govern, exercise his body, make him healthy and strong, that we may make him prudent and reasonable." I merely refer to the subject as one which ought to be practically regarded in our system, and I hope hereafter to be able to mature a plan by which it may be introduced.

I have also made preliminary arrangements for the introduction of vocal music of an elementary branch of education. Without discussing the proposition of Professor Stowe, "that the ability to learn to sing is universal," there is no doubt that the use of this delightful means of instruction will be as advantageous in New Brunswick, as it has proved to be on the continent of Europe, in Great Britain, in the United States, and in some of the neighboring Provinces. For the present the pupil teachers in the Training School are to receive, at certain hours every week, instruction in this science; and I hope that in a few years vocal music will form a necessary branch of education in all our Parish Schools.

THE TRAINING AND MODEL SCHOOLS.

The state of the Training and Model Schools has occupied the serious consideration of the Board during the past year. This Institution has been in existence since 1848, and has done a large amount of good. Public expectation has not, I am aware, been fully met by the results thus far; but I am persuaded that the cause of education has been greatly promoted by the teachers who have left this establishment, and there is, in consequence, in different places, a decided preference now given to trained teachers. The importance of this Institution cannot be too highly estimated. It is universally admitted, in every country where education is properly cared for, that Schools for the training of teachers are indispensable. M. Guizot, a very enlightened Educationist, remarks:—"That that State has yet done nothing for popular education, that does not watch that those who devote themselves to teaching be well prepared." I need not discuss the advantages and necessity of such an Institution, as every one must feel that an efficient Training School, and efficient inspection, are inseparably connected with uniformity and success in teaching.

TEXT BOOKS, MAPS, AND APPARATUS.

Notwithstanding the efforts of the Department to procure and furnish to the Schools proper reading and text books, maps, and other apparatus, considerable difficulty is yet experienced on this account. The new regulations provided, "that the existing selections and arrangements, as regards the books, maps, and apparatus, were to be continued until revised after due enquiry." A new Geography, one which will be adapted to the course of instruction carried out in the Schools, and which will furnish correct information both in the political and physical department of this science, is a desideratum which I am striving to supply. This new Map of the Province, now in course of publication, under the sanction of the Government, will, if it can be attained for the Schools at a reasonable rate, supply what is now felt to be a very serious deficiency. To meet the wants

of remote places, I have communicated with the Inspectors on the importance of establishing additional agencies for the sale of School Books in those parts of the Province where the supply has hitherto been too limited.

REPORTS OF INSPECTORS.

The Reports of the Inspectors will exhibit very fully the condition of our Common Schools. Some of these Schools, I am sorry to say, are very inferior, and there are difficulties in the way of their improvement which only time and labor can overcome. In other cases, however, the Teachers are competent and faithful; their Schools are well taught, and well governed. But, notwithstanding all that is said against our Common Schools, it cannot be denied that they have done, and are now doing a large amount of good. It is admitted on all hands that, since the establishment of the Training School, and a system of inspection, the standard of qualification of the Teacher has been raised, and the education of the Schools materially improved.

There is everywhere, and amongst all classes throughout the Province, an anxiety for education. The people value it as absolutely necessary, and are willing to unite in any legitimate means to secure it. I trust that my own labors during the last few months, in urging this important subject, have, in some degree, assisted in promoting this disposition. These labours have also been advantageous to myself personally, as they have given me a more accurate knowledge of the educational condition of the Province.

The service is one in which earnest, persevering, and faithful effort is required, and in which such effort will be well repaid. The children rising up around us demand our care, as we look to them to fill our places after we have passed away.

I sincerely trust that the effort now in progress may, through the Divine Blessing, issue in the establishment of a sound educational system, which will be a means of permanent usefulness to the rising generation of New Brunswick.

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2. Province of Nova Scotia.

(Extract from the Report of the Rev. Dr. Forrester, Chief Superintendent of Education.)

There are appended to this Report various tables, shewing the number of Schools and Districts in the Province; expenditure for Schools, &c.;—number, age, and sex of scholars,—duration of schools, sex of teachers, character of school houses, and abstract of Grammar School returns,—but the Superintendent regrets that these tables are only to be regarded as an *approximation* of the truth. He considers that it will be necessary to appoint a staff of paid agents to collect these statistics, before an accurate and reliable view can be given of the condition of Education throughout the Province.

The Superintendent also remarks that there is some improvement in the state of Education throughout the Province since last year,—that the number of schools has considerably increased, that the difference between the number of schools taught in summer and winter has diminished, and that, although the public money expended is somewhat smaller than that of last year, the amount raised by the people is larger, by a few hundreds. He also states that the apparatus and equipments, as well as the whole style and character of the education imparted both in the Common and Grammar Schools, seem decidedly on the advance.

The Superintendent forcibly depicts the evils arising from irregular attendance of the scholars at the Public Schools,—many of the schools being closed for months. He also states that there are now upwards of 100 Normal trained teachers engaged in the duties of their vocation throughout the Province, and that he cannot supply half the demand for such teachers. Dr. Forrester also comments on the great diversity of allowance from the Provincial funds to the different teachers. It appears that, generally, the teachers in the more thickly settled districts, where the schools are the largest, receive the least public money.

UNIFORMITY OF TEXT BOOKS.

The sum of £600 has, as usual, been expended in the purchase of school books, which have been proportionally distributed among the various School Boards. I think I can now congratulate the Province on the near prospect of a uniformity of school books. I have been aiming at this ever since I entered on the duties of my present office; and this year considering the Province as ripe for the change, a great proportion of the above sum has been expended in the purchase of the Irish National Series alone. One firm has stereotyped all those of the series required by the common schools of the Province, which are sold at a lower rate than any other class of school books now in general use. Other booksellers are importing the same series, so that, in the course of a year or so, a complete uniformity in the school books used throughout the Province will prevail. Out of the £600 granted by the Province for the above object, £50 has been paid to Mr. H. Reid for 1000 copies of his publication on Geography.

PUBLIC SCHOOL LIBRARIES.

I cannot here omit noticing, that nothing has been done during the past year relative to the school libraries. My views on this subject have been set forth in several succeeding reports. I am thoroughly convinced that there is no way of giving satisfaction in the dispensing of this boon, and in the distributing of these books, but by allowing the people to make their own selection. For this purpose a catalogue of suitable and profitable books ought to be prepared, to receive the sanction of the Legislature, and a Repository opened, in some central locality of the Province, for their reception. In May next, had it not been for the act of the Legislature of last session, there would have been not less than £2000 due this fund, which, if judiciously expended, would go far in laying the foundation of a pretty extensive Library, and which, being added to year after year would be the means of diffusing among our population an immense amount of valuable information, and tend largely to elevate the whole of our industrial and moral economy.

NORMAL AND MODEL SCHOOLS.

The number of pupils in attendance at these Institutions is still on the increase. During the winter of 1857 and 1858 there were in attendance 61 pupil teachers and 3 paying pupils. Of these, at the end of the term, 8 received first class certificates, and 33 were awarded second class certificates, and 8 obtained scholarship. Last summer session there were in attendance 46 pupil teachers, 4 paying pupils, and 1 agricultural. Of these, 1 received a Grammar School diplomacy, 19 obtained first class, and 11 second class certificates.

The learned Doctor earnestly contends for a renewal of the grant of £100 formerly appropriated by the Province for scholarships at the Normal School. He states that there is no Normal School with the same equipment and staff of officers, either on this or the old continent, supported at the same moderate rate. He also observes that at the Training School in New Brunswick, the sum of 6s. per week is granted to every pupil in attendance, and there is no Normal School, either on this or the other side of the Atlantic (except that in Nova Scotia), that does not support, either in whole or in part, the students in attendance. Nothing of the kind is done at the Normal School at Truro. The Superintendent observes that surely £100 a year given, not in a eleemosynary way, but as a reward of diligence and success in the prosecution of their studies, is a comparatively small sum to appropriate to such an object.

He further states that there is now a larger attendance at the School than on any former occasion, there being enrolled 73 pupil teachers and 1 paying pupil.

He also observes that the attendance at the Model Schools is considerably increased since the date of his last report. The average number of attendance during the past year having been 168.

EXPERIMENTAL GARDEN, WITH FARM.

The Superintendent states that the soil of the experimental garden and farm at the Normal Institution is thoroughly exhausted, and that, before it is capable of answering the end intended, it must pass through a process of cultivation, both mechanical and chemical, for which purpose between £300 and £400 will be required, in consecutive yearly grants of £150.

TABULAR STATEMENTS.

It appears from the tables annexed to the report, that there are throughout the Province receiving Provincial aid 1,123 schools, educating 34,053 pupils, at an average cost to the Province of 4s. per pupil, and to the people 9s. 8½d. The average salary of each teacher is £38 16s. 11d., and the average duration of schools 9¾ months. There are 51 Grammar Schools in the Province.

II. Papers on Practical Education.

1. HINTS ON ENGLISH COMPOSITION.

BY GEORGE E. B. COCKBURN, ESQ., M.A., RECTOR OF THE MODEL GRAMMAR SCHOOL FOR UPPER CANADA.

In a country like Canada, where every one who aspires to occupy any position is more or less called upon to express his sentiments publicly, either orally or through the medium of the press, we should imagine that English Composition would hold a prominent place in the schedule of our school studies. But our daily experience tells us that such is not the case, and that we are generally left to acquire that art in a loose, nondescript manner, after we are supposed to have *finished* our education. We believe, however, that many of our zealous teachers are fully sensible of this defect, but have been deterred from giving this branch a prominent place in the regular curriculum of studies, from an exaggerated idea of

the difficulty of training the youthful mind to the art of composition. With a view to remove this difficulty, and to answer various inquiries, we desire to offer the following few simple hints on English Composition. We would commence by remarking that the great bugbear in the way of teaching English Composition, has been that the subjects given out by the master have not been adapted to the mental powers of the pupil. Any one may be convinced of the truth of this remark, by turning over the pages of any ordinary composition class-book, in which, among the list of subjects for essays, he will find such nice abstractions as "*Virtue is its own reward*," "*Honesty is the best policy*," "*Benevolence*," "*Charity*," "*Beauty*," "*Envy*," "*Vice*," "*Truth*," "*Justice*," "*Time*," &c. Now these nuts are rather hard for any one to crack; and to set any ordinary man—far less a child, with its feeble, undeveloped powers—to write about such airy, fleeting abstractions, is simply absurd. The food is too strong, and not adapted to the intellectual digestive organs of the child. You must tempt it by a lighter, simpler, and more nourishing diet; and that you can easily procure, by adopting the following recipe:—Take a short, pithy fairy tale, or heart-stirring deed from history; read it carefully over once, or twice if necessary, to the little fellows, who will listen to it with breathless attention. Then encourage one of them to repeat, as he best can, on the spur of the moment, the same story; and when he has done so, tell the whole class to reproduce it as carefully as they can, but to use *every freedom* in the handling of the subject. In this manner you will help to cultivate—what in a young class it is most essential to cultivate—the habit of attention and sustained intellectual effort; and the fact of one of their class-mates having repeated the story, will encourage the dullest to persevere. You can then cause two or three boys to reproduce, on the black-board, their essays, in whole or in part, which you can thus publicly criticise.

After warning the class against similar errors, you may send them all to their seats, to write a second or improved copy, by which means you bring vividly before the boy the fact of his progressing—one of the greatest levers in self-education. When in this manner they have had sufficient practice in composing in a variety of styles, so as to be able to punctuate correctly (which may be taught in a very few lessons by the analysis of sentences), and to write pretty fluently, the next step is to throw them more on their own resources, by suggesting to them various subjects for original composition, taking care, however, that these be confined to things which they have seen or handled, or can easily imagine. They may thus describe a shipwreck, fire at sea, cricket-match, boat-race, battle scene, holiday excursions, &c. The teacher can thus allow full scope to individual taste and talent, and can help the backward,—but let him beware of compelling his pupils to write a theme nicely cut up and dissected into so many dry morsels, labelled with equally dry names, and thus attempt to force every boy to *think* alike and in a regular order.

The higher style of composition may now be safely entered upon by the more advanced pupils, to whom the master may give critical or parallel biographies; historical, imaginative, or other themes, which require a fairly cultivated mind and taste, and powers of nice discrimination. In these higher subjects he will find it almost indispensable to have at his command a fair school library, to which he can refer the pupils for consultation or preliminary reading. Let them have full time to digest what they read, so that their thoughts may not be mere crude repetitions of the ideas of others.

Such is a rough outline of the manner in which we conceive English Composition may be taught. The judicious teacher may also avail himself of other means to aid the pupils in acquiring that art. Thus, by making it a rule, at least in the junior classes, to admit no answer which does not contain a clearly expressed definite proposition,—by teaching history not so much by questioning as by demanding an oral or written account of a particular lesson or subject,—by requiring in the classics a full, good English (not Latin-English) translation of every passage, instead of allowing both languages to be murdered piecemeal by that curious grammatical hybrid termed "*construing*," by causing the pupils themselves to comment on and recite choice pieces of our best authors; by avoiding the pernicious habit of correcting pages of bad grammar, which is one of the surest methods of teaching a boy bad grammar, by familiarising him with it; by instituting among the senior pupils a carefully conducted debating society: by these and such similar appliances as will occur to every one who has studied the philosophy of the human mind, in connection with instruction, the art of English Composition can be easily and pleasantly acquired, and a good mental training be at the same time secured. In conclusion, we would draw the particular attention of every teacher to the orthography of his pupils, and the necessity of curtailing their spasmodic effusions.

2. THE FIRST ERROR OF TEACHING.

The first error is teaching men to imitate or repeat, rather than to think. We need to take but a very cursory glance at the great theatre of human life, to know how deep a root this radical error has struck into the foundation of education. Look abroad among men, and ask yourselves how many of the moving multitude inquire into the springs of action; how many seek to know the causes and consequences of those scenes in which they themselves are actors; or, to descend to details, how many attempt to understand the true principles of the business in which they are engaged, how many can correct a blunder arising merely from the application of a principle. Analyze this boasted liberty of ours; look again upon republican society in the freest land of the earth; separate the living agents from the mere automata in this game of life, and tell me how many of the latter—how many of the former! And if you are not pleased with the result, tell me whether this is a decree of nature or a fault of education; whether you believe if men were taught to be independent thinkers, and that, while they revered all that was good, or glorious, or valuable, in the works of their ancestors, they, too, had an indwelling spirit whose high prerogative it was to extend the conquest of mind, they would cease to inquire, and remain dull floats upon the ocean of being.

But if you would know what the effects of thinking are, compare Athens with China. Here are three hundred millions of people—more than one-third of the human race—whose history goes far back into remote antiquity, and who commenced with no small share of arts and sciences, but who have added not a single particle to knowledge, nor taken one step in improvement; whose only policy is to prevent innovation, and whose only power is to perpetuate succession. Here is another people, whose population does not exceed one-tenth that of Ohio, whose place can scarcely be found on the map, who commenced barbarians, yet who have given to the world new sciences and new arts, and whose mighty men infused into language

"Thoughts that breathe and words that burn;"

who reconquered their conquerors by the spirit of eloquence, and whose renown has filled the earth.

What makes this mighty difference? The one learned to repeat, the other to think.—*Connecticut School Journal.*

3. FALLACY OF PREMATURE EDUCATION.

When we are considering the health of children, it is imperative not to omit the importance of *keeping their brains fallow as it were, for several of the first years of their existence.* The mischief perpetrated by a contrary course, in the shape of *bad health, peevish temper and developed vanity*, is incalculable. Some infant prodigy, which is a standard of mischief throughout its neighbourhood, misleads them. But parents may be assured that this early work is not, by any means, all gain, even in the way of work. I suspect it is a loss, and that children who begin their education late, as it would be called, will rapidly overtake those who have been in harness long before them.

And what advantage can it be that a child knows more at six years old than its compeers, especially if this is to be gained at a sacrifice of health, which may never be regained? There may be some excuse for this early book-work in the case of those children who are to live by manual labour. It is worth while, perhaps, to run the risk of some physical injury to them, having only their early years in which we can teach them book knowledge. The chance of mischief, too, will be less, being more likely to be counteracted by their after life. But for a child who is to be at book-work for the first twenty-one years of its life, what folly it is to exhaust in the least its mental energy, which, after all, is its surest implement.

A similar course of argument applies to *taking children early to church*, and to over-developing their minds in any way. There is no knowing, moreover, the disgust and weariness that may grow up in the minds of young persons from their attention being prematurely claimed.—*Arthur Helps.*

4. A PLEA FOR DULL SCHOLARS.

A writer in the *Rhode Island School Master* gives an incident in his experience with just reflection, which we commend to every teacher who is tempted to be impatient with dull scholars:

I once saw a teacher engaged in hearing a brilliant recitation, where all was prompt and successful. The class was in high spirits, the teacher in fine temper; but when it came the turn of an honest looking boy at the foot, with large heavy eyes, and a troubled look, I saw the smile of satisfaction leave the teacher's face before he had finished putting the question; I saw the class sneer in anticipation of the blunder; and I saw too the poor boy flinching from the gaze

of the school, and the impatient look of his teacher. He failed, of course. The teacher turned away with an expression of *resignation*, which was a more severe blow to the boy than if he had been struck. Reader! have you never done this thing? Never be impatient with dullness in school. Do not merely refrain from contemptuous epithets, (for who would be so brutal?) but avoid every shrug of the shoulder, every gesture of impatience, every sigh of disappointment. It is mortification enough to the scholar to know that he is not so bright as his companions; do not add to his shame the sense of injustice.

A child may be quick to grasp principles, yet slow in learning facts; he may be deficient in mathematical ability, and yet possess much poetic feeling, and an earnest, ardent love of the beautiful. A bad memory or some other defect will keep him back in recitation, though his mind may be full of precocious thoughts, which find no utterance in the bustle and hurry of the school room.

I had a case of this kind in my first school; it was a poor little fellow who always seemed puzzled; he was slow to take an idea, and appeared to have no power whatever to express his mind. His companions thought him stupid, and I shared the general impression. In the course of the term, I introduced exercises in composition—a thing hitherto unknown in school. To our astonishment, his first effort exhibited an originality of thought and a facility of expression which no other boy could equal. On one occasion he wished to introduce a few stanzas of poetry into his composition, and not remembering the exact form of the original, substituted his own expressions; they were all correct, poetic, and metrical. On conversing with him about his pursuits, I found him altogether superior to his companions, in all the more mature and valuable properties of the mind.

I learned wisdom by that experience, and have since found many similar cases; indeed, so many, that I am sometimes inclined to think that a slow manner of thought, in a child, is a sign of good intellect. Therefore, if I find that a boy is unsuccessful in ordinary school studies, I look round to see what I can do for him. If he has a poor memory, I often find that he can grasp a thought; if he cannot read well, he may nevertheless understand thoroughly what he is reading about; if clumsy in speech he may be skillful in expressing his thoughts in writing; if he is deficient in mathematical ability, he perhaps has talent for drawing, for mechanics, music, or the languages; though hating arithmetic and geography, he may have a love of poetry and art, that may be turned to account. Thus I find the law of compensation exhibited even in the school room. Many a man or woman has developed a symmetrical mind and character in after life, who in childhood seemed only 'half made up.'

Therefore, O teacher, be not hasty in your judgments! remember that the scope of your influence is limited; that there are chambers of the young mind which, with your parade of school books, you have never entered; remember that the heavy-eyed lad whom you deem so obtuse may yet grow to be a man whom you will delight to honor. Be patient.—*Ohio Journal of Education.*

5. HOW MANY HOURS SHOULD SCHOOL BE KEPT IN.

At a late meeting of the Massachusetts Teachers' Association, the question, How many hours a day ought children in the primary schools to be confined to their studies? was debated by Mr. Ansorge of Dorchester, who advocated the shortening of the usual duration of school hours. Mr. Bulkley, Superintendent of Schools in the City of Brooklyn, being called on, made a statement in regard to school hours in that city and New York. Mr. B. condemned in strong terms the present practice of keeping children confined so arbitrarily and so long in schools. The remarks of Mr. Bulkley were exceedingly spirited and pertinent. Mr. Charles Northend, Principal of the State Normal School at New Britain, Conn., corroborated the statements of Mr. Bulkley, and spoke earnestly in favor of a reform by reducing the number of school hours. He would have one-half of the time of the children given to play.

Mr. Emerson of Boston took a similar view of the subject. Mr. Brown of New Hampshire expressed his views, being called on, and thought that the medium course should be pursued. So far as most of the primary schools in New Hampshire were concerned, the speaker said that most of the scholars would have exercise enough during the winter, in keeping warm.—*Ohio Journal of Education.*

6. SUGGESTIONS TO CURE IRREGULAR ATTENDANCE AT SCHOOL.

No evil in our schools is so great as the irregular and tardy attendance of pupils. Those connected with city schools can form no adequate conception of its extent. Destructive of good order and system there, country villages suffer from it infinitely more. The writer was once connected with the public schools of a city where tardiness was reduced to a very small percentage, *by giving preference of seats to those who were present at the opening of school.* But there more scholars wanted places than could be accommodated; and the fact that the seats were assigned to the first comers kept the pupils regularly in their places. A city of Northern Illinois, with a hundred scholars in the High School, has avoided tardiness in that department, for weeks at a time, by a similar course, in connection with other means.

No panacea can be given for the evil; but a few suggestions may be useful. *First.* The teacher must be prompt himself. *Second.* He must be determined to check the evil. He must make a distinction between being present and being absent at call of roll, at which time the door should be closed. In our schools it is generally best to do that twice a day. A teacher in a regularly-seated house can often dispense with the formal call, and note the vacancies by glancing about the room. Whatever be the mode, make it the business to know who is in time. Request written excuses in cases of irregularity. Do not expect notes to prevent falsehood, but as a means of keeping the attention of parents directed to the attendance of their children. Disclaim all responsibility for the progress of irregular pupils, but relax no effort to make them regular. If a paper is published in your field, make good use of it. Never hold back an iota of the truth in stating how much irregularity you have. The worse it is to begin with, the more room is there for you to improve it. Concealing an evil is a poor way to cure it. I know of one teacher who has a very irregular school, judging from the published statements of it, who sends regularly every week to the editor in his place a table stating the number of scholars belonging to the school, the number of absences and cases of tardiness. People can thus see what they have to do for their schools. They can not expect teachers to take children to school; it is their own business to see that they are present.—*Illinois Teacher.*

III. Papers on Physical Geography and Commerce.

1. CAPTAIN PALLISER'S DISCOVERIES—Mr. DAVID THOMPSON HIS PRECURSOR.

A short time ago, we announced, in advance of all our cotemporaries, that Captain Palliser had discovered a pass in the Rocky Mountains, at Bow River, on the south branch of the Saskatchewan. In communicating this information to the public, we took occasion to express doubts, whether this was entitled to be regarded as an original discovery; suggesting the probability of its having been previously made by Mr. David Thompson, late Astronomer and Surveyor to the North West Company. Since we made the announcement of the alleged discovery by Captain Palliser, a paper has been read on the subject before the Royal Geographical Society, of London. On that occasion, no less than four passes in the Rocky Mountains, were enumerated as having been discovered by Captain Palliser and his assistants. From an examination of the subject, we have since ascertained that not one of these discoverios is original. They had all been discovered some sixty years ago, by the late Mr. Thompson. The position assigned to them by Captain Palliser corresponds, in point of latitude and longitude, precisely with that given to them by their original discoverer, sixty years ago. So far as it is at present known, Captain Palliser has fallen upon but four of the five passes which Mr. Thompson discovered, so far in advance of any one else. The exploration of Captain Palliser has had the effect of confirming the accuracy of Mr. Thompson's observations, and the precision with which he laid down the points at which there are practicable passes in the Rocky Mountains.

These facts cannot fail to direct attention to the labors of the late Mr. Thompson If he discovered, sixty years ago, all the passes which Capt. Palliser has been able to find in the Rocky Mountains, it will be no violent conclusion to say that there must be in the result of his labours, comprised in 67 volumes of manuscript, much more that is of great practical importance and value. Mr. Thompson entered the service of the Hudson's Bay Company, in 1790, his principal business being to make explorations and surveys of their territory. The surveys, he tells us himself, "were all carefully corrected by numerous astronomical observations, for latitude and longitude and the variation of the compass; commencing in the year 1790 and ending in the latter part of 1825." Here then in these volumes, which have never seen the light, are the results of thirty-five years of labor. What that labour consisted of it may be worth while to examine. During the greater part of the time, Mr. Thompson took meteorological observations, sometimes three times a time, and kept a journal of the weather. He established the latitude and longitude of all the principal places which he visited, in a period of 35 years. During the seven years he was in the employment of the Hudson's Bay Company—for he joined the North West Company in 1797—Mr. Thompson among other things, surveyed the rivers, lakes and carrying

places from Cumberland House to York Factory; thence round by Fort Nelson and the Saskatchewan to Seepaywisk; thence from the Rein Deer River, the great northern branch of Church-hill River, in Hudson Bay, and from this junction, the rivers and lakes to York Factory viâ Nelson River; also the distance from York Factory to Buckingham House, on the Upper Saskatchewan, and by another route from Buckingham House to York Factory; from the latter point to Reed Lake; from Cumberland House to York Factory, by the nothern passage, viâ Cranberry Lake and Carrying Place and the Burnt Wood River to Fort Nelson.

When Mr. Thompson entered the service of the North West Company, in 1797, the agents, the Hon. Wm. McGillivray and Sir Alexander Mackenzie directed him "to make a survey of the rivers, visit the several trading houses and settle their positions." At that time, the North West Company pushed its trade northward beyond the Great Slave Lake, Southward, a considerable distance down the Mississippi, eastward near the shores of the Hudson Bay, and westward almost as far as the Rocky Mountains. Proceeding from Grand Portage, North of Lake Superior, the chief depôt of the Company, Mr. Thompson surveyed the rivers and lakes to the River and Lake Dauphine, and part of the Stone Indian River; from the mouth of the Rein Deer River to the eastern extremity of Athabaska Lake; the upper part of Church-hill River; from Fairford House, by the Rein Deer River and Lake, to the east end of Athabaska Lake; Rein Deer River to Cumberland House and the mouth of Sturgeon Weir River, on Cumberland Lake; from Isle de la Crosse, at the head of Church-hill River, by the Beaver River to and over Red Deer Lake; from the junction of the Indian and Moose Rivers to the Mandorne villages on the Missouri River; the Stone Indian River to its junction with Red River; up the latter river to the Clear Water River; up Clear Water Lake; thence to Turtle Lake, the source of the Mississippi, and thence to Louis River, descending it to its embouchure into Lake Superior. The next survey made by Mr. Thompson was from the Sault Ste. Marie to the great carrying place, through the interior country to Red Deer's Lake. He also made a land survey from Fort Augustus, on the Saskatchewan, to the Pembina and Athabaska rivers, and down them both. We next find him on a journey from the Rocky Mountain House, southward to the Stag River. And here he was approaching the pass, the discovery of which has been claimed for Captain Palliser. In company with Mr. Duncan McGillivray, Mr. Thompson passed to Camp of Pee-a-gon Indians, beyond Bow River. Nor did he merely travel. He surveyed wherever he went; working out his surveys and establishing the latitude and longitude of all important points. From the Rocky Mountain House to Fort St. George, he surveyed the Saskatchewan. We next find him in a survey from Fort William, on Lake Superior to Lac la Croix; thence to Musquhagan Lake, Church-hill River; of Peace River from the Horse Shoe to its fall into Athabaska to the lake of the same name; from Lac la Croix to the Rat River countries bordering on the waters of Church-hill River, and of the Beaver River.

We now come to the time when Mr. Thompson crossed the Rocky Mountains, at the point where Captain Palliser alleged a railroad may be constructed. On the 10th of May, 1807, "I began," says Mr. Thompson, "to cross the mountains, by the valley of the sources of the Saskatchewan River, thence by a brook descending to the Columbia River; thence to the Kootanas lakes, the head of this river, and there made a trading house, (it would seem by this that no such trading house existed before,) for the Kootanas and other Indians, on the west side of the Rocky Mountains." While in this region, Mr. Thompson measured Mount Nelson and other mountains.—*Leader.*

2. THE SASKATCHEWAN COUNTRY.

Extract from a recent Speech in House of Assembly of W. McD. Dawson, Esq., M. P. P. for Three Rivers.

Apart from the question of the validity of the Hudson's Bay Company's charter, there was a large tract of country lying along the Saskatchewan, which was not at all affected by that charter. That territory was as much a part of Canada as the streets of Toronto were a part of Canada. (Hear, hear.) This was simply a question of historical fact, and of which there could not be the slightest doubt. The greater part of this territory was available for settlement, and was generally good. There was, undoubtedly, a rough country intervening between that and Lake Superior, but not impracticable for making roads. The good territory commences about Rainy Lake, and from thence to the Rocky Mountains, a distance of about 1,200 miles in a straight line; from thence northward along the base of the Rocky Mountains for about 500 miles to the Unjeiga, or Peace River; the country is well adapted for settlement. Striking thence southeasterly to Lake Winipeg, you include a tract of 500,000 square miles, or 320,000,000 of acres of available land. The most northerly portion of this territory may be said to be fully equal in point of climate to Lower Canada, while the southern portion was far superior to any part of the peninsula of Canada West. These were facts which had been well ascertained. The first explorer of the country, who first crossed the Rocky Mountains, was Sir Alexander Mackenzie, in 1793. His report would be found in the library. It would be found that, although the frost became intense during the winter, yet, in this northern latitude—a latitude of 567 degrees—at this place where he wintered, the snow never lay over a foot deep, and the river was not frozen over till the middle of December. Five hundred miles south of that, the country is very fine. For the last thirty or forty years, however, this country had been studiously excluded from the view of the Canadian and British people. It was, at one period, well known to Canada. There was a highway in those days through that territory to the Pacific, and a large trade was carried on. The result of the survey now made would do away with the impression that that country was inaccessible beyond Lake Superior. It would be shown that the greater part of it was navigable. With regard to the distances, he might state, that from Fort William, on Lake Superior, there were twenty-eight miles of road to be made through the roughest part of the country, and would cost about £300 per mile. From the termination of this road, there were 35 miles navigable on Dog Lake and Dog River. There were five miles of road to be made through a very easy tract. With a little improvement, they had then 65 miles of water communication through Savanne River and Lac des Mille Lacs. Then there was a distance of 67 miles of road to make which brought them to an arm of Rainy Lake. From there, with the single exception of the Fall at Port Francis, there was a distance of 208 miles navigable to the Lake of the Woods. There were then 91 miles of road to make over a very level country—the greater part of it being prairie—to Red River at Fort Garry. From Fort Garry taking the route by Lake Winipeg, there is a stretch of 296 miles navigable to the Rapids of Lake Saskatchewan. By ascending from Lake Winipeg by the Little Saskatchewan, the distance would be increased, but the rapids of the Saskatchewan would be overcome. By taking the Winipeg route, there was a road of 20 miles to make. But once above the rapids of the Saskatchewan, there were at least 750 miles navigable to Acton House—about the uppermost hundred miles. There is some difference of opinion as to whether steamers could ascend some of the rapids; but from the most reliable information he could obtain, he was satisfied that a steamer could ascend all the way to Acton House. From Acton House to the navigable waters of Frazer River the highest estimate of distance was 300 miles, and that 300 miles pass through a great part of the gold country. (Hear, hear.) First striking upon Thompson River—and by information lately received by the Imperial Government, he believed that 100 miles of that 300 would be navigable for steamboats. He had, however, given the distance calculated for a road. The result of the whole was that there were 511 miles of road to be made between Lake Superior and the Pacific, and 1,468 miles of navigable waters which could at a small expense be made available. Estimating the time therefore, it would take to reach the Pacific from Lake Superior—with light waggons and ordinary fast steamers—allowing a speed of seven miles an hour upon the roads, and twelve miles an hour by steamboat, the whole distance would be traversed in less then nine days, leaving ample time for the exchange of mails and transhipment of goods.

3. ECONOMIC GEOLOGY OF CANADA: PEAT, &c.

A RECENT LECTURE BY T. S. HUNT, ESQ.

Mr. Hunt having begun by giving a sketch of the formation of coal and its allied minerals, such as anthracite and black-lead, went on to say it was to be regretted that Canada should be wanting in coal; but, at the same time, it was a matter for congratulation that she had resources of another fossil combustible, the extent of which had scarcely ever been thought of—he meant the peat bogs of the country. The people of Canada, for the most part from Great Britain, where coal was plenty, never gave such attention to the valuable qualities of peat, as was manifested in those countries where coal and wood were scarce, and where, in consequence, peat was made to serve all the wants of life. In some parts of continental Europe, for instance, in the northern part of France, Holland, and Germany, peat was made to do service in almost everything in which fuel was required. In Holland, iron was smelted and lime burned with peat; and even bricks were made of it; houses were warmed with it; it was used also for the purpose of generating steam for driving engines, as well as locomotives. At the Paris Exhibition, some of the best specimens of iron were shown to have been manufactured in Germany, and almost entirely of peat. Some ten years ago, the steamers running on the Shannon began to use, as a fuel, peat compressed by hydraulic agency; and this was the more remarkable, when it was considered that part of the river in question ran

through a coal basin. When peat came to be thus used, it was stated, as one of the advantages of this change of fuel, that, in a given voyage, the quantity of peat required could be packed in a space less than two-thirds of that required for mineral coal. This, it was stated, was a valuable consideration in the case of vessels making a long voyage. At the Paris Exhibition peat compressed by a similar process was exhibited; by pressure its woody structure had become so obliterated that it was capable of being turned into a lathe like wood; and it had been shown that peat so prepared had been used with advantage on some railway lines. Another branch of industry, connected in France with the preparation of peat, was converting it into charcoal. In the northern portion of France, where wood was scarce and dear, a half million of tons of peat was raised annually; it was worth about four dollars a ton, wholesale, in the crude state, but the compressed peat, as used in Ireland, was worth twenty shillings sterling a ton. Peat was converted into charcoal by being submitted to a low red heat; during this process it gave out an immense amount of water and oils, as well as gases; but the oils and gases were directed into the furnace, and thus aided in the preparation of the charcoal. In this way the peat was made to yield forty per cent. its weight of hard, compact, charcoal—so hard, indeed, that it would ring when struck by a hammer. This charcoal was sold, for household purposes in Paris, at 100f. or twenty dollars a ton; or at twelve or thirteen francs, that was to say at about two and a half dollars a sack; English coal sold in the city in question at about 5 francs a sack; so it was seen that the charcoal was a vast deal more valuable than English coal. Connected with this charring of peat, substances were eliminated which could be turned to great advantage in a commercial point of view—for instance, naptha, bitumen and salts of ammonia. Common peat yielded about a sixth of its weight in oils, if distilled in a proper manner; these being rectified would give a thick bituminous oil or asphalt; as well as finer oils for lubricating machinery: also, a lighter oil, identical with the carbon oil now so extensively used for lamps. Including the Island of Anticosti, which was remarkable for its peat, Lower Canada contained, perhaps, 1,000 square miles of this valuable material. Some four or five years ago, a gentleman of this city, now deceased, undertook the working of peat in the vicinity of Chambly; he compressed peat, but in an imperfect manner, and brought it into the Montreal market. The attempt, however, was not successful in a pecuniary point of view, and it was abandoned for the time. Canadian peat contained less mineral matter than European peat; for the lecturer had proved that peat from St. Hyacinthe gave but 15 or 16 per cent. of ashes: while peat in Paris gave 25 or 30 per cent. In Canada, peat would seem to be a worthless mineral matter; but, notwithstanding, he anticipated the day, when the peat bogs of the country would render Montreal and Quebec independent of fuel from the United States. Indeed, there was no reason why we should not use compressed peat, not only on our large river steamers, but also on our great railways. The fact was, that the people of Canada must look for some other combustible than their forests. The rapid destruction of the woods might not, perhaps, subject the present generation to great inconvenience; but, in the course of two or three more generations, it would be almost impossible to find wood in sufficient quantity to supply the country. But, when this exigency should arrive, there would be found in our peat bogs, what he might call an inexhaustible supply of fuel; second in value only to beds of mineral coal. [Applause.] The lecturer next proceeded to treat of the useful purposes to which some of the bituminous shales of Canada might be turned; and then reverting to another substance which could be extracted from peat, stated that it was capable of being converted into candles vieing in transparency with the finest wax; it was also capable of yielding 1 per cent. of paraffine oil—a substance largely used, of late, for the purpose of illumination. Taking into consideration all these facts, with regard to peat, every one must admit that we had an important source of wealth in the products of our bogs. He would be glad, did time permit, to speak of some of the minerals which might be converted into usefulness and wealth; and which were to be found in this Province—such as gypsum, sulphurettes, black-lead, and the manufacture of salt, etc.; but, at any rate, he would take a few minutes to remark on the importance of the artificial manures capable of being extracted from the offal of the fisheries of the Gulf. He was of opinion that from 100 to 150,000 tons of artificial manure might be manufactured annually from the waste of our fisheries; and this equal to Peruvian guano. The worn out lands of Lower Canada demanded something of the nature of this manure; but, while guano was now imported at $60 and $70 a ton, the manure of our own fisheries, which could be procured much more cheaply, was allowed to go to waste unnoticed. The French, however, were aware of the importance of this manure, and were now manufacturing it, on a large scale, in the Straits of Belle-Isle; while Canada, while she might not only use it herself, but export it to other countries, seemed to evince no interest in the matter; There was no reason why she did not engage in another manufacture—salt, instead of bringing it from Liverpool, and the more especially as there were, on the shores of Gaspé, the greatest facilities for such an enterprise. In conclusion the lecturer expressed a hope that at some future time he might have further opportunity for affording additional information on the resources of Canada.

4. GREAT ERUPTION OF MAUNA LOA, SANDWICH ISLANDS.

A letter from Honolulu, dated 1st February, states that the present eruption of this volcano is represented as the most magnificent that has occured in our islands within present memory. The heavens at night are fully illuminated for hundreds of miles around, and the sea is lit up with long, slanting beams. The smoke has been sensibly perceptible here, at a distance of two hundred miles to windward, and the light discerned. Out at Maui, distant halfway to Hawaii, the illumination has been splendid. The Mauna Loa, on the Hawaii, the most modern island of the group, is the latest formed of Hawaii's mountains, and is yet incomplete. Viewing it from Hilo it presents the outline of a bow slightly bent. It appears to be long, hence its name Loa. But Viewing it from Waimea, on the right from Kona, opposite, and from Kau, on the left of Hilo, our mountain presents nowhere its end, and then you conceive that it is an immense dome. That seemingly low arch is the highest of the Pacific Ocean mountains. But it is yet in its giant youth. The stream of lava has reached the sea in the short time of five days, flowing a distance of forty miles, and first filling up an immense valley in the mountains, beside sending off numerous abortive side streams. It is still discharging with unabated vigor. A few miles south of the well known port of Kawaihae we perceived the point of discharge into the sea. A cloud of steam rose in every fantastic form as the molten lava met the briny element, which, as if angry at this hostile intrusion, lashed the beach with a surf of unusual violence.

We had brought our own saddles and our own supplies, and were soon provided with horses and native attendants. Leaving the dry and arid beach, we, step by step, attained to a region of vegetation and a cooler air, and were soon passing through a tropical region of exuberant growth, glades of breadfruit, varied by the rich bloom of orange trees of golden fruit, crimson ohias, and a profusion of creeping vines. Our path was rocky and steep, and we had time to see and enjoy all these things. So ascending with varying scene and climate we reached camping ground at a distance of perhaps sixteen miles from the beach, ten miles short of the orifice of the volcano and some thirty miles from where it discharges into the sea, and near the flowing lava.—Night was the time for observation. The before black and smoking masses then shone out in hundreds of fiery illuminations, and the fountain head disclosed itself by a *jet de Feu* varing from 200 to 890 feet in height, and in diameter of base 300 feet, as we conjectured from an examination at that distance, through our glasses. The front of the flow is about 3,000 feet in width, and slowly, irresistibly pushes forward its high, red wall of fire, rising over hills and falling over precipices with a calm, irresistible power, which humbles and belittles all human efforts. Above the crater rose continually a dense column of smoke to the height of, perhaps, 10,000 feet. There was not, however, with this as with the eruptions of Ætna and Vesuvius, a discharge of cinders, nor perceptibly even of steam. The discharge was confined to the dense, pure and perfectly fused heavy lava, and to heavy boulders projected far above the fountain, and falling sometimes back again into the chaldron, and sometimes without the rim, down which they rolled, for a time glowing and visible, soon turning black, and lost to our sight.

More like an Icelandic geyser, now rising, now falling, in columns, uniting, dividing and jetting in spires, pyramids, cones and columns. Next the crater the flow is not visible from below, being in a valley, after which it divides itself into numerous streams, occupying five or six miles in breadth, and, the descent being precipitous, the flow is rapid; but it soon reaches a surface of light descent, and here the flow is slow and the streams mainly concentrated into one. Occasionally a cascade was to be observed. Conceive a Trenton Falls metamorphosed into a fall not of sparkling, foaming, white water, but of fluid iron, going over with sullen pitch, bearing along cakes of black congealed lava, as of ice. Set this scene against the great side of the mountain, in the night, only lighted by fires, wreathed by its own smoke, and you have what we saw that night from our mountain camp. Not far below the crater, one of the new side streams had been dammed up until a lake had accumulated behind the obstruction, and the weight broke it down, and the released mass rushed down with tremendous noise and fury through the thick jungle, cutting down the trees, rolling off huge boulders from its front of twenty-five feet high, resembling a pile of burning coals.

IV. Papers on Classical Subjects.

1. ARCHÆLOGICAL DISCOVERY.—ELEUSINIAN MYSTERIES.

A letter from Athens, in the *Nord*, announces the discovery of an important Greek inscription, throwing considerable light on the Eleusinian mysteries. It contains the whole programme (diagramma) of the ceremony, and was found at St. Constantius, a village about four leagues to the north of Kalamata. The stone on which the inscription was engraved was two metres in length, and the men who found it, being perfectly ignorant of its immense value, cut it in two, and used it for the jams of their church door. By this mutilation, upwards of 20 lines have been lost forever; but there still remain a hundred, some of which have suffered very considerably.—The inscription commences with the oath to be taken by the priest and priestesses, the latter having to swear that they have been true to their husbands. It then proceeds to regulate the transmission or collation of certain mysterious objects; the kind of crown the initiated are to wear, their dress, the oath of the gyneconome, or female who had the women under her direction, the order of procession, the way of pitching the tents, &c.; it prescribes severe punishments for those who shall dare to disturb the ceremonies, naming twenty police officers, called rabdouchoi, entrusted with the maintenance of order. It confers upon the hierophant Mnesistratus the care of the sacred fountain, and regulates the distribution of its water, as well as the baths, &c. The whole inscription is in the Doric dialect, in letters posterior to Euclid's time. The first to discover and to copy it was M. Vlastos, a schoolmaster of Andrytsaina, who had it published in the *Philopatris*, of Athens.

[The Eleusinian mysteries were held in the very highest veneration throughout Greece. They were celebrated in Attica in two places, at Agræ on the Ilissus, and at Eleusis. The latter were by far the more important. By the researches of scholars, much light has been thrown on the manner of their celebration, but no investigation has yet been successful in ascertaining what were the subjects which were revealed to the initiated. The statement that "the inscription is in letters posterior to Euclid's time," indicates a period after 403 B. C., for in that year Euclid, (not the geometer,) was Archon, and the double letters, derived from the Ionic, Ξ, Ψ, Ω, and H, were first used by the Athenians.—*Ed. J. of Ed.*]

2. A CURIOUS DISCOVERY OF AN OLD CUSTOMS TARIFF.

The *Moniteur* contains a report to Prince Napoleon, Minister of Algeria and the Colonies, from M. Renier, of the Institute, giving an account of a singular discovery of a stone tablet containing a customs tariff of the time of Septimius Severus—that is, of the 202nd year of the Christian era. It was found in the ruins of Zaraia, the ancient Colonia Julia Zaraia, situated in the subdivision of Batna, in the district occupied by the tribe of the Ouled Sellam; the finders of it were some men employed in digging foundations for a mill for the Caid of the place, one Si Moktar. An impression of the tariff having been taken in oil paper, by an Italian mason, and transmitted to Paris, the imprint shows that some mutilations exist in the tablet, but the greater part of what is cut in it can be perfectly well made out. It begins with the words: "Imperatoribus Cæsaribus Lucio Septimio Severo et Marco Aurelio Antonino Augustis Piis Consulibus; Lex portus post discessum cohortis instituta," which is —"The Emperors and Cæsars Lucius Septimius Severus and Marcus Aurelius Antoninus, pious and august, being Consols, Customs Regulations established after the departure of the cohort." It then goes on to specify, in separate divisions, and item by item, the duties to be paid for various objects.

In the first division, entitled "Duties to be paid per head," are the following: "A hare, 1½ denarii (this coin was worth about 8d.); a horse or a mare, 1½; a mule, 1½; a pig, — (indistinct); a sucking pig, —; a sheep or goat, —;" and a note says that cattle destined for market are exempt from duties." The second division, "On foreign woven fabrics," gives, "A table cover, 1½ den.; a light colored tunic, 1½; a bed covering, ½; a purple sagum, 1;" and adds, "Other African stuffs pay per piece." The next division is for skins, but the duties are effaced: "A skin completely prepared, —; a skin prepared, —; a horse or goat skin, —; *cordiscum*, per lb. —; *vopa* per quintal, —; glue, per 10 lb. —; sponges, per 10 lb. —." The next division runs as follows: "Principal Customs Regulation: Pasture animals and beasts of burden are exempt from duty; for other things see the chapter which concerns them. An amphora of wine, —; an amphora of date wine, —; dates per quintal, ½ den.; figs, per quintal, —; ——, per 10 bushels, —; nuts, per 10 bushels, —; and turpentine for lamps." The colony of Zaraia, to which this tariff applies, was between 136 and 139 of the Christian era the garrison of a cohort, and it is probable that up to the year 202 the cohort charged to defend the frontiers of the empire was exempted from customs duties. The colony was situated on one of the most frequented roads which led from the desert to the Cæsarian Mauritania.

Among the objects mentioned in the tariff are some which are still made in the oasis of Zibaud and Bledel Djerid, in the south of the Regency of Tunis. For example, the "light-colored tunics" are evidently the haics which wealthy Arabs wear at present, and which have lately been used by European ladies as shawls; the *saga* are now the *gandouras* which form the insignia of command in the Regency of Tunis; and the bed-coverings are perhaps the gaily colored blankets which are still used in those parts. The date wine is not the same as palm wine, but was a fermented liquor which readily intoxicated. Pliny makes mention of it, and it is now replaced in the oasis by a sort of alcohol made from figs. The meaning of the words *cordiscum* and *vopa* is not very clear, but perhaps they are not correctly copied. It has hitherto been supposed that the customs duties of the Roman empire were uniformly the 40th part of the value of the goods—that sum having been levied in Italy, Sicily, the two Gauls, Asia Minor, Bithynia, Pontus and Paphlagonia; but the tablet which has now been found proves that the entries were not uniform.

It proves, also, that in Africa, at all events, they were inferior to one-fortieth of the value; thus, Papinianus, a law writer who lived in the time of Septimius Severus, states that the legal price of slaves was fixed at 20 gold pieces, or five hundred denarii, the fortieth part of which is 12½ den.; but, as may be seen, only 11½ are inscribed in the tariff. Again, the Theodosian code, which was drawn up previously to the year 401 in our era, fixes the price of horses for the cavalry in Numidia at 400 den., the fortieth of which is 10; yet the duty on horses in the tariff is only 1½. The exemption from duty of oxen destined for the markets, and of pasturage of animals, is explained by the fact that the Government levied market and pasture taxes on them, and could not, consequently, make them pay twice over; and as to the exemption of beasts of burden, it is no doubt owing to the consideration that it would have been unjust to tax both the goods and the animal which carried them.—*Galignani's Messenger.*

[This most interesting inscription supplies information on points on which but little was previously known. It is, probably, the most valuable discovery connected with the Roman tariff since the celebrated edict of Diocletian, which fixed a maximum of prices throughout the Empire, was found. In the latter case, there are fortunately two copies, one found at Eski-hissar, the ancient Stratonice in Syria, and the other in Egypt. Full information on Diocletian's edict is given in a work on the subject by W. M. Leake, Esq., London, 1826.—*Ed. J. of E.*]

3. ORIGIN OF HOLIDAYS FOR SCHOOLBOYS.

There lived a philosopher in ancient times who laid a solid foundation for the lasting thankfulness of schoolboys. He used to say that he would rather have a grain of wisdom than a cart full of gold, —and who, heathen as he was, had strong perceptions of the doctrine of the immortality of the soul. That man was Anaxagoras, not the princely gentleman of Argos, but the far-seeing, yet often wild and fanciful, philosopher of Clazomenæ. Just before his death at Lampsacus, three years subsequent to the commencement of the great and protracted struggle of the Athenians and Lacedæmonians for predominance in Greece, 428 B.C., Anaxagoras was asked if he had any particular wish, as it should be fulfilled if he would only give it expression. "Certainly I have," said the kind-hearted old man; "I wish to be remembered with pleasant feelings by all schoolboys, and I only ask that, in memory of me, they may always have a whole holiday on the anniversary of my death." And this was decreed accordingly; and this fine unselfish old fellow was not the mere recommender, but the founder of holidays for schoolboys, which holidays, in further commemoration of his name, were long known by the name of *Anaxagoreia.—Eng. S. S. Tea. Mag. & Jour. of Ed.*

4. PANIC.

This word is said to have originated on this wise: At the battle of Platæa the air resounded with a fearful cry, which the Athenians attributed to the god *Pan*. The Persians were so alarmed that they fled. From this circumstance originated *panic fear*, which in course of time became simply *panic*.

V. Papers on Colonial Subjects, etc.

1. CANADIAN SURVIVORS OF THE WAR OF 1812.

Following up the patriotic and successful efforts of the Hon. Wm. H. Merritt, in the House of Assembly, Sir E. P. Taché moved during the present Session for the consideration of an address to Her

Majesty praying her to grant half-pay to the surviving officers of militia, who served during the late war with the United States. The gallant knight said that no cause existed why those survivors should not receive the same boon that had been granted to their brethren, with whom they fought and bled, and who had since that time received half-pay as long as they lived, while the remainder were left without any half-pay. There could, in his opinion, be no doubt as to the right of those officers to receive half-pay. The gallant knight alluded to the fact that the geographical position of Upper and Lower Canada was such that in the year of 1812 the Upper Canadian militia had a more arduous task to perform in defending its territory than Lower Canada. Yet, at the same time, he could not help reflecting with feelings of pride on the fact that, on every occasion in which the enemy attempted to land in Lower Canada, his countrymen repulsed them with slaughter, and in no case suffered the foe to pitch their tents on their soil. Some time ago he had been requested to take charge of the measure by an old veteran of 1812, and he had refused on public grounds. He did not think that it was right for the province to go to the Home authorities as a mendicant. He thought that the parties interested should go to the Home authorities, themselves and present these petitions. He also refused on private grounds—inasmuch as he was engaged in that war, and therefore would appear to think himself entitled to half-pay. But he thought, at the same time, that such a measure should arise in the other branch of the Legislature, and if there was one man more than another, from whom such a measure should originate, it was that hon. and gallant soldier, who had taken part in that glorious struggle, he alluded to the hon. William Merrit. The hon. gentleman here alluded to the calumny of a historian named James, who in alluding to the war of 1812, had stated that the French Canadians displayed cowardice at the battle of Lake Champlain. Such a statement, he said, was totally untrue. The French Canadians on that occasion manfully stood their ground, as would be seen by Christie's history of Canada, where it was set down that it was Lieutenant Wright, who commanded the gun boats that had disgracefully run away on that occasion, while Captain Daly, the Captain who had the command of the French Canadians, did not budge, but fought with the greatest display of valor. The reason that Mr. James spread this calumny on the French Canadians, was, no doubt to save his national credit and the credit of the gun boats—but was such conduct, he would ask, fair or manly. Again, the despatches on that occasion spoke in the highest terms of the bravery of Captain Daly. And the returns of killed and wounded at that engagement on Lake Champlain, showed that the greatest number of killed and wounded were on board those boats manned by French Canadians. He had long waited for this opportunity of defending the wounded honor of his comrades in arms—those brave men who had served with such distinction in the last war, and whose memory had been so falsely and disgracefully maligned. In conclusion, as he was an interested party he would not vote on this occasion.

Hon. Mr. Matheson seconded the motion. The hon. gentleman spoke in a patriotic strain of the war of 1812, and strongly supported the motion.

Hon. Mr. Morris supported the motion. It brought to his mind the days of his boyhood, when, although too young to take part in the war of 1812, yet he was no inactive spectator of the scene. He could say that in the history of the world no such instance existed of the bravery of any militia, who like our militia, had in every case they met the enemy defeated them ; and on one occasion especially, the enemy was beaten exclusively by French Canadian militia. He held in his hand a note from the hon. Mr. Crooks, who had taken a gallant part in the war of 1812, expressing his regret that he would not be able to be present on this occasion. There were also several other hon. gentlemen now in the House, who had taken part in the war of 1812, and who had received medals of distinction for that occasion. But there was one gentleman in the room, the hon. gentleman on his right (Hon. Mr. Gordon) who had borne a still more honorable distinction than a medal, although unseen by the public. That hon. gentleman had borne in his body ever since that time a bullet received in that memorable war. The motion was granted.—*Leader Report.*

2. SIR SAMUEL CUNARD—A TITLE WELL EARNED.

If all the titles conferred by Queen Victoria on her meritorious subjects have been as fairly earned as the baronetcy which she has recently bestowed upon Mr. Samuel Cunard, of Nova Scotia, the aristocracy of Great Britain will have received a splendid augmentation of moral dignity during her reign. Mr. Cunard has rendered the most important services to his country, and he deserves to rank among the naval heroes of England. Instead of a baronetcy, he deserved, as well as the Duncans, Exmouths, Collingwoods and Nelsons, to be elevated to the peerage ; for the peaceful victories he has gained over a great rival on the ocean, are fully as important to the welfare, if not so stimulating to the imagination, of England, as any of their sterner achievements. The only drawback from the honor which he has earned lies in the circumstance that the party he vanquished lent him all the aid in its power towards the accomplishment of his triumphs. But that does not make his deserts the less, as the agent by whom the conquests were made. Five years ago there was a fair struggle between England and the United States for supremacy on the Atlantic in steam navigation, and, for a brief time, the chances seemed to be in our favour. We had finer and faster steamships than England could boast of, we had lines of packets between New York and Bremen, New York and Liverpool, New York and Havre, and New York and Glasgow ; but just at the critical moment when aid was most needed to secure victory to our own flag, the subsidies which had been granted by our Government to our own ships were withdrawn, and the scale turned in favor of Britannia, who forthwith gave a flourish with her trident, and Cunard drew up his steamers with as much skill and courage as Nelson formed his ships into line at the battle of the Nile. He lost no opportunity for attacking us in every direction, and has at last achieved a most brilliant naval victory for which he has been most properly rewarded. In order to destroy our Havre lines of packets, he established a line of steamers between that port and Liverpool for the express purpose of depriving us of the freight which we had never imagined could be taken from us, and while our own ships were lying idle and rotting at our wharves, while our ship-yards were dismantled, and our steam marine broken up and scattered, the English steamers between New York and Europe were daily increasing. During the past winter there have been forty-odd steamships plying between New York and European ports, and only two of them have been American. While the ship-yards of Glasgow, Newcastle and Birkenhead have been in full blast turning out iron steamships to ply between New York and Liverpoole, Bremen, Hamburg, Havre, Glasgow and Galway, our own ship-yards have been silent as the halls of Morven, and our ships have been lying idle at our wharves.

With much of this great victory over us Sir Samuel Cunard should be justly credited, although, as we have said already, he could never have achieved so splended a success had not our Government co-operated with him. While building up our Navy at an outlay of nearly twenty millions a year, we have, by our own fatal niggardliness in refusing a subsidy to our steam lines, very nearly destroyed the commerce for whose protection our Navy is intended. Fortune has favored Cunard beyond any man of the time ; his own energetic and intelligent enterprises have been backed up and sustained by the liberality of his own Government, and by the fatal mistakes of our own. It is hardly possible to over-estimate the importance of his enterprising spirit to the commerce of Great Britain, or the disastrous effect it has had upon the maritime interests of the United States. In place of the bloody hand which his new title gives him the right to add to his escutcheon, he should put a steamboat or a paddle-wheel to indicate the origin of his greatness.—*New York Times.*

3. THE SPEECHES AND PUBLIC LETTERS OF THE HON. JOSEPH HOWE.

Edited by Willian Annand, Esq., M P.P. Published by Messers. Jewett & Co., Boston. Two volumes, 8vo.

The period over which the public career of Mr. Howe extends is the most interesting, politically, in the history of Nova Scotia. And among the actions of that period Mr. Howe has taken a prominent part. It is the period during which the great battle of responsible Government was fought and won. Mr. Howe having been at all times on the liberal side, took an active part in that constitutional struggle. He has enjoyed some of the fruits of victory ; but he must have felt it to be of less importance that he should be minister of the Crown, than that he should be able to say that, aided by his efforts, his native country had come into the posession of a constitutional Government. As historical materials, these volumes possess a certain value ; though in that respect, they necessarily give but one side of the matter. These volumes may be studied with advantage by our politicians ; for next to the history of Canada, that of the sister Provinces, with which it is probably our destiny to be united hereafter, by a federal tie, ought to interest us. If Canada is to join its fortune to that of the sister Provinces, their past history, as well as their present position and recources, become necessary subjects of study for our public men. In this respect, the appearence of these volumes is peculiarly opportune.

A self-made man, and originally a printer's boy, Mr. Howe is in some sense the Franklin of Nova Scotia ; From the position of an apprentice printer, he rose to the highest office which any Nova Scotian has ever filled, in his own country. At an early age, and, as he admits, with few qualifications for the post, be became journalist. Experience gave him such success in this field as one could achieve in such a Province as Nova Scotia, a quarter of a century

ago. The truth is the journal became, as has so frequently been the case in France and the United States, the stepping stone to a position in the Government. Perhaps we ought to regret that the change from the one position to the other is regarded as a rise, for we are satisfied that in a normal condition of things journalism is as respectable and in many respects far more important than statesmanship. The journalist, in a good condition of society, points out the way in which the statesman must walk; ripening, by examination and discusssion, public questions, of which the settlement is ultimately forced upon the too often reluctant statesman. But in Nova Scotia, a quarter of a century ago, if journalism could be made the avenue to colonial statesmanship it was as much as could be expected of it. It was so made, in the case of Mr. Howe, as it had been in that of nearly all the prominent statesmen of France, who figured during the reign of Louis Phillipe. Besides journalist and statesman; in addition to being, for these times—for the Walpoles are all dead—a model letter writer, he has some pretensions to be a poet; or perhaps it would be better to say, that like most other people, he has been known to write poetry at some period of his life; and the lecture-room is to him no unfamiliar scene.

To give an analysis of these volumes would be to epitomize the history of Nova Scotia, for the first thirty years. We must therefore content ourselves, at least for the present, with directing the reader's attention to them; with the assurance that they contain much relating to the history of a sister Province, of which no public man in Canada can afford to avow entire ignorance.—*Leader.*

4. SIR BRENTON HALIBURTON, &c.

The Queen has been graciously pleased to confer the honor of knighthood on the Hon. Brenton Haliburton, late Chief Justice of Nova Scotia, and popularly known as the author of the celebrated letters of "Sam Slick, the clock pedlar, of Slickville, Connecticut, U.S." Sir Brenton is now a candidate for a seat in the House of Commons, for Launceston, England.

Sir Allan Macnab, late Premier of Canada, is also a candidate, M.P., for Brighton, England.

The visit of the Hon. Francis Hincks, Governor-in-Chief of the Windward Islands, is referred to on page 77.

5. SIR DOMINICK DALY.

We observe the statement confirmed in the English papers that Captain Dundas, M.P., has been appointed to succeed Sir Dominick Daly, as Lieutenant-Governor of Prince Edward Island. Our old Canadian friend Sir Dominick has completed the usual period of office tenure in the Island, and will doubtlessly be promoted to a more important Government. Connected so long with Canada both before and after the establishment of Responsible Government, Sir Dominick Daly will always excite a lively interest among his old friends, who will not cease to watch his future career with high hopes and best wishes. Few men are better calculated by moderation and firmness to guide the destinies of a people under constitutional rule. In a small Government like Prince Edward Island, containing not many more inhabitants than this city and vicinity, where party spirit much prevails, where party variances are always afloat and parties equally divided, it is suprising that Sir Dominick has remained so long quietly among the good folks there, seeing that most of his predecessors have, in a much shorter time, found the place too hot for them. Of the kind attention and hospitality shown by the Lientenant-Governor to visitors from Canada to the Island we have heard from the mouth of witnesses, who personally experienced the same, extended to them in the most friendly, hearty spirit of welcome.—*Quebec Chronicle.*

VI. Biographical Sketches.

No. 9. OBITUARY LIST FOR 1858.

Our record of Death's doings among the upper ranks of society during the year 1858, is more than usually numerous. In the ranks of the peerage there have died since the 1st January, 18 in all, viz.: the Duke of Devonshire, the Marquis of Queensberry, the Earls of Ilchester, Winchelsea, Courtown, Ranfurly (2d), Ranfurly (3), Morton, Glengall, Haddington, Orford, and Aylesford; and Lords Dunfermline, Sudley, Clifford, Aylmer, Braybrooke, Lyons, and Poltimore, and the Baroness Grey de Ruthyn. Of these, the earldom of Glengall and the English barony of Melrose, enjoyed by the late Earl of Haddington, have become extinct, while the ancient barony of Grey de Ruthyn has become merged in the superior honors of the Marquis of Hastings. During the same period we have had to record the deaths of the following members of the baronetage; the Rev. Sir H. Dunkinfield, Sir C. L. Falkiner, Sir J. Dunlop, Sir J. W. Egerton Brydges, Sir W. L. Foulis, Sir R. Campbell, Sir J. Haggerston, Sir Jas. McGregor, Sir David Wedderburn, Sir W. R. S. Cockburn, the Very Rev. Sir W. Cockburn, Sir H. Stracey, Sir J. M. Burgoyne, Sir M. Dodsworth, Sir Samuel Stirling of Glorat, Sir H. Fitzherbert, Sir Philip Crampton, Sir E. N. Buxton, Sir Charles Ogle (Admiral of the Fleet), Sir J. Key, Sir C. Abney Hastings, Sir Offley P. Wakeman, Sir Charles Des Voeux, Sir H. J. Caldwell, Sir R. Preston, Sir T. W. Blomefield, Sir Joseph Bailey, Sir J. S. Mackenzie, Sir A. de Capell Brooke, Sir J. Musgrave, Sir H. J. Lambert, and Sir A. Walden. Of the above 32, the baronetcies of Dunlop, Dunkinfield, and Hastings have become extinct. The following Knights have also paid the debt of nature: Sir J. H. Coode, Sir E. S. Travers, Sir C. A. Fitz Roy, Sir Wm. H. Maule, Sir W. H. Pierson, Sir R. Darling, the Right Hon. Sir John Dodson, Sir T. Mansell, Sir Wm. Peel, Sir T. Hawker, Sir F. Ashworth, Sir C. Felix Smith, Sir H. Wilock, Sir G. Rich, the Hon. Sir E. Butler, Sir John Potter, Sir Wm. Reid, Sir R. T. Routh, Sir A. P. Green, Sir Bedford H. Wilson, and Sir Wm. Lyons, in all 21. The House of Commons has lost (besides Sir J. Bailey, Sir E. N. Buxton, and Sir John Potter, already mentioned) only two of its members, Mr. M. Williams, M.P. for West Cornwall; and Mr. Wm. Hackblock, M. P. for Reigate. Besides the above, the aristocracy have to lament the loss of Lord Charles Wellesley, Lord Proby, the Marchioness of Westmeath, the Countess of Cardigan, the Countess of Clanwilliam, the Countess of Wilton, the Hon. and Rev. C. G. Perceval, the Countess of Rosslyn, and the heirs apparent to the titles of Torrington, Hotham, Rendlesham, and Molesworth. Among American statesmen the most eminent deceased for the year was Thomas H. Benton. With him departed Senator Evans of South Carolina, Senator Henderson of Texas, ex-Senator Bagby of Alabama, Gen. James Gadsden of South Carolina, John A. Quitman of Miss., Thos. L. Harris of Illinois, and ex-President Anson Jones of Texas. Among lawyers have died Benjamin F. Butler and Chief Justice Duer of New York. Among authors, William Henry Herbert, William Jay and Madame Ida Pfeiffer. Among merchants, Anson G. Phelps and Benjamin Marshall of New York, and James Adger of Charleston. Among mechanics, Isaac Newton and John P. Allaire. Among scientific men, Bonpland, the naturalist, and Robert Brown, the botanist. Among painters, Airy, Scheffer. Among theatrical characters, the great Rachel and Lablache the singer. Among soldiers, Field Marshal Radetzky of the Austrian army, and Major General Persifer F. Smith, United States army. Among naval commanders, Admiral Lord Lyons, of the British service, and two American Commissioners, Mathew C. Perry and T. Ap Catesby Jones. Among philosophers, Robert Owen. Among prominent characters at the European Courts, the Duchess of Orleans, Redschid Pacha, Grand Vizier of Turkey, and Baron Ward (the Yorkshire Hostler) Prime Minister of Parma. The Emperor of Japan also lately died. Among other notorieties deceased may be mentioned Soyer, the prince of cooks, Dred Scott, whose name will be a famous one in the annals of the country, and Eleazer Williams the reported Bourbon.

No. 10. JOHN MUNN, ESQ.

Mr. Munn was a native of Irvine in Ayrshire, Scotland, and came to this country some five and fifty years ago at the age of 15. By a combination of integrity of character with enterprising energy and peserverance he soon became one of the most extensive and successful shipbuilders that ever followed that important business in the Port of Quebec. At one time he is believed to have been worth about £100,000, the honestly earned recompense of his useful exertions. The result, however, of unfortunate speculations in connection with River steam navigation is generally known to have made serious inroads on this handsome fortune, and to have caused reverses, which seemed irretrievable, and, beyond doubt, tended to throw a gloom over his later years, and perhaps even to shorten his life. In the days of his prosperous course Mr. Munn was noted for his great kindness to the workmen in the neighborhood of St. Roch's, and often kept his ship-yard open during winter on their account more than his own His acts of charity were as numerous as they were meritorious and unassuming, nor were they restricted by any religious or sectional considerations. Many living recipients of his bounty will long continue gratefully to attest his generous conduct on the calamitous occurence of the great fires; and though of a different persuasion, he contributed £500 towards the restoration of St. Roch's church alone. The memory of the liberal character and of the meritorious conduct of the deceased will be long cherished by the citizens of Quebec, who join in general sympathy and regret on this mournful occasion. At a meeting of the Council of the Board of Trade, held on Monday, 21st March, it was resolved:—That the Council have learned with deep regret the death of John Munn, Esq., for nearly half a century largely engaged in the business of shipbuilding at this Port, and universally known and esteemed for his

strict integrity, and his unostentatious charities to the poor; That, as a mark of respect to his memory, the Members of the Board of Trade do attend his funeral."—*Quebec Chronicle.*

11. D. BURRITT, ESQ.—ANOTHER U. E. LOYALIST.

We learn from the Merrickville *Chronicle*, that death has terminated the career of one of the pioneers of Central Canada, Daniel Burritt, Esq., for upwards of fifty years a resident of Burritt's Rapids and the oldest magistrate in the county of Carleton, who departed this life on the 27th of April, in the 87th year of his age. The deceased and his brother, the late Stephen Burritt, were the earliest settlers on the Rideau river, having, as U. E. Loyalists, drawn land from Government in the locality now distinguished by their name. There, proximate to each other, they cleared the forest, cultivated the land—as rich as any in Canada—and reared families of children whom they had the gratification of seeing comfortably settled around them. The subject of this notice was remarkable for his physical vigor, having up to a recent period been in the habit of working in the fields in time of harvest from a sheer love of labor. He was an upright magistrate, a kind neighbor, and highly respected by all who knew him.

No. 12. PROFESSOR WM. C. BOND.

We are pained to announce the death of William Cranch Bond, Esq., the director of the Astronomical Observatory at Harvard College. He died at Cambridge on Saturday last, the 29th January, at the age of 69 years. He was born in Portland, Me., the 9th of September, 1789. Before his appointment to the Cambridge Observatory, he had devoted himself with much industry, talent and success, not only as to astronomical observations, but to the improvement and construction of optical instruments, in every detail of which he was well informed and practically skilful. Having gained a reputation as an observer at his private observatory at Dorchester, he was called to the charge of that in Cambridge, in 1839, before as yet any buildings were erected. The great telescope was mounted June 24, 1847. In connection with his sons, he had used the great refracter there with important results in observation of the fixed stars, the nebulæ, and the planet Saturn. To his practical skill observers owe a piece of mechanism called the "spring governor," by which time is visibly measured to a small fraction of a second. To the same skill in applying scientific knowledge to mechanical means was in a large part owing what is known in Europe as the "American method" of recording observations by electro-magnetism He has been engaged with encouraging success in experiments for taking photographs of the stars by a camera attached to the great telescope. Before his appointment at Cambridge he was employed by the United States government in astronomical observations, to be used in connection with those of the South Sea exploring expedition. Mr. Bond's talents and acquirements as a skilful astronomer were duly appreciated, not only in this country, but in Europe. In 1842, the honorary degree of Master of Arts was conferred upon him by Harvard College. He was a member of the American Academy of Arts and Science, of the American Philosophical Society of London. By his death the College is deprived of a highly valued officer, and the scientific community of one of its most gifted and accomplished sons. —*Boston Advertiser.*

VII. Papers on Natural History.

1. THE LOVES OF BIRDS.

Poets have sung the loves of men and angels, but they have never been known to sing of the loves of birds. They have been very neglectful in this respect. The loves of birds would form as fruitful a theme as those of the poets themselves. In their attachments they are generally faithful and affectionate, and it must be confessed they are, like men, a little jealous sometimes. Audubon gives a beautiful description of the loves of humming birds. He says that in their courtship, the male, dancing airily upon the wing, swells his plumage and throat, and whirls lightly around the female; then diving towards a flower, he returns with loaded bill, which he proffers her. He seems full of ecstasy when his caresses are kindly received. His little wings fan her as they fan the flowers, and he transfers to her the insect and the honey which he has procured. If his addresses are received with favor, his courage and care are redoubled. He dares even to catch the tyrant fly-catcher, and hurries the blue-bird and martin to their nests; and then on sounding pinions, he joyously returns to his lovely mate. Who would not be a humming-bird? Audubon says:

"Could you, kind reader, cast a momentary glance at the nest of a humming-bird, and see, as I have seen, the newly-hatched pair of young, little larger than bumble-bees, naked, blind, and so feeble as scarcely to be able to raise their little bills to receive food from their parents; and could you see those parents, full of anxiety and fear, passing and repassing within a few inches of your face, alighting on a twig not more than a yard from your body, waiting the result of your unwelcome visit, in a state of the utmost despair, you could not fail to be impressed with the deepest pangs which parental affection feels on the unexpected death of a cherished child. Then how pleasing it is, on your leaving the spot, to see the returning hope of the parents, when, after examing the nest, they find their nurslings untouched."

We have remarked that birds, as well as men, are sometimes jealous in love. An exception, however, may be found to this general rule in the golden-winged woodpecker, a frequent and well-known inhabitant of our American forests. Among the bright beaux and belles of this interesting tribe no jealousies seem to exist, and no quarrels ever occur. Cheerily they hop through life, attended by the good wishes of all their acquaintances, and of each other. No sooner does spring call them to the pleasant duty of selecting mates, and pairing off, than their voices may he heard from the tops of high, decayed trees, proclaiming with delight the opening of the welcome season. Their note at this period is merriment itself, and when heard at a little distance, resembles a prolonged and jovial laugh. Those golden-winged woodpeckers are the darlings of Audubon. In describing their manner of mating he says that several males surround a female, and to prove the truth and earnestness of their love, bow their heads, spread their tails, and move sideways, backward and forward, performing such antics as would induce any one witnessing them to join his laugh to theirs.

She coyly flies to another tree, where she is followed by her suitors, and where again the same ceremonies are gone through with, until a marked perference is indicated for some individual.

In this way all the golden-winged woodpeckers are very soon happily mated, and each pair proceeds to excavate a hole in a tree for a nest. They work alternately with industry and apparent pleasure. When the nest is finished they caress each other on the tree-top, rattle their bills against the dead branches, "chase their cousins, the red-heads, defy the purple gardels to enter their nest, and feed plentifully on ants, beetles, and larvæ." By and by the female lays four or six eggs, the whiteness and transparency of which are doubtless the delight of her heart. The woodpeckers raise a numerous progeny, laying two broods every season.

The loves of the turtle-dove and mocking-bird are graphically described by Audubon, as are also those of the wild turkey, who is said to be even more ridiculous in his motions, and more absurd in his demonstrations of affection than our common tame gander. The curious evolutions in the air of the great horned owl, or his motions when he has alighted near his beloved, Audubon confesses himself unable to describe. He says the bowings and snappings of his bill are extremely ludicrous; and no sooner is the female assured that the attentions paid to her by her lover are the result of sincere affection, than she joins in the motions of her future mate.

So much for the loves of birds. In many respects they resemble those of men. We have among us in society our humming-bird lovers, our golden-winged woodpeckers, our turtle-doves, our turkeys, and our ganders; and occasionally we find a pair who remind us of horned owls.—*Boston Journal.*

2. VOCAL MACHINERY OF BIRDS.

It is difficult to account for so small a creature as a bird making a tone as loud as some animal a thousand times its size; but a recent discovery shows that in birds the lungs have several openings communicating with corresponding air-bags or cells, which fill the whole cavity of the body from the neck downward, and into which the air passes and repasses in the progress of breathing. This is not all. The very bones are hollow, from which air-pipes are conveyed to the most solid parts of the body, even into the quills and feathers. The air being rarified by the heat of the body, adds to their levity. By forcing the air out of the body, they can dart down from the greatest heights with astonishing velocity. No doubt the same machinery forms the basis of their vocal powers, and at once resolves the mystery into a natural ordering of parts.—*Gardner's Music of Nature.*

VIII. Miscellaneous.

1. THE RED RIVER VOYAGEUR.

Out and in the river is winding,
The links of its lone, red chain,
Through belts of dusky pine-land,
And gusty leagues of plain.

Only, at times, a smoke-wreath
With the drifting cloud-racks, joins
The smoke of the hunting-lodges
Of the wild Assiniboins.

Drearily blows the north-wind
From the land of ice and snow,
The eyes that look are weary,
And heavy the hands that row.

And with one foot on the water,
And one upon the shore,
The Angel of Shadow gives warning,
That day shall be no more.

Is it the clang of wild-geese?
Is it the Indian yell,
That lends to the voice of the north-wind
The tone of a far-off bell?

The voyageur smiles as he listens
To the sound that grows apace;
Well he knows the vesper ringing
Of the bells of St. Boniface.

The bells of the Roman Mission,
That call from their turrets twain
To the boatmen on the river,
To the hunter on the plain!

Even so in our mortal journey
The bitter north-winds blow,
And thus upon life's Red River,
Our hearts as oarsmen row.

And when the Angel of Shadow
Rests his feet on wave and shore,
And our eyes grow dim with watching,
And our hearts faint at the oar,

Happy is he who heareth
The signal of his release
In the bells of the Holy City,
The chimes of eternal peace!—*John G. Whittier.*

2. DON'T DEPEND ON FATHER'S PURSE.

How many young men of the present day, instead of launching out into the world and earning a livehood and building up a reputation through their own exertions, as their fathers have done before them, spend their time in idleness, if not dissipation, and depend upon their fathers even for the daily bread necessary to prolong their worthless existence? To all such drones we recommend the following:—

Stand up here, young man, and let us talk to you. You have trusted alone to the contents of "father's purse;" on his fair fame for your influence or success in business. Think you that "father" has obtained to eminence in his profession but by unwearied industry? or that he has amassed a fortune honestly without energy and activity? You should know that the faculty requisite for the acquiring of fame or fortune is essential to, nay, inseparable from, the retaining of either of these. Suppose father has the "rocks" in abundance; if you never earned anything for him, you have no more business with these "rocks" than a gosling has with a tortoise! and if he allows you to medle with them, perpetrates untold mischief. And if the old gentleman is lavish of his cash toward you, while he allows you to while away your time, you'd better leave him; yes, run away, sooner than be an imbecile, or something worse, through so corrupting an influence. Sooner or later you must learn to rely on your own resources, or you will not be anybody. If you have become idle; if you have eaten "father's bread and butter," and smoked your "father's" cigars; cut a swell in "father's" buggy, and tried to put on "father's" influence and reputation—you might far better have been a poor canal boy, the son of a chimney-sweep or boot-black; and, indeed we would not swap with you the situation of a poor half starved, motherless calf! Miserable objects you are, that depend entirely upon parents, playing gentlemen, (dandy loafers.) What in the name of common sense, are you thinking of? Wake up there? Go to work with either your hands or your brains, orboth, and be something! Don't merely have it to boast of, that you have vegetated as other green-horns, but let folks know that you count one! Come, off with your coat, clinch the saw, the plough handles, the scythe, the axe, the pickaxe, the spade,—anything that will enable you to stir your blood! Who are they that have worth and influence in society? Are they those that have depended alone on the old gentleman's purse? or are they those that have climbed their way to their position by their own industry and energy? True, the old gentleman's funds or personal influence may secure you the forms of respect, but let him lose his property or die, and what are you? A miserable fledgling—a bunch of flesh and bones that needs to be taken care of!

Again we say, wake up—get up in the morning—turn round at least twice before breakfast—help the old man—give him now and then a generous lift in business—learn how to take the lead, and not depend forever on being led, and you have no idea how the discipline will benefit you. Do this, and, our word for it, you will seem to breathe a new atmosphere "possess a new frame, tread a new earth, wake to a new destiny"—and then you may begin to aspire to manhood. Take of then, that ring from your lily finger, break your cane, shave your upper lip, wipe your nose, hold up your head, and by all means never again eat the bread of idlenes, nor depend on "father."—*Hunt's Merchants' Magazine.*

3. HUMILITY ONE SIGN OF GREATNESS.

I believe the first test of a truly great man is his humility. I do not mean by humility doubt of his own power, or hesitation in speaking his opinion; but a right understanding of the relations between what he can do and say, and the rest of the world's sayings and doings. All great men not only know their business, but know usually that they know it; and are not only right in their main opinions, but they usually know that they are right in them; only they do not think much of themselves on that account. Arnolfo knows that he can build a good dome at Florence; Albert Dürer writes calmly to one who had found fault with his work, "It cannot be better done;" Sir Isaac Newton knows that he has worked out a problem or two that would have puzzled any one else: only they do not expect their fellow-men, therefore, to fall down and worship them; they have a curious undersense of powerlessness, feeling that the greatness is not *in* them, but *through* them; that they could not do or be anything else than God made them. And they see something divine and God made in every other man they meet, and are endlessly, foolishly, incredibly merciful. The slightest manifestation of jealousy or self-complacency is enough to mark a second rate character of the intellect.—*Ruskin.*

4. FOOD GIVEN BUT KNOWLEDGE DENIED.

It would be accounted a very barbarous thing in a father or master, to suffer a child to starve for want of neccessaries of life, food and raiment; and all the world would cry shame upon them for it: but how muct *greater cruelty* must it in reason be thought, to let an immortal soul, and one *for whom Christ died,* perish for want of knowledge and necessary instruction for the attainment of eternal salvation?—*Archbishop Tillotson.*

5. A BABE'S PRAYER.

A little child, not quite two years old, the son of a pious Irish clergyman, was taken to the house of a relative, and, being too young to be separated from his nurse, went with her to dine in the servant's hall, where having waited in vain for a blessing to be asked before commencing, put his baby hands together, and lisped a simple prayer. The aged butler was affected to tears, and uttered words to this effect: "Never again shall a babe like that teach me my duty."

6. THE LITTLE COMFORTER.

When the lone spirit is crushed beneath an accumulated weight of sorrow, and the soul shrouded in darkness and gloom what is more soothing than the sweet caressings of a dear child? I have a little son, who for more than seven years has cheered my pathway. Three weeks since, we stood by an open grave, and in that grave saw a coffin, which we knew contained the precious remains of our dearest earthly friend. In early manhood he had passed away leaving us to mourn the loss of such a husband and father as "few have to lose." We left the dear spot, and sought the home where for years we had enjoyed uninterrupted happiness. I threw myself on a chair, and was giving full vent to my agonized spirit, when a pair of little arms were thrown around my neck, and a sweet voice whispered, "Don't cry, mother, father is better off than we are. We will be good, and pretty soon we will go too." Oh! thought I, what a precious treasure is left me even now; and I thanked my Heavenly Father that He had not left me comfortless. I not only had a child but he was affectionate, and manifested a disposition to assuage my grief. True as days passed he said many things that thrilled my inmost soul, and gave freshness to the wound he vainly endeavoured to heal; making his very sympathy painful. But they were prompted by a spirit of affection, which made a source of comfort to my desolate heart; I knew they were kindly said. I shall not soon forget his words, one

day he imprinted a score of kisses on my tearful face, saying, "We are all together, now, mother; you and I are all our little family. Never mind, mother, I'll take care of you, and love you just as well as father did."

I have always felt the importance of cultivating the kindly feelings of children, but never before realized the vast responsibility resting upon mothers to cherish every generous emotion—every feeling of sympathy and tenderness. What a happy world would ours be, were love, kindness, benevolence, and pure philanthrophy, in full operation! And where can these divine principles be more successfully disseminated than in the youthful mind? And who better adapted to foster and cherish such heavenly virtues than the mother? What would be the glorious results if every child should be taught to "do unto others as they would have others do unto them?" I would teach them the "art of thinking," and "inspire in their young hearts the love of the beautiful." I would teach them to think how many tears they might dry—how many hearts they might make happy—how many little acts of kindness they might perform among their brothers and sisters, or towards their school and play mates. I would show them beauty in soothing and lessening the cares of a father and mother; or if one had been left alone in this vale of tears, the magnanimity of cheering the lonely hours of the stricken one. I would show them beauty in kindly words and tones of love—in participating in the joys and sorrows of their little associates—in doing good to all—in loving all, and trying to throw sunshine on the pathway of all with whom they come in contact. If children from their infancy are educated to feel—to love—to rightly appreciate earthly blessings, will they not be more inclined to love and seek after Him who is goodness itself, when they shall arrive at the years of accountability? and will not the world be made better through their influence? A. L.—*British Mothers' Journal.*

7. MY SISTER'S GRAVE.

There is one spot on earth I love most; one that memory and affection will for ever hallow. It is a quiet spot begirt with mountains. Near it flows the stream whose banks have been full oft the scene of my childish pastimes. Here, hand in hand with her I doated on, it was my delight to seek the sparkling pebble or the early wild-flower. Here in transport, I watched the varying movements of the spotted trout as now slowly, and now with an arrow's speed, it cut the crystal flood. A little beyond, shaded by a spreaded elm, the old school-house stands, where, having ever the peculiar good fortune to win the favor of the master of the birch and the rule, I passed happier days than is common in these schools of initiation into the mysteries of science.

A little farther on, at the foot of a high and irregular hill, half covered in sweet May with the fragrant apple-blossom, and in autumn with her golden fruit, stands an antique mansion—my grandmother's home. Here I was wont to repair during the interval of school, to listen to the tale of olden time, or the strain that was still sweet, though flowing from lips that had inhaled the cold breath of more than eighty winters.

But why do I linger thus around the spot I would fain approach? Why do I speak only of days and scenes, which were interwoven with the golden web of bright thoughts and joyous memories, while—

> "Ever and anon of grief subdued,
> There comes a token like a scorpion's sting,
> Scarce seen, but with fresh bitterness imbued;
> And slight withal may be the things which bring
> Back on the heart the weight which it would fling
> Aside for ever."

There is an instinctive shrinking of soul when we would probe again those wounds which time has failed to heal. There is a sacredness, a solemnity prevading our heart when we stand over the resting-places of our buried dead. We shun the observer's eye—alone and silent, retiring within the inner sanctuary of the soul, we would hold communion only with the past and with the departed.

In the valley I have mentioned, just by the murmuring river, is a small enclosure—within is a narrow mound marked by a plain white slab. This slab bears a name I cannot mention here, but it is hers—my sister's. This spot is the dearest of earth. I stand by it—my aching head rests upon its cold marble—distance of time and space is annihilated. The world around has "vanished from my thought," alone with her who rests beneath the sod on which I stand. Not with that form merely, which so calmly beautiful we placed in this narrow dwelling-place, but her pure spirit is here. I know its soothing power. I feel its holy ministrations. Is it indeed sent forth to me as to one that shall conquer in the stern conflicts of earth—that shall become an heir of the great salvation? Glorious thought! Together we seek the past—exhume its buried years, its slumbering images. We taste again its joys, we feel its sorrows. And then from this irrevocable past I would turn to the eternal future—to that future which looms up before me, but as the misty image in the far distant horizon. I turn inquiringly to her, but, ah! the spell breaks—the vision vanishes and the stern reality stalks forth but "too coldly real." * * * * * I am alone—before me is nought but mouldering ashes—still the scenes of that last day of my sister's life are more vividly present than those of yesterday. I see the death damp on that brow and cheek, where now the pale marble rests, and now again the deep hectic plays. Those deep mild eyes beam on me with an unearthly lustre. Hear those words—not faint and low as they have been, but clear and firm—they speak a Saviour's love. Oh, God! I hear angelic music from those lips—she is hymning on earth the glad song of the redeemed. All is still again—with her head reclining on my bosom she sleeps—her lips move—I listen to catch the sound—she speaks in a whisper, bidding me bring her chair from the yard, where she has been wont to breathe the freshness of June, for she is cold. Alas, it is the chill of death! She wakes, but it is only to heave a few faint sighs, and the silver cord is loosed—the struggling spirit freed.

Now I am inded alone. The shadows of the holy Sabbath evening are gathering darkly around me—but deeper are the shadows on my soul as memory brings back the anguish of that hour, mingled as it was with mercies, when my sister breathed out her life on my bosom; and the cold heart sinking too, of the return from that still uncovered grave to the vacant, desolate home. Alone! alone, with night and her pale moonbeams, and the silent dead—but yet not alone. The hushed voices of evening address me with words of consolation. The rustling breezes whisper peace. The voice of Inspiration speaks, saying, "I am the way, the truth, and the life," pointing to that spirit-world, where there is no more sin—no more death. An angel voice, too, I hear, soft and low, but with beckoning hands saying, "come up hither."—*British Mothers' Journal.*

8. PARENTS' TREASURES.

Kind mother, approach with your husband, and behold that child of yours. There it lies in the embrace of sleep! How innocent—how lovely—how interesting. What a smile on those cheeks—what heavenly radiance sits upon that little countenance! What an essence is wrapped up in that form! What inherent power lies concealed there! In that workmanship Nature has done her best.

Now parents, while it lies there peacefully slumbering, look upon it as a *treasure* and as a *charge*. Can you claim this as *your* treasure? Is it *indeed yours?* Who gave that gift? That nature came from God. Be careful how you look, however, on the treasure. Worship it not as some would silver and gold. Worship it not as *many* do the treasures of earth. A peculiar and mysterious treasure, it requires a peculiar and wonderful management.

While you gaze upon it and wonder, remember it is a charge committed to you but for a few days. It is a union of the mortal and immortal. It is a link between heaven and earth. It resembles the angelic, as well as the earthly. But whatever mysteries hover round its nature and destiny, remember you have it only for a short time. It is in your care. You can do with it as you please. Its nature is very susceptible of impressions. You may stamp upon that smooth beautiful material any image within your reach. As you look on that child, remember it has been born into a wicked world. It will be surrounded with unholy influences. Never forget its immortal nature. It will live for ever. In its nature there is a spark that will for ever glow. In its little bosom there is a principle that will run paralled in its existence with that of Jehovah. That thinking thing, so soon to become an accountable being, will go through eternity. That child may, by grace, rise and soar towards the infinite perfections and happiness of God for ever, or sink and be approaching the dimensions and misery of Satan.

As you, therefore, turn away from that curious being, let it be with the prayer, that you may remember its nature and prospects, and so manage the charge, that when your Lord shall call for you all, you may be able to say, "Here are *we*, and the *child* Thou didst give us."—*British Mothers' Journal.*

VIII. Educational Intelligence.

CANADA.

ADDRESS TO HON. FRANCIS HINCKS.

The subjoined Address was presented to His Excellency Hon. Francis Hincks in the Normal School, on Saturday last. Hon. S. B. Harrison, chairman of the Council, read the Address. In addition to the members of the Council of Public Instruction, several gentlemen were present, and appeared to take a lively interest in the proceedings. The address was as follows:

To His Excellency the Hon. Francis Hincks, Governor-in-Chief of Barbadoes and the Windward Islands of the West Indies.

May it please Your Excellency.

The Council of Public Instruction for Upper Canada cordially welcome you to the country of your former public life, and especially to this Establishment, for the completeness of which, including its grounds, its Educational Offices, its Normal and Model Schools, Museum and Depositories of School Apparatus and Libraries, the country is largely indebted to your exertions. We are happy to avail ourselves of this occasion to acknowledge that the means for procuring these grounds and erecting these buildings were recommended by you to the Canadian Legislature in 1850; that the General School Act itself of that year, under the authority of which we have provided these structures and matured our present system of public instruction for Upper Canada, was introduced by you into the Legislature, and became law by means of your advocacy and efforts in connection with those of your truly patriotic colleague, the late lamented Honorable Robert Baldwin, who, at that time with yourself, first proposed the fundamental principle of our school system: namely, the right of the freeholders and householders in each municipality to provide for the education of their children in their own way, without being superseded in any respect, but aided to the utmost extent possible, by the encouragement and cooperation of Government, whose only restrictive interposition is, to insure individual right of conscience, parental supremacy in matters of religion, and the expenditure of public school monies for the payment of duly qualified teachers.

It was also when you were first Minister of the Crown in Canada, and on your recommendation, that our Grammar and Supplementary School Acts of 1853 and 1854. were submitted to the Legislature. Under the operation of these acts, our Grammar Schools have been incorporated into a general system, and greatly improved Maps, Globes, and various apparatus have been provided for the public schools generally, and Libraries to the extent of nearly two hundred thousand volumes have been established by municipal and local school authorities.

It affords us great satisfaction to be able to add, that successive administrations of Government, and all political parties of Upper Canada, have maintained inviolate the great principles of that system of public instruction in the establishment of which you took so conspicious and leading a part.

We are sure it will afford you pleasure to learn, that in Upper Canada, the population of which, according to the census taken in 1851, was less than a million, the number of children in the Common Schools, according to the last annual returns in 1857, was 272,737, and the amount provided by the people for their education was upwards of one million two hundred thousand dollars—an increase of more than three hundred per cent. since 1850, with a corresponding improvement in the character and fittings of the school-houses, and the methods and quality of instruction given.

We sincerely congratulate your Excellency on the high honor which our Gracious Sovereign has been pleased to confer upon you, and on the success of your Government in the West Indies. We assure you of our earnest wishes and prayers for your future prosperity and happiness.

Department of Public Instruction, Toronto, 23rd April, 1859.

Hon. Mr. Hincks replied as follows;

Gentlemen,—I thank you most sincerely for the cordial welcome which you have extended to me on the occasion of this transient visit to my adopted country, and for the flattering notice which you have taken of my humble efforts to promote the success of the educational system of Upper Canada during the period when I had the honor of serving as one of the Ministers of the Crown for this Province.

It is most gratifying to me to learn from your statistics that the people have of late evinced even greater zeal than they did formerly in the promotion of education.

Your association of my name with that of my lamented friend and former colleague, the late Hon. Robert Baldwin, affords me a suitable opportunity of expressing the poignant regret which I felt on hearing of the death of that truly upright man.

Let me once more thank you, gentlemen, for the unexpected honor conferred on me by your address, and let me assure you of my best wishes for the success of your efforts in the promotion of education.

—— Authorized School Books, Upper Canada.—The United Board of School Trustees in the town of Guelph have been most diligent and active in placing the schools of that town upon a most efficient footing, and from the reports and regulations which they have adopted and published from time to time we have made some valuable extracts. The subject of authorized school books having been lately under consideration, the Board adopted the following report of a sub-committee on the subject. After referring to some proposed arrangements, they state that "they feel that a departure from the established rules in this particular would be a dangerous course, and might at a future time be productive of evil. * * * They feel satisfied that *the law gives the Board or its officers no discretionary power in this particular*, and the constant spirit and intention of the various enactments upon this subject, are to the effect that no books not authorized by the Council of Public Instruction shall be used in any Common School in Upper Canada. To illustrate their opinion the Committee subjoin the following extracts from the Common School Act 13 and 14 Vic., cap 48:

Sec. 14 enacts that no foreign books in the English branches of education shall be used in any Model or Common School, without the express permission of the Council of Public Instruction.

Sec. 23, Sub. Sec. 10.—Requires Trustees in towns, &c., to see that all pupils in the Schools are duly supplied with an uniform series of *authorized* text-books.

Sec. 29, Sub. Sec. 3.—County Boards of Public Instruction are to select from a list of text-books, recommended as *authorized* by the Council of Public Instruction, such books as they shall think best adapted for use in the Common Schools of the County.

Sec. 31, Sub. Sec. 5.—Provides, that it shall be the duty of each Local Superintendent of Schools to prevent the use of *unauthorized*, and to recommend the use of authorized, books in each school.

Sec. 35, Sub. Sec. 9.—Empowers the Chief Superintendent of Education to submit all books and manuscripts that may be placed in his hands to the Council of Public Instruction, to obtain their sanction before they can be introduced as text books.

Sec. 38, Sub. Sec. 5.—Provides that the Council of Public Instruction shall examine, recommend, or disapprove of text books for the use of Schools, and further, that no portion of the Legislative School Grant shall be employed in aid of any School in which any book is used that has been disapproved of by the Council.

—— Visiting the Schools.—The Guelph Board make the following excellent suggestions on this subject: "Your Committee would suggest that an examination and report made by the Visiting Committee of each school at some time in the interim between the regular quarterly examination of the Local Superintendent, would, in their opinion, be an improvement, and make the Members of the Board more perfectly conversant with the wants, requirements, and practical workings of the various Schools, as well as afford additional encouragement to the teachers in the performance of their arduous duties."

BRITISH AND COLONIAL.

—— The Aberdeen Colleges United.—The Gazette publishes an ordinance from the Scottish Universities' Commissioners ordaining that from and after the 15th October next, the two Universities shall be fused into one, under the name of the University of Aberdeen. The ordinance further directs; "That there shall not be more than one Professorship in any one branch of instruction in the Faculty of Arts in the University of Aberdeen. That the classes in the Faculty of Arts, with the exception of the class of Natural History, and the classes in the Faculty of Divinity, in University of Aberdeen, shall assemble and be taught in that portion of the University Buildings, hitherto belonging to, and occupied by King's College, with any additions that may be made thereto; and those in the Faculty of Law and Medicine, and also the class of Natural History, shall assemble and be taught in that portion of the University Buildings belonging to, and occupied by Marichal College, with any additions that may be made thereto. That the general Library of the University shall be kept at that portion of the University Buildings belonging to, and occupied by, King's College, but any library or libraries to be appropriated to the Faculties of Law and Medicine shall be placed in buildings convenient for the use of these Faculties."

—— Melbourne University admitted to Imperial Rank.—"Downing Street, March 19.—The Queen has been graciously pleased to direct that letters patent be passed under the Great Seal, granting and declaring that the degree of Bachelor of Arts; Master of Arts, Bachelor of Medicine, Doctor of Medicine, Bachelor of Laws, Doctor of Laws, Bachelor of Music,

and Dr. of Music, already granted or conferred, or hereafter to be granted or conferred by the University of Melbourne, in the Colony of Victoria, shall be recognized as Academic distinctions and rewards of merit, and be entitled to rank, precedence and consideration in the United Kingdom, and in the colonies and possessions of the Crown throughout the world, as fully as if the said degrees had been granted by any University of the United Kingdom."

FOREIGN.

—— Education in Germany.—In a voluminous work upon Germany, published the last year at Gotha, the author congratulates himself and his countrymen that there is no other country in the world so advanced in every species of culture—no land where all classes, from the highest to the lowest, are so well educated—no land where so much pains is taken to elevate the people! On an average, there is only one in every hundred who can not read and write; in some States only one in ten hundred, and in some none. In the whole country there are four hundred gymnasiums, and twenty-four universities, and in the universities eighteen thousand students. In Prussia alone are three hundred and eighty-two institutions for orphan and neglected children; all of whom are taught to read, and write, and cipher. In 150 cities are public libraries, and in no other land has the book trade attained to so much importance!—there being 2,650 establishments; of which Leipsic has 150, Berlin 180, and the whole of Austria 190: and the number of works from German authors, which appear annually, is from 8,000 to 10,000. Yet, among the masses of the people, it is impossible to buy books, and as far as reading is concerned, they might almost as well never have been taught. There is only one in a hundred who can not read—yet not one in a hundred ever thinks of reading, or has an opportunity. The author had not been in every land, and had no idea of a truly intelligent reading people. The newspaper is a far more efficient educator than the spelling book, and of this they know nothing.—*Massachusetts Teacher.*

—— Common Schools in South America.—It is worthy of note that the Government of Buenos Ayres recognizes the principle that the education of the masses is the only safeguard to a Republic, and have taken the instruction of youth from the priesthood and placed it under the charge of a Common Educational Department, organized after the Common School System of the United States. The school funds are placed in the hands of the Governor, to be distributed in certain proportions to the districts, the tax-payers being taxed from one-fourth to half as much as the donation. A monthly paper has also been started, devoted entirely to school interests.

IX. Literary and Scientific Intelligence.

—— European Libraries.—In a recent account of the public libraries of Europe, it is stated that the nine public libraries of Paris alone contain upwards of a million and a half of printed volumes; nearly as many as all those of Great Britain put together, and but little short of twice as many as those of the United States. All the other States of Europe have many or few large or small libraries, according to the progress they have made in civilization. Thus, Prussia has 44 public libraries, containing an aggregate of about 2,480,000 volumes; Austria 49, with an aggregate of nearly 3,000,000; Bavaria 18, with an aggregate of 1,326,480; Russia 12, with an aggregate of 1,236,480, etc.

——Paris Literary Items.—In Paris, the second volume of Guizot's memoirs is announced. M. Biot's complete works are published in three volumes. A history of Cuba now in its seventh volume, has appeared. General Comonfort has published a pamphlet of thirty pages, defending his administration of Mexico. There is also a "Voyage dans les solitudes Americaines, Minnesota," by the Abbe Domenect. Gen. Niel has published by authority of his government, the journal of the engineering operations of the siege of Sebastopol, a large quarto of six hundred pages, with a folio atlas of 15 plates. The new historical dictionary of the French languages by the French Academy, is published at eight francs per number.

——France.—The national *appropriations in France* for 1859, are, for the war department 345,000,000 francs, and for *primary education* only 6,000,000. The city of New York alone allows nearly this sum for its public schools, and yet its population is only about 700,000, while France has a population of 36,000,000. The whole sum voted for education, was 20,000,000 francs, of which 14,000,000 are to be devoted to superior education in the colleges of letters, arts, and sciences.

——Theory of the Aurora Borealis.—At the recent meeting of the British Association for the Advancement of Science, Admiral Ross read a paper on this subject. He said: "It having occured to me that, if my theory were true, namely, 'that the phenomena of the Aurora Borealis was occasioned by the action of the sun, when below the pole, on the surrounding masses of colored ice, by its rays being reflected from the points of incidence to clouds above the pole, which were before invisible, the phenomena might be artificially produced; to accomplish this, I placed a powerful lamp to represent the sun having a lens, at the local distance of which I placed a rectified terrestrial globe, on which bruised glass, of the various colors we have seen in Baffin's Bay, was placed to represent the colored icebergs we had seen in that locality, while the space between Greenland and Spitzburgen was left blank, to represent the sea. To represent the clouds above the pole, which were to receive the refracted rays, I applied a hot iron to a sponge; and, by giving the globe a regular diurnal motion, I produced the phenomena vulgarly called 'The Merry Dancers,' and every other appearance, exactly as seen in the natural sky, while it disappeared as the globe turned, as being the part representing the sea to the points of incidence. In corroboration of my theory, I have to remark that during my last voyage to the Arctic Regions (1850–51) we never among the numerous icebergs saw any that were colored, but all were a yellowish white; during the following winter, the aurora was exactly the same color, the the phenomena produced in my experiment was the same, as was, also, the Aurora Australis, in the Antarctic regions, where no colored icebergs were ever seen. I regret that it is out of my power to exhibit the experiments I have described, owing to the peculiar manner in which the room must be darkened, even if I had the necessary apparatus with me; but it is an experiment so simple that it can be easily accomplished by any person interested in the beautiful phenomena of the Aurora Borealis."

—— A Mirage.—At about six o'clock on Wednesday evening (April) a magnificent sight attracted attention in Oswego. The peculiar state of the atmosphere caused a refraction which presented the Canada Shore, which seemed but a few miles distant. The trees and beach were distinctly visible, and the phenomenon was one of unusual beauty in every particular.

—— How Rain is Formed.—To understand the philosophy of this phenomenon, essential to the very existence of plants and animals, a few facts, derived from observation and a long train of experiments, must be remembered. Were the atmosphere every where, at all times, at a uniform temperature, we should never have rain, hail, or snow. The water absorbed by it in evaporation from the sea and the earth's surface would descend in an imperceptible vapor, or cease to be rated. The absorbing power of the atmosphere, and consequently its capability to retain humidity, is proportionably greater in warm than in cold air. The air near the surface of the earth is warmer than it is in the region of the clouds. The higher we ascend from the earth, the colder we find the atmosphere. Hence the perpetual snow on very high mountains in the hottest climates. Now, when, from continued evaporation, the air is highly saturated with vapor—though it be invisible—if its temperature is suddenly reduced by cold currents descending from above, or rushing from a higher to a lower latitude, its capacity to retain moisture is diminished, clouds are formed, and the result is rain. Air condenses as it cools, and, like a sponge filled with water and compressed, pours out the water which its diminished capacity can not hold. How singular, yet how simple, is such an arrangement for watering the earth!—*Scientific American.*

—— The Air in Town and Country,—R. Angus Smith, an English gentleman, who has for several years devoted attention to the condition of the air of towns, communicates to the London Athenæum the result of some of his experiments for ascertaining the amount of organic matter contained in the air of various localities. The process by which this is accomplished consists in finding how much of a solution of permanganate of soda will be decomposed by a given amount of air. The process occupies about half an hour. Mr. Smith states that he finds as much difference between the back streets of a town and the air of a hilly district in the North of Lancashire as from 1 to 22. In other words, there was found the air of a close court 22 times more matter capable of decomposing the solution than there was found in a free hilly district.

——How to Cut Glass with a piece of Iron.—Draw with a pencil on paper any pattern to which you would have the glass conform; place the pattern under the glass, holding both together in the left hand, (for the glass must not rest on any plain surface.) then take a common spike or some similar piece of iron, heat the point of it to redness, and apply it to the edge of the glass; draw the iron slowly forward, and the edge of the

glass will immediately crack; continue moving the iron slowly over the glass, tracing the pattern, and the clink in the glass will follow at the distance of about half an inch, in every direction, according to the motion of the iron. It may sometimes be found requisite however, especially in forming corners, to apply a wet finger to the opposite side of the glass. Tumblers and other glasses may be cut or divided very fancifully by similar means. The iron must be reheated as often as the crevice in the glass ceases to flow.—*Scientific American*

—— A young lady explained to a printer, the other day, the distinction between printing and publishing, and at the conclusion of her remarks, by way of illustration, she said: "You may print a kiss upon my cheek, but you must not publish it."

X. Departmental Notices.

NOTICE TO GRAMMAR SCHOOL MASTERS.

The vacations in the Model Grammar School have been lately altered so as to allow an opportunity to Grammar School Masters of visiting the school during their own vacations. The sessions, will in future, extend from the Monday after Easter until the fourth Friday in July, and from the Monday following the end of a seven weeks' vacation from that day until the 22nd of December. On the 7th of January the School again resumes.

NORMAL SCHOOL TEACHERS.

The present session of the Normal School closes on the 22nd June. Application for teachers should be made during the early part of that month. The next session of the school will commence on the 8th August. Application for admission should be made in person not later than the first week of the session.

UNAUTHORIZED TEXT-BOOKS IN THE SCHOOLS.

In reply to several inquiries in regard to the use of unauthorized text-books in the Schools, we refer the reader to the law on this subject, as quoted on page 77.

POSTAGE REDUCED ON TRUSTEES' RETURNS.

The Hon. the Postmaster General has recently issued the following circular notice to Postmasters in Upper Canada: "The Half-Yearly School Returns made by School Trustees to the Local Superintendents of Schools, may, though the printed form be partly filled up with the names of the pupils and the days of attendance, in writing, be transmitted by Post, in Canada, as printed papers, at one halfpenny each, *to be prepaid by Stamps.*"

DELIVERY OF THE JOURNAL OF EDUCATION.

SUGGESTIONS TO LOCAL SUPERINTENDENTS.

Numerous complaints having reached this Department of the non-receipt at the Post Offices of the *Journal of Education*, application has been made to the Post Master General's Department to have the evil remedied. The Post Office authorities express their willingness to co-operate in the matter, and a circular notice has been issued on the subject. As several Post Masters are at a loss how best to facilitate the delivery of the *Journal* to the School Corporations to which they are addressed, we would suggest to the various Local Superintendents that it might be well for them to confer with the several Post Masters in their neighbourhood, and afford them every information in their power as to the proper localities and parties to whom the *Journal* should be delivered.

SCHOOL MANUALS AND HALF-YEARLY RETURNS.

Arrangements are being made to despatch, during the current month, a supply of School Manuals and Half-Yearly Returns, to the County Clerks, for gratuitous distribution by the Local Superintendents to the various rural Trustee Corporations. The Manuals for Cities and Towns, and for Grammare not yet ready for distribution.

SCHOOL REGISTERS.

School Registers are supplied gratuitously, from the Department, to Grammar and Common Schools Trustees in Cities, Towns, Villages, and Townships by the County Clerks—through the local Superintendents. Application should therefore be made direct to the local Superintendents for them, and not to the Department. Those for Grammar Schools will be sent direct to the head Masters.

PUBLIC SCHOOL LIBRARIES.

"Township and County Libraries are becoming the crown and glory of the Institutions of the Province."—*Lord Elgin at the Upper Canada Provincial Exhibition, September*, 1854.

The Chief Superintendent of Education is prepared to apportion *one hundred per cent.* upon all sums which shall be raised from local sources by Municipal Councils and School Corporations, for the establishment or increase of Public Libraries in Upper Canada, under the regulations provided according to law. Prison Libraries, and Teachers' County Association Libraries, may, under these regulations, be established by County Councils, as branch libraries.

SCHOOL MAPS AND APPARATUS.

The Chief Superintendent will add one hundred per cent. to any sum or sums, not less than five dollars, transmitted to the Department by Municipal and School Corporations on behalf of Grammar and Common Schools; and forward Maps, Apparatus, Charts, and Diagrams to the value of the amount thus augmented, upon receiving a list of the articles required. In all cases it will be necessary for any person, acting on behalf of the Municipality or Trustees, to enclose or present a written authority to do so, verified by the corporate seal of the Corporation. A selection of articles to be sent can always be made by the Department, when so desired.

PRIZES IN SCHOOLS.

The Chief Superintendent will grant one hundred per cent. upon all sums not less than five dollars transmitted to him by Municipalities or Boards of School Trustees for the purchase of books or reward cards for prizes in Grammar and Common Schools. Catalogues and Forms forwarded upon application.

PENSION —SPECIAL NOTICE TO TEACHERS.

Public notice is hereby given to all Teachers of Common Schools in Upper Canada who may wish to avail themselves at any future time of the advantages of the Superannuated Common School Teachers' Fund, that it will be necessary for them to transmit to the Chief Superintendent without delay, if they have not already done so, their annual subscription of $4, commencing with 1854. The law authorizing the establishment of this fund provides, "*that no teacher shall be entitled to share in the said fund who shall not contribute to such fund at least at the rate of one pound per annum.*"

ADVERTISEMENTS inserted in the *Journal of Education* for three cents per word, which may be remitted in *postage stamps*, or otherwise.

TERMS: For a single copy of the *Journal of Education*, $1 per annum; back vols., neatly stitched, supplied on the same terms. All subscriptions to commence with the January Number, and payment in advance must in all cases accompany the order. Single numbers, 12½ cents each.

☞ All communications to be addressed to Mr. J. GEORGE HODGINS, *Education Office, Toronto.*

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