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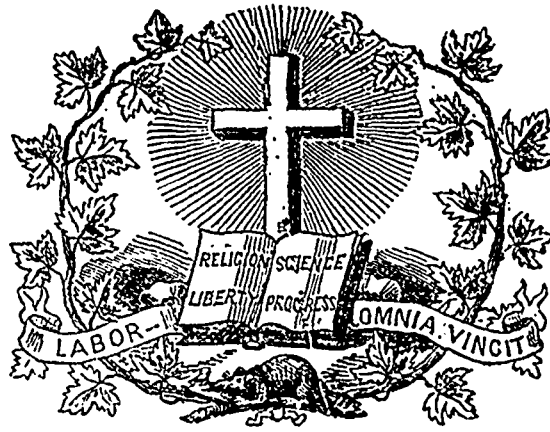
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# JOURNAL OF EDUCATION.

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**SUMMARY.**—**EDUCATION:** University Lecture. McGill College, by Professor Johnson.—School days of Eminent Men in Great Britain, by John Thoms, (continued).—Suggestive Hints towards Improved Secular Instruction, by the Revd. R. Dawes; 13th Chemistry (continued)—**OFFICIAL NOTICES:** Erections of School Municipalities.—Appointments: School Commissioners.—Diplomas granted by Boards of Examiners.—Situations Wanted.—**EDITORIAL:** The Census.—Pastoral Letter of the R. C. Bishop, and Notice of the Anglican Lord Bishop, of Montreal, on the Census.—McGill Normal School.—International Exhibition of 1862.—The Visit of H. R. H. the Prince of Wales to America (continued)—Addresses presented by Educational Institutions to H. R. H. the Prince of Wales: Trustees of the Hamilton City Schools.—Report of the Superintendent of Education for Lower Canada, for 1859 (continued).—Decision by the Court of Appeal.—**MONTHLY SUMMARY:** Educational Intelligence.—Literary Intelligence.—Miscellaneous Intelligence.—**WOOD CUTS:** H. R. H. the Prince of Wales.—1, A view of the Victoria Bridge.—2, The Entrance.—3, Putting up a tube.—4, Section of a pier and ice-breaker.

## EDUCATION.

### University Lecture, McGill College.

Professor Johnson delivered the University Lecture before the students and friends of the University. He took for his subject the "Organization of Universities." We subjoin a condensed report:

If we limit the name University, he said, to such organizations only as those to which it is applied in the present day, we find no similar institution in the era of Greece or Rome. But if we regard them solely in their educational aspect, as foci of the higher mental culture of the youth approaching manhood, we have no hesitation in calling Athens and Alexandria—the Universities of the ancient world. A cursory examination is sufficient to convince, us of the general semblance; a minute investigation discovers a remarkable correspondence in many details. The histories of the philosophers and their followers supply abundant evidence in the case of Athens. At Alexandria, the similarity extending beyond the mere educational system, reaches even to endowment. We find there, an institution, the Museum, occupying a portion of the palace of the Ptolemies, endowed by the state, for the support of professors, (of whom Euclid was one of the first,) and having attached to it a library (the celebrated library of Alexandria), botanical gardens, etc. In one of the schools connected with it Hypatia lectured on mathematics and philosophy and wrote her commentaries on works on Algebra and conic sections. The downfall of the Roman Empire was accompanied by the overthrow of these seats of learning. The lamp of knowledge was almost entirely extinguished. The darkness of the following ages is proverbial. To the effort to dispel it we owe the gradual rise of Universities, whose growth was spontaneous, and independent of the state, but they were recognized by it, when arrived at maturity. The mother University, that which, if not itself the first, was the model to all succeeding Universities (including Oxford and therefore the other British Universities) was Paris. The exact date of its foundation can not be determined. Students appear to

have gone to Paris (though in small numbers) for a couple of centuries before the sudden spread of the scholastic philosophy in the beginning of the 12th century caused such immense numbers to flock thither as to induce Philip Augustus to enlarge the boundaries of the city for their accommodation. The centre of attraction was Abelard, best known perhaps, at present, for his love of Heloise. When he left the city, the students followed. The city being sensible of the advantage from the influx of students endeavoured to retain those already resident and to draw others by immunities. The King, in addition, granted a charter. Hence the University dates its birth. It was not, however, called then by this name. "Studium generale" was the term applied to what we now call a University. The Latin "Universitas" was used in the middle ages to denote any public Corporation.—Its application became gradually limited to an educational Corporation in the present sense. Hence the name does not imply, as some imagine, that all branches of knowledge are taught, nor that all the Faculties are contained in it.—From the discussion at the time of the establishment of the University of London, it would appear that the only essential part, without which there can be no right to the name, is the Faculty of Arts. In France, however, at present, the name, University of France, is almost equivalent to "system of national education," as it includes all schools and colleges, from the lowest to the highest.

The beginning of Oxford, like that of Paris, is lost in obscurity. Its alleged foundation or re-establishment by Alfred is very doubtful. Its first charter was granted only by Henry III. Nevertheless it was a school of great resort long before this.—In these and the many other Universities subsequently founded, there was at first no regular organization,—such as now prevails.—Any one was at liberty to teach who could get auditors.—The teachers were called indifferently Magistri or Doctores.—In process of time, the right of teaching and, as a consequence, these titles, were limited to those who had completed a full course of study. To them too, was committed the government of the University.

Subsequently to the establishment of the degrees of Master and Doctor in the manner described, the inferior degree of Bachelor was created, to which was attached the duty of teaching under the direction of a Master or Doctor.

The students in Arts were called Artists,—a term used to denote a liberally educated man by Shakespeare in Troilus and Cressida,

"The wise and fool, the artist and unread."

A cultivator of the fine arts, now called an Artist, was then named an artisan, a word now equivalent to mechanic.

The title Professor was introduced about the beginning of the 16th century. It was applied to those Masters and Doctors who receiving fixed salaries in lieu of fees, gave gratuitous lectures. The students naturally attended these in preference to others for which payment was exacted. Hence the lectures of the Masters and Doctors ceased to be given, and the Professors became the sole instructors. The Professorial system thus originated, conti-

nues still on the continent, but was subverted in England by the Tutorial, arising from the College influence.

Colleges were founded in Paris and Oxford as well as elsewhere, soon after the Universities, but their object was different. The function of the University was educational—that of the College alimentary. The College supported, while the University instructed.

It must be remembered that anciently students were poorer as a class than in modern days. We know that in Oxford a very serious riot occurred in the reign of Henri III, in which a cook, who hung boiling water on a student importuning him for alms, was slain immediately by a fellow student. The actual poverty was made the more sensible by the multitudes gathering together. In Paris there are said to have been as many as 15,000 or 20,000 at one time. We can conceive these numbers not very much exaggerated, if we reflect that not even books were to be had then except at the Universities. At Paris, and the many other imitators of it, the booksellers were considered University officers and sworn to obey its rules. We have a curious trace of the connection in our own language. These book-sellers, or rather book-lenders, for their chief business consisted in lending out books to be copied, were accustomed to sell writing materials for this purpose. They were called stationarii, (from *Statio*, low Latin for a stall or shop,) hence, our words Stationer, and Stationery.

To lessen the evils arising from poverty and overcrowding,—some benevolent men endowed colleges, in which lodging and aids to their maintenance were given to poor students. The partakers of these benefits were incorporated, and called "sosi" or fellows from their sharing in the grant.

These fellows or fellows and scholars, as they were sometimes called, elected one of their body to manage their household. He was called Principal, Provost, President or Master. To aid them in their studies, they often found it advisable to procure the assistance of a private tutor, and they naturally selected a senior member of their own, when qualified. Other students, not members of the College, were allowed, when desirous, to have the advantage of the tutor's aid for the professor's lectures, on payment of a share of the expense. In this manner arose the subordination of members existing in the Colleges at the present day. The tutorial lectures originally subsidiary to the professorial, by slow degrees took their place, after the heads of Colleges had, from various causes, obtained the government of the Universities, ousting the masters and doctors.

The lecturer then proceeded to give an account of the present constitution of the Universities of Oxford, Cambridge and Dublin, expressing his regret that time prevented him from giving more details with regard to these, or the Queen's University, and that of London.

In the course of the lecture, a suggestion was thrown out that it was desirable to change the present name, University of McGill College, (which does not occur in the Charter) into that of University of Montreal, for many reasons—among others,—to prevent the confusion of the University with the College—the present title ignores the power of affiliation—there are now two Colleges in the University, one in Richmond, the other in Montreal—the liberality of the citizens of Montreal in endowing it, ought to be commemorated as well as the munificence of James McGill; he only required in his will that the first College should be called by his name.—*Montreal Gazette*.

### School days of Eminent Men in Great-Britain.

By JOHN TIMBS, F. S. A.

(Continued from our last.)

CXXIX.

GOWPER AT WESTMINSTER.

William Cowper, "the most popular poet of his generation, and the best of English letter-writers," was the son of Dr. John Cowper, rector of Great Berkhamstead, Herts, and was born at the parsonage-house, in 1731. In his sixth year he lost his mother, of whom he always retained the most affectionate recollection; the deprivation of her tenderness laid the seeds of these infirmities which afterwards afflicted his manhood. In the year of his mother's death, he was, as he himself describes it, "taken from the nursery, and from the immediate care of a most indulgent mother," and sent out of his father's house to a considerable school kept by a Dr. Pitman, at Market-street. Here for two years he suffered

much from ill-treatment by his rough companions: his sensibility and delicate health were the objects of their cruelty and ridicule; and one boy so relentlessly persecuted him that he was expelled, and Cowper was removed from the school. Cowper retained in late years a painful recollection of the terror with which this boy inspired him. "His savage treatment of me," he says, "impressed such a dread of his figure on my mind, that I well remember being afraid to lift my eyes upon him higher than his knees; and that I knew him better by his shoe-buckle than by any other part of his dress." To the brutality of this boy's character, and the general impression left upon Cowper's mind by the tyranny he had undergone at Dr. Pitman's, may be traced Cowper's prejudice against the whole system of public education, so forcibly expressed in his poem called *Tirocinium*; or, *a Review of Schools*.

About this time Cowper was attacked with an inflammation in the eyes, and was placed in the house of an oculist, where he remained two years, and was but imperfectly cured.

At the end of this time, at the age of ten, he was removed to Westminster School. The sudden change from the isolation of the oculist's house to the activity of a large public school, and the collision with its variety of characters and tempers, helped to feed and foster the moods of dejection to which Cowper was subject. His constitutional despondency was deepened by his sense of solitude in being surrounded by strangers; and thus, thrown in upon himself, he took refuge in brooding over his spiritual condition. This tendency had first manifested itself at Dr. Pitman's school, and next at Westminster. Passing one evening through St. Margaret's churchyard, he saw a light glimmering at a distance from the lantern of a gravedigger, who, as Cowper approached, threw up a skull that struck him on the leg. "This little accident," he observes, "was an alarm to my conscience; for the event may be remembered among the best religious documents I received at Westminster." He sought hope in religious consolations, and then hopelessly abandoned them; and he was struck with lowness of spirits, and intimations of a consumptive habit, which the watchful sympathies of home might possibly have averted or subdued.

Nevertheless, Cowper appears to have been sufficiently strong and healthy to excel at cricket and football; and he persevered so successfully in his studies, that he stood in high favour with the master for his scholarship. Looking back many years afterwards on this part of his life, he only regretted the lack of his religious instruction. Latin and Greek, he complains, were all that he acquired. The duty of the schoolboy absorbed every other, with the single exception of the periodical preparations for confirmation, to which we find this interesting testimony in his Letters:

"That I may do justice to the place of my education, I must relate one mark of religious discipline, which, in my time, was observed at Westminster; I mean the pains which Dr. Nichols took to prepare us for confirmation. The old man acquitted himself of this duty like one who had a deep sense of its importance; and I believe most of us were struck by his manner, and affected by his exhortations."

Cowper translated twenty of Vinny Bourne's poems into English, and his allusions to his old favourite usher of the fifth form at Westminster are frequent. (1)

"I remember (says Cowper) seeing the Duke of Richmond set fire to Vinny's greasy locks, and box his ears to put it out again." And again, writing to Mr. Rose, Cowper says: "I shall have great pleasure in taking now and then a peep at my old friend, Vincent Bourne; the neatest of all men in his versification, though, when I was under his ushership at Westminster, the most slovenly in his person. He was so inattentive to his boys, and so indifferent whether they brought good or bad exercises, or none at all, that he seemed determined, as he was the best, so he should be the last, Latin poet of the Westminster line; a plot, which I believe he exercised very successfully; for I have not

(1) Vincent or Vinny Bourne, the elegant Latin poet, and usher of Westminster School, where he was educated, died in 1747. Cowper has left also this feeling tribute to his old tutor:—

"I love the memory of Vinny Bourne. I think him a better Latin poet than Tibullus, Propertius, Ausonius, or any of the writers in his way, except Ovid, and not all inferior to him. . . . It is not common to meet with an author who can make you smile, and yet at nobody's expense; who is always entertaining, and yet always harmless; and who, though always elegant, and classical in a degree not always found even in the classics themselves, charms more by the simplicity and playfulness of his ideas than by the neatness and purity of his verse: yet such was poor Vinny."

Vinny's Latin translations of the ballads of "Tweedside," "William and Margaret," and Rowe's "Despairing beside a Clear Stream," in sweetness of numbers and elegant expressions equal the originals, and are considered scarcely inferior to anything in Ovid or Tibullus.

heard of any one who has at all deserved to be compared with him." Even in the time of his last illness, we find that Cowper's dreary thoughts were, for the moment, charmed away by the poems of his old favourite, Vincent Bourne.

Among Cowper's contemporaries at Westminster were William, (afterwards Sir William) Russell, whose premature death he had early occasion to deplore; Cumberland, the essayist, with whom he lodged; Impey, and Hastings, afterwards distinguished in India; and G. Colman, Lloyd, and Churchill; these, with a few other Westminster men, limited to 7, formed the Nonsense Club. Cowper likewise speaks of the five brothers Bagot, his school-fellows, as "very amiable and valuable boys." With one of them, Walter Bagot, he renewed his intimacy twenty years after they left school: "I felt much affection for him," says Cowper; "and the more so, because it was plain that after so long a time he still retained his for me." Such a renewal of school-friendship is very rare.

Cowper was taken from Westminster at eighteen. He has left, amidst many recollections of a less cheerful cast, the following pleasing picture:—

Be it a weakness, it deserves some praise,  
We love the play-place of our early days;  
The scene is touching, and the heart is stung  
That feels not at that sight, and feels at none.  
The wall on which we tried our graving skill,  
The very name we carved, subsisting still;  
The bench on which we sat while deep employed,  
Though mangled, hacked, and heaved, not yet destroyed;  
The little ones, unbuttoned, glowing hot,  
Playing our games, and on the very spot;  
As happy as we once, to kneel and draw  
The chalky ring, and knuckle down at taw;  
To pitch the ball into the grounded hat,  
Or drive it devious with a dexterous pat;  
The pleasing spectacle at once excites  
Such recollection of our own delights,  
That, viewing it, we seem almost to attain  
Our innocent, sweet simple years again.  
This fond attachment to the well-known place,  
Whence first we started in a life's long race,  
Maintains its hold with such unfailling sway,  
We feel it even in age, and at our latest day.

CXXX.

## WARREN HASTINGS AT WESTMINSTER.

Few men stand so prominently from the historic canvas of the eighteenth century as Warren Hastings, the first Governor-General of Bengal. He was born in 1732, and left a little orphan, destined to strange and memorable vicissitudes of fortune. Of his childhood, Lord Macaulay has painted this impressive picture:

"The child was sent early to the village school (of Daylsford, in Worcestershire), where he learned his letters on the same bench with the sons of the peasantry; nor did anything in his garb or fare indicate that his life was to take a widely different course from that of the young rustics with whom he studied and played. But no cloud could overcast the dawn of so much genius and so much ambition. The very ploughmen observed, and long remembered, how kindly little Warren took to his book. When he was eight years old he went up to London, and was sent to a school at Newington, where he was well taught but ill fed. He always attributed the smallness of his stature to the hard and scanty fare of this seminary. At ten, he was removed to Westminster school. Vjany Bourne was one of the masters. Churchill, Colman, Lloyd, Cumberland, Cowper, were among the students. Warren was distinguished among his comrades as an excellent swimmer, boatman, and scholar. At fourteen, he was first in the examination for the foundation. His name in gilded letters on the walls of the dormitory still attest his victory over many elder competitors. He stayed two years longer at the school, and was looking forward to a studentship at Christchurch, when he was removed from Westminster to fill a writership obtained for him in the service of the East India Company. He was placed for a few months at the commercial academy, to study arithmetic and book-keeping; and in January 1750, a few days after he had completed his seventeenth year, he sailed for Bengal, and arrived at his destination in the October following."

It is worthy of remark, that Warren Hastings was removed from Westminster through the death of his uncle, who bequeathed him to the care of a friend, who was desirous to get rid of his charge as soon as possible. Dr. Nichols, the head-master at Westminster, made strong remonstrances against the removal of a youth who seemed likely to be one of the first scholars of the age. He even offered to bear the expense of sending his favourite pupil to Oxford. But the guardian was inflexible, obtained for the

writership, and he was sent to India. Here he rose through indomitable force of will, which was the most striking peculiarity of his character, to be Governor-General of Bengal. Lord Macaulay touchingly says:

"When, under a tropical sun, he ruled fifty millions of Asiatics, his hopes, amidst all the cares of war, finance, and legislation, still pointed to Daylsford. And when his long public life, so singularly chequered with good and evil, with glory and obloquy, had at length closed for ever, it was to Daylsford he retired to die."

CXXXI.

## GIBBON, THE HISTORIAN—HIS SCHOOLS AND PLAN OF STUDY.

EDWARD GIBBON, the celebrated historian, was born at Putney, in Surrey, 1737, in a house situated between the roads which lead to Wandsworth and Wimbledon.

From his own account we learn that in childhood Gibbon's health was delicate, and that his early education was principally conducted by his aunt, Mrs. Porter. At the age of nine, he was sent to a boarding-school at Kingston-upon-Thames, where he remained two years, but made little progress, on account of his ill-health. The same cause prevented his attention to study at Westminster School, whither he was sent in 1749; and "his riper age was left to acquire the beauties of the Latin and the rudiments of the Greek tongue." After residing for a short time with the Rev. Philip Francis, the translator of Horace, he was removed, in 1752, to Oxford, where he matriculated as a gentleman commoner of Magdalen College, in his fifteenth year. Though his frequent absence from school had prevented him from obtaining much knowledge of Latin and Greek, his love of reading had led him to peruse many historical and geographical works; and he arrived at Oxford, according to his own account, "with a stock of erudition that might have puzzled a doctor, and a degree of ignorance of which a schoolboy would have been ashamed." His imperfect education was not improved during his residence at Oxford: his tutors he describes as easy men, who preferred receiving their fees to attending to the instruction of their pupils; and, after leading a somewhat dissipated life for fourteen months, he embraced the Roman Catholic faith.

With the object of reclaiming Gibbon to Protestantism, his father sent him to Lausanne, in Switzerland, to reside with M. Pavillard, a Calvinist minister, whose arguments and Gibbon's own studies led him in the following year to profess his belief in the doctrines of the Protestant church. He remained in Switzerland for five years, during which time he studied hard, to remedy the defects of his early education. He had now become perfectly acquainted with the French language, in which he composed his first work. His biographer, Lord Sheffield, observes that "Gibbon's residence at Lausanne was highly favourable to his progress in knowledge, and the formation of regular habits of study;" to this fortunate period of retirement and application, he was chiefly indebted for his future reputation as a writer and a thinker; and for his production of the *History of the Decline and Fall of the Roman Empire*, the most brilliant work in modern historical literature.

(To be continued.)

## Suggestive Hints towards Improved Secular Instruction.

BY THE REV. RICHARD DAWES, A. M.

(Continued from our last.)

XIII.

## CHEMISTRY.

The quantity of carbonic-acid gas locked up in every cubic yard of limestone has been estimated at 16,000 cubic feet. The quantity locked up in coal, in which its basis, carbon, forms from 64 to 75 per cent., must also be enormous; if all this were set free, extinction of animal life, etc.; to suggest any mode of approximating to the weight of carbonic-acid gas locked up in a given weight of chalk—a cubic foot for instance—by weighing it before being converted into lime and weighing it afterwards—difference in weight arising from the gases driven off.

Five per cent. of this gas in the atmosphere would be highly deleterious, and ten per cent. would be entirely destructive to animal life.

To make out by experiment that air is not a simple body, by burning a taper under a bell-jar over water, etc., or a piece of phosphorus, but is made up of oxygen and nitrogen, about 1/5th in bulk being oxygen and 4/5ths nitrogen; also the different compounds which this forms with oxygen, etc.

That water is not a simple substance, but composed of two elements, oxygen and hydrogen, in the proportion of 1 to 2 in volume and 8 to 1 in weight; and when analysed, that the two simple elements can be again reunited to form water.

The hot iron which the blacksmith plunges into his watertrough decomposes the water—the oxygen of the water uniting with the iron and forming an oxide of iron, which is sometimes seen as a flaky substance on the surface, the hydrogen being set free, mixed with some impurity which gives it an offensive smell: the same when the kettle boils over, or water is thrown into the fire.

That salt is made up of a vapour called chlorine and a metal called sodium—that sulphur, mercury, and the metals, as far as yet known, are simple substances, and to point out the more common ones—to explain and make them understand what is meant by a salt made up of a base and an acid, etc.—the way in which acids and alkalis act upon vegetable colours—how they neutralise each other, test for them, etc.

In order to form definite notions of the relative weight and substances of such bodies as the gases, of matters the existence of which is not evident to the sight, it will be necessary to have recourse to the balance: this, in the case of common air, may easily be done by exhausting the ordinary brass bottle, the volume of which is a quart, by means of the air-pump; in the case of the following, the weights would be found—

Atmospheric air.....	21 2/5 gr.	.....	1 1/5
Hydrogen.....	1 1/4	.....	1/12
Oxygen.....	23 4/5	.....	1 1/2
Nitrogen.....	21 4/5	.....	1 1/2
Carbonic acid.....	32 2/3	.....	1 9/10

The simple fact of showing how these invisible substances can be handled—those which are heavier than common air, poured from one vessel to another, like water—can be pumped out, and even, by a dexterous manipulator, ladled out by the hands, proving that the transfer is really made by testing in the ordinary way, is of itself most instructive.

The teacher might easily show this in the case of carbonic-acid gas, by taking a quantity of bruised chalk or limestone, powdered marble, or brisid oyster shells—place them in the bottom of an open vessel (a rather tall glass one would be best), then pour sulphuric acid diluted with water upon them, when the gas would be copiously given off—would rest at the lower part of the vessel, rising as the quantity increased—then letting a lighted taper be gradually lowered, the point to which the gas had risen would soon be seen by the taper becoming dim, and when sunk a little further it would entirely go out.

To know that the gas given off from the substances above named is actually carbonic acid, it would not be sufficient merely to know that it is heavier than common air: but it must also be shown that it will not support combustion—will make lime water turbid—and is an acid, by turning vegetable blues red.

It is also instructive to collect this gas by displacement—making it in a vessel into which a bent tube will fit, giving it a direction into any vessel into which the gas can descend, and thus displace the air of the atmosphere. It will be found very instructive to perform this experiment in the following way: balance a glass jar at one end of a scale-beam, and then allow the carbonic acid to displace the air of the atmosphere; the end of the beam on which the jar is suspended will very soon begin to descend, thus showing the pouring in a heavier air than the one which previously occupied it—a thing not evident to the sight, but made so in this way: restore the equilibrium by means of pieces of paper—test the height to which the carbonic-acid gas has risen, by dipping in a lighted taper.

Also show that it is a compound substance formed by the chemical union of carbon, a solid, with oxygen—that one atom of carbon unites with two of oxygen, the chemical equivalents of which are 6 and 16, forming a compound substance of which 22 is the equivalent—the resulting gas not being an increase in volume over the oxygen with which the carbon united, but an increase of specific gravity, by the interpenetration of the substances.

For instance, if the exact quantity of carbon were burnt in a jar containing the exact quantity of oxygen with which the carbon would unite, the result would be carbonic-acid, equal in volume to the volume of oxygen, but of course specifically heavier, and

having all the properties of the former, the solid carbon thus united having become invisible.

This carbon may be thrown down again, and would show itself in a volume of smoke—the black and restored carbon.

The mode of weighing a gas lighter than the air of the atmosphere, would be by inverting the jar, having the open mouth downwards, and placed at the end of the balance as before—in the case of hydrogen, for instance, allowing it to ascend the inverted jar, it will soon be shown by the other end of the balance descending—it may be shown to be hydrogen by lading it out and bringing a lighted taper into contact with it.

The following experiment, which is easily made, would show the change which atmospheric air undergoes by being passed through the lungs.

Take a jar with an air-tight stopper, and such as is used for pneumatic purposes—if open at the lower end, it must be placed over water—take out the stopper and place the mouth over the opening—inhalate and exhale the air several times by breathing with the mouth over the opening, and taking care that no air from the atmosphere gets in; put in the stopper, and then test the air—it will be found to have all the properties of carbonic-acid—will put out a light, make lime water turbid, etc.

It is found that lungs of an ordinary capacity will take in about 160 cubic inches of air, and the greatest about 295. A man of five feet one inch takes in about 160, and eight additional cubic inches for every inch in height is found to be a very near approximation to what really takes place in life.

The same may be done by breathing through a bent tube into an inverted jar; the upper end of which is closed; this, after having passed through the lungs and breathed out, will ascend, being heated and mixed with watery vapour, and on raising a lighted taper towards the top of the vessel or depressing the vessel upon the taper, it will be extinguished.

The reason why this gas breathed out by animals ascends, the gas itself at the temperature of the atmosphere being heavier than common air, is, that it comes from the animal heated, and is mixed with watery vapour.

As a curious result of the chemical inquiries of the present age, it has been ascertained, that the quantity of carbonic acid, breathed out by a healthy man in 24 hours is about 13 1/2 oz., of which about 7 oz., is solid carbon; about 63 oz. by a cow, and about 70 oz. by a horse; and that an approximate calculation founded on this would give about 500 tons, breathed out by the population of London; and that the quantity of carbon breathed out by the whole animal race would be sufficient to supply all the vegetable world on the surface of the globe.

It has been ascertained by a Swedish philosopher experimenting on a healthy man about thirty-five years of age, confined in a small chamber into which air entered by a hole on one side, and examining it after it passed through at the other, that the carbon ejected per hour was 105 grs. fasting; 190 grs. after breakfast; 130 when hungry; 165 two hours after dinner; 160 after tea; and 100 sleeping; making about 7 oz. daily.

The mode of making common coal gas—the process which is going on in the burning of the gas, or of a candle—how the water which is formed during the combustion—the carbonic acid, etc.—is returned through the atmosphere again to assume the form of vegetable life, etc.—that a given weight of wood, for instance, or of any other combustible body, when consumed, if all the parts were collected, would weigh more even than the wood, and why?—that when they burn wood on their own fires, elm will leave more ashes than beech—beech than oak—oak than willow, etc., and that consequently these trees during their growth carry away different quantities of inorganic matter from the soil—that leaves make more ashes than straw—straw than grain.

These are things not difficult to understand—but they ought to be taught by experiment, and all that is required may, by a person at all well acquainted with the subject, be done at very little expense. There are numberless ways of showing the principle of many of these things, not only in the arts, etc., which would apply more particularly to towns, but in the common every-day things of life, whether in town or country, and calling attention to them when an experiment is performed, is of more service in an educational point of view than those without experience are at all aware of.

Many examples might be brought forward where even the remarks of ordinary workmen have led to discoveries of a most important kind; but the two following, from Sir John Herschel's "Discourse on Natural Philosophy," are particularly striking; a soap-manufacturer remarks that the residuum of his ley, when exhausted of the alkali for which he employs it, produces a cor-

rosion of his copper boiler, for which he can account. He puts it into the hands of a chemist for analysis, and the result is, the discovery of one of the most singular and important chemical elements, iodine. Curiosity is excited: the origin of the new substance is traced to the sea-plants, from whose ashes the principal ingredient of soap is obtained, and ultimately to the sea-water itself. It is thence hunted through nature, discovered in salt mines, springs, etc., and pursued into all bodies which have a marine origin: among the rest, sponge. A medical practitioner then calls to mind a reputed remedy for the cure of one of the most grievous and unsightly disorders to which the human species is subject—the goitre—which infest the inhabitants of mountainous districts, and which is said to have been originally cured by the ashes of burnt sponge. Led by this indication, he tries the effect of iodine on that complaint; and the result establishes the extraordinary fact that this singular substance, taken as a medicine, acts with the utmost promptitude and energy on goitre (of course, like all medicines, with occasional failures), as a specific against that odious deformity.”

Another instance affording a safeguard of human life, and a remedy for a more serious evil: “In needle manufactories, the workmen who point needles are constantly exposed to excessively minute particles of steel which fly from the grindstones, as the finest dust in the air, and are inhaled with their breath; this in time produced a constitutional irritation dependent on the tonic properties of the steel, which was sure to end in pulmonary consumption: in so much, that persons employed in this kind of work, used scarcely ever to attain the age of forty years. In vain was it attempted to purify the air, before its entry into the lungs, by gauzes or linen guards; the dust was too fine and penetrating to be obstructed by such coarse expedients, until some ingenious person bethought himself of the motions and arrangements of a few steel filings on a sheet of paper held over a magnet. Masks of magnetized steel are now constructed, and adapted to the faces of the workmen. By these the air is not merely strained, but searched in its passage through them, and each obnoxious atom arrested in its progress.”

Also Davy's safety-lamp, lightning conductors, etc., are all instances of the application of science to the most valuable purposes of social life.

So indifferent, from habit, do the miners become, in the midst of danger, that to those unaccustomed to this class of life, their conduct appears almost unaccountable. The following was told me, by a scientific friend, as having occurred when visiting a mine of a very dangerous character.—

“The workman carrying the light, when he came to a particular part of the mine, stopped, and coolly said, ‘Now, Sir, if I were to elevate the light a few inches higher, we should be blown to atoms.’” Meaning the light would then come in contact with the carburetted hydrogen which, from its comparative lightness, was floating in the upper part of the diggings.

This dangerous gas, issuing from fissures in small quantities, and sometimes from beds below those the men are working, by means of boring is employed as a gas-jet to light the veins above. Sometimes it is carried to the surface of the ground, and a continual fire kept up by it at the surface.

Of the great usefulness of being acquainted, through experiment, with facts in science which are of a practical kind, a knowledge of which, from experience, I am convinced is attainable in our best elementary schools, the following is a striking instance. The philosophy of it is very interesting, and from its being an important practical lesson, I give it here: it shows also, that the very means we take to protect both life and property may, through ignorance, increase the danger we wish to avoid; and is an instance, where a knowledge of science prevented what might otherwise have been attended with most serious results. Being in London, I went with a friend to the Royal Institution, to hear a lecture which had been announced on the manufacture of glass, and on the application of various metallic substances in colouring it, etc.; on arriving there, we found there was no lecture, some danger of fire having arisen from the furnaces erected for the occasion. On the subsequent Friday, Professor Faraday gave a very interesting account of this accident. The heat of the furnaces and fire resting on the bricks of the fire-place in the lecture-room, had so heated the bricks, as to char the ends of some joists on which the floor rested, and the ends of which ran up nearly to the fire-place, and were in contact with the bricks; this caused a smell of fire. Water was thrown on the fire in the fire-place to extinguish it, and while this was being done, a workman went into the room below, and broke the ceiling at a distance from the fire-place, and spying every now and then a flame issuing out, thought nothing could

stop it. This being pointed out to Professor Faraday, he immediately saw the water thrown for the purpose of putting out the fire, falling on the heated bricks, was decomposed, and the hydrogen, by the pressure of the steam above, was forced downwards, and coming in contact with the charred beams, took fire, the beam ends being sufficiently hot to ignite it, so that the very means taken to extinguish it were adding to the danger. He then directed the water to be thrown on the heated substances near the fire, and these being cooled down below the point which would cause the gas to ignite, there was of course no further danger in throwing water on the fire.

The facts of a scientific kind connected with this are by no means difficult to understand, and are such as an experienced workman, who had seen experiments on the composition and decomposition of water—how the compound substance could be separated into two others, by coming in contact with a heated surface, like the bricks, and that one of them, hydrogen, was very inflammable, and would ignite at a low temperature—that the oxygen would assist the combustion—would easily understand: the lesson taught him would be, that, in a case of this kind, instead of continuing to throw water on the fire and on the bricks, he would immediately direct it to be poured on the heated materials around, and then pour water again on the fire; when, even if gas were evolved, there would be nothing near it of a sufficiently high temperature to ignite it.

Facts in science such as these have a direct practical bearing; and when it is seen how much of property in towns, nay, of life itself, may depend upon a knowledge of them among what are called our more experienced workmen, their importance will be understood.

A knowledge of elementary chemistry, and of what has been termed the philosophy of common things, is becoming every day more and more necessary in the schoolmaster, and greater facilities for acquiring it are placed within his reach.

The Training Colleges make it a part of their course of instruction. The managers of schools are now seeing its importance; and influential individuals who take an interest in promoting a good practical education for the industrial classes, are proposing to institute prizes in their own counties and districts for those schoolmasters who shew the greatest knowledge of such subjects, and its application to the comforts of life—with regard to food and its cookery—ventilation of cottages, and sanitary condition of them—a knowledge of mechanics and labourer's work, etc.: such prizes to be adjudged after examination in writing, and *riâ voce*, by competent persons in the required subjects; and, I would add, as shewn in their application of it, in the State of their schools.

The Committee of Council on Education will aid in providing the necessary apparatus for instruction in elementary physical science, in schools where the teachers are competent to use it; and the Board of Trade (1) Department for the encouragement of Practical Science and Art, at which Dr. Lyon Playfair is secretary for the former, is instituted for the purpose of promoting it, both in schools and other local institutions.

The demand for apparatus connected with this department of teaching is likely to be very great compared with what it has been; and those employed in its production are turning their attention to simplify and cheapen it. I am told if such instruction be made in common schools, that a very great reduction in price will be the consequence.

Philosophical instruments are not essentially more expensive than tools for tradesmen, or utensils for domestic use. They are dear because the demand is small; but if made in large quantities they will, according to the common results and experience in other matters of trade, be made more cheaply.

I have received, with reference to the class of prizes already alluded to, a synopsis of what is called a knowledge of common things. It is inserted here with the permission of the promoters,

(1) The Treasury Minute establishing this department of the Board of Trade, says:—“My Lords concur in the views expressed by the Lords of Committee of Trade, that every means should be used to render these institutions as much self-supporting as possible, and that in the plans adopted, that object should always be borne in mind. My Lords adopt this view, not only because they feel it incumbent upon them to confine the public expenditure to the lowest limit, but also because they entertain a belief that the utility of such institutions is great in proportion as they are self-supporting.” This remark applies equally to all our schools; and school managers would do well to aim at this in all possible cases, as a result which their efforts ought to lead to, and in the end attain.



and is a good outline of the practical turn which the schoolmaster ought to give to the knowledge he possesses on this subject. It may also, in some measure, direct him in bringing to bear what he knows on his every-day teaching.

(To be continued.)

## OFFICIAL NOTICES.



### ERLECTIONS OF MUNICIPALITIES.

His Excellency the Administrator of the Government was pleased, on the 27th November last, to re-annex to the School Municipality of Hemmingford, that part of this township now annexed to the School Municipality of St. Jean Chrysostôme No. 2, in the county of Châteauguay, except the lands in the fifth range of the Crown lands, and in the first and second ranges of the Clergy Reserves.

His Excellency the Administrator of the Government was pleased, on the 21st instant, to erect the Township of McNider, in the county of Rimouski, into a separate municipality.

### APPOINTMENTS: SCHOOL COMMISSIONERS.

His Excellency the Administrator of the Government was pleased, on the 3rd instant, to make the following appointments of School Commissioners, viz.:

County of Maskinongé.—Peterborough: Mr. Régis Lajoie.

County of Richelieu.—Parish of Sorel: Mr. Pierre LaTraverse.

His Excellency the Administrator of the Government was pleased, the 21st instant, to make the following appointments of School Commissioners:—

County of Champlain.—Champlain: Mr. Zéphirin Durand dit Chartier.

County of Temiscouata.—Notre-Dame du Portage: Mr. Joseph Gagnon.

### CATHOLIC BOARD OF EXAMINERS FOR THE DISTRICT OF MONTREAL.

Mr. Edouard Lafond, and Miss Marie Josephine Hébert have obtained diplomas authorizing them to teach in Model Schools.

Mrs. Widow Ouellet, and Misses Marie Duplessis, Emilie Bayard, Ann Plouright, Philomène Belleville, Mélina Bousquet, and Louise Lauzon have obtained diplomas authorizing them to teach in Elementary Schools.

F. X. VALADE,  
Secretary.

### BOARD OF EXAMINERS FOR THE DISTRICT OF SHERBROOKE.

Messrs. Oscar Lang, Alden Learned, Uldoric Béchard, Henry C. Bel-den, Sylvester C. Annable, James W. Wiggett, and Misses Marion Pearl, Adeline Mackie, Mary Simonds, Lois Richardson, Clarissa Harvey, and Maria L. Cross have obtained diplomas authorizing them to teach in Elementary Schools.

S. A. HURD,  
Secretary.

### BOARD OF EXAMINERS FOR THE DISTRICT OF STANSTEAD.

Misses Lucy A. Bissell, Marilla R. Bissell, Catherine Gilbert, Ellen Baldwin, Betsey Thomas, Emelio A. Munro, and Messrs. Albert Pratt, James A. Munro, Ezra William Aldrich, Solomon Carey, Joseph Willis, John McDonald, and Rufus L. Ayer have obtained diplomas authorizing them to teach in Elementary Schools.

C. A. RICHARDSON,  
Secretary.

### SITUATIONS WANTED.

Mr. John McAfee, provided with an Elementary diploma. Apply at the Education Office.

# JOURNAL OF EDUCATION.

MONTREAL (LOWER CANADA) DECEMBER, 1860.

## THE CENSUS.

The Fourteenth of January is the appointed day on which the taking of the Census of this Province is to begin, —a work of deep concern to its inhabitants.

It is well known that the former census was very defective. It contained many errors of omission, the result, in some cases, of neglect on the part of enumerators, but more frequently caused by the indifference, if not by the dishonesty of some of the parties whose duty was to make accurate statements.

There exists unfortunately against the census in certain quarters a strong prejudice caused by the fear of increased taxation, or of a forced enrolment for military service; but such a mode of procedure is unknown in the country, and this apprehension is quite ridiculous. It is hardly probable, at least for a long time to come, that this country will be the seat of a war, and even if it were, the census rolls could be of but little use for military purposes. Besides, in this supposed contingency it would not be a matter of much difficulty to find out a delinquent even if his name were not on the roll. We touch lightly on this idle fear, for in justice to the common sense of the country, we must say we are well aware that it would not be easy to find a locality where so pusillanimous a sentiment, which must needs spring from the grossest ignorance of every-day life, could be entertained.

But the fear of increased assessment and taxation, caused by the taking of the census, is, we regret to say, widely spread. To dispel this erroneous impression is a duty devolving upon all who exercise any influence over their fellow-countrymen. For this purpose it will be necessary to lay before them the impossibility of using the information which they may give, in a way detrimental to their interests, and the many advantages which must inevitably follow from a correct return. It will suffice to say that the different municipal grants for educational and other purposes, are apportioned according to population, thus:—

1st. The Common School Grant is divided between Upper and Lower Canada, according to the respective population of the two sections of the Province. One of the effects of the last census was, that Lower Canada actually received less than Upper Canada.

2ndly. Each school municipality receives its share of the school grant according to its population.

3rdly. Each school district receives its part of the municipal share according to the number of children of age to attend school.

4thly. The Act abolishing the Seigniorial tenure provides that after a certain lapse of time, the municipalities of every township shall be entitled to an indemnification to be distributed also according to proportion of population.

The other figures registered by the census are of equal importance. The value of agricultural products, extent of land cleared and under cultivation, value of real estate and of all that constitutes the wealth of a nation, or of a locality, are carefully computed and digested, and these statistics often serve as a basis, or as memoranda, in the distribution of public moneys. As it would be unjust and unskilful to underrate, so would it be dishonest to exaggerate the facts. A census in short should contain the truth, the whole truth, and nothing but the truth. That honesty is the best policy will prove true in this as in all instances. They who, through the sordid fear of contributing a fair quota to the support of government, attempt to defraud the State, only cheat their own section of the Province for the benefit of the other; they cheat their own district and municipality to the advantage of every other district and municipality, and ultimately rob themselves. Their share of the public grant proving inadequate, they must of necessity overtax themselves to meet the deficiency, and so run into the very danger they had wished to avoid.

But the desire to see this country take its proper place among those of the continent, ought to be an incentive strong enough of itself to cause the spontaneous removal of every obstacle in the way.

Let the intelligent and active men in every locality watch over this important work. They may detect many errors, which are sure to creep in, spite of the utmost care and good faith of the enumerators. It must be borne in mind that the opportunity will not again present itself in ten years, and that during this period the legislative wisdom of the country will have to be guided by the result.

We may add, while on this subject, that by a clause in the Act the enumerators are authorized to furnish printed schedules to be filled up by the occupants of every dwelling or part of dwelling in cities, towns and such other places as the Office of Statistics may judge proper. These blank forms shall be delivered during the week immediately preceding the second Monday in January, and it shall be the duty of the enumerator, or his deputy, to call for them on that day, or so soon after as possible.

Householders ought to see that these schedules be not mislaid, and should fill them carefully, without omitting any one actually living in the house, or temporarily absent; for they will find in the blank a column ruled purposely for the latter. It will be necessary to see that it be returned to the officer, after having entered correctly all the information required—the age, national origin, religious belief, number of children attending school, &c., &c.; all these data are of statistical importance. Trusting to the kind indulgence of our readers, we have given these details in the hope that they may be of some use. It must not be forgotten that any one refusing to answer the questions, or giving false information, is liable to be fined in a rather heavy penalty.

Since the above was in print the following documents have appeared in the *Montreal Gazette*.

### **Pastoral Letter of the Roman Catholic Bishop of Montreal on the Census.**

The following letter was recently read from the pulpits of the churches in the Diocese:—

We believe it to be our duty to inform you that in January a census will be taken of the whole Province.

You must know that the Commissioners charged with this duty are obliged to conform to the law, under pain of fine and imprisonment. They must, among many other things, take down very exactly the name, the sex, the condition and occupation of all the persons who live or work in their district, or who are not absent from it but for a certain period.

You will have then to answer all their questions, so that nothing be missing, to the inquiries they are strictly obliged to return to the Government, which, by the way, is but doing what is done in other countries. Do not forget that you will be yourselves exposed to fine and imprisonment, should you withhold from them what they have the right to ask.

We can certify to you that in this, there is no question of taxing you, neither of enlisting you for the purpose of sending you to war; for the end the Government have in view in taking this census, is a full knowledge of the resources of the country, the better to work them for the good of its happy inhabitants.

Religion cannot but gain by this development of all the resources Providence has so liberally bestowed upon us. We should in consequence second the efforts of those who are making agriculture, commerce and industry flourish; because this country will be the more happy in proportion as the population settling upon its soil is moral, and endowed with habits regulated by religion and morality. Therefore will special questions be put to you on those points.

Besides, religion imposes upon us all obedience to the laws under which we are governed; and they who resist temporal power, resist God himself, who, in His advisable Providence, has never failed to regulate the order of human societies. You will therefore make it a duty to obey the census law as all others.

You know moreover that it is always forbidden to lie. It would therefore be a culpable lie to mislead on this occasion the officers of the Government, who are legitimately authorized to take all the necessary information in order to fulfil the purpose of the law. We must all therefore make it a duty of conscience to tell the truth, and all the truth, in answering such questions as may be put to us on the subject of the census in question, and in doing this with good intentions we will have the merit of accomplishing a religious duty.

We shall at the same time be doing an act of true patriotism, ever blessed by religion. We must therefore compute so exactly that none of us will be missing from the ranks of our nationality, not even the little children who will there figure as the hope of our country. It is evident that we will like to show ourselves on this great scene in numbers, so that all may know that we have arms enough to till this vast country, and that we wish to keep for ourselves this fine heritage, bequeathed to us by our religious fathers. May our unfortunate countrymen dying of misery and weariness in a foreign land, return to us on hearing what happiness we enjoy on our native soil. (1)

### **Notice read by the Anglican Lord Bishop of Montreal in Christchurch Cathedral:—**

Before commencing my sermon, I wish to say a few words to you respecting the Census, now being taken,—as I have also desired my clergy to speak to their respective congregations:

I have received several notices which have been issued by the Commissioners, who are charged with the responsible office of taking the Census for this city, and I wish to call your attention to the very great importance that must attach to the accuracy with which the papers left at every house should be filled up. You will see a notice on this that the Legislature has affixed a penalty to all who shall neglect or refuse to fill up those schedules to the best of their knowledge and belief,—which penalty the enumerators have press orders rigidly to enforce. I trust, however, that better motives, than the fear of incurring such a risk, will influence you all in this matter—since it is only where faith can be placed in their accuracy, that such returns can be of the slightest value. Those of the last Census were so notoriously, on the very face of them, incorrect, that they could never for an instant be relied on, as of any authority whatever. The Census Commissioners for this city,

(1) Want of room prevents us from giving the Pastoral Letter of the Bishop of St. Hyacinthe, which has also appeared in the same journal, on the Census.



on the present occasion, are taking great pains to avoid similar mistakes; and I would especially remind you, that as members of the Church of England it is very necessary you should be accurately returned under "No. 5" in the schedule, which is the head of "Religion." The Census is to be made of all persons who shall be resident in any house on the night of Sunday next, the 13th of this month, and the schedules will be called for in the course of the following Monday.

### McGill Normal School.

The Principal of the McGill Normal School has often in his Reports expressed his regret that while many young women attend that institution and become qualified as teachers, so few young men can be induced to attend. This may perhaps result from their ignorance of the fact that there exists a demand at fair salaries for male teachers trained in the Normal School, and more especially for those who have received the model school diploma, all of whom heretofore trained have found good situations, and many others might be employed. The facilities offered by the school are very great, and many young men now less usefully employed might thereby obtain an entrance into an honourable profession and an education useful to them throughout life. Students with the requisite amount of preliminary education may still be admitted at the beginning of the second term of the school in January.

### International Exhibition of 1862.

We are authorised to state that the correspondence between the Commissioners for the Exhibition of 1851, the Society of Arts, and the Trustees for conducting the Exhibition of 1862, has been brought to a satisfactory conclusion, as will be seen by the accompanying letter, addressed to the Secretary of the Society of Arts. This correspondence has had relation to the site for the building, the provision of the necessary funds, the incorporation of the Trustees by the authority of the Crown, and their relations with the Commissioners for the Exhibition of 1851:

London, November 22nd, 1860.

Sir,—We have to acknowledge the receipt of your letter of yesterday, enclosing the copy of a communication from Her Majesty's Commissioners for the Exhibition of 1851 to the Council of the Society of Arts, in which the Commissioners express their general approval of the object which the Society has in view in organising the Exhibition of 1862, and their willingness to render such support and assistance to the undertaking as may be consistent with their position as a chartered body, and with the powers conferred upon them by their Charter of Incorporation.

Under these circumstances we have to request that you will intimate to the Council of the Society of Arts our willingness to accept the Trust which the Council and the Guarantors have in so flattering a manner expressed a wish to repose in us, on the understanding that the Council will forthwith take measures for giving legal effect to the Guarantee, and for obtaining a Charter of Incorporation satisfactory to us.

We have the honour to be,

Sir,

Your obedient servants,

(Signed)

GRANVILLE,  
CHANDOS,  
THOMAS BARING,  
C. WENTWORTH DILKE,  
THOMAS FAIRBAIRN.

P. Le Neve Foster, Esq.,

Secretary to the Society of Arts.

The Guarantee List includes 662 persons, and the sum guaranteed now amounts to £366,500. The Commissioners for the Exhibition of 1851 have granted a site for the building on their estate at South Kensington.

### The Visit of His Royal Highness the Prince of Wales to America. (1)

IX.

LOWER CANADA.

(Continued from our last.)

The building erected for the Provincial Exhibition and destined to serve as a depository for objects of art, was constructed under the superintendence of the Board of Arts and Manufactures. The main edifice is 184 feet in length, and the wings form a transept measuring in all 124 feet. The frame work is of iron unenclosed with brick, and two galleries run round the building. Taking into account the short time allowed for preparation the exhibition was quite successful in its various departments.

Soon after leaving this the Prince repaired to Point St. Charles for the purpose of formally inaugurating the Victoria Bridge,—a ceremony which was the occasion, if not the only object of his voyage. To the rain which the day before had fallen with hardly an intermission, had succeeded a rather cloudy morning; but at length the weather cleared up and the sun shone forth brilliantly. Upon the large blocks which serve as coping-stones to the solid facings of the approach to the abutment stood two rows of ladies, who were but ill-protected by their parasols against the intense heat of the solar rays. On either side of the abutment seats rising in tiers had been prepared for the members of Parliament and others having a claim to the privilege, which consisted principally in the shelter afforded from the heat,—for cooped up between a wall and the space which practical discretion yielded to the locomotive, their situation was not a very favorable one for sight-seeing.

But from the platform over the walls of the abutment a scene truly worthy of an artist's pencil presented itself. The city could be taken in at one glance, with its front following the bend of the river, its shunning spires and domes glittering in the light of a summer's day, its magnificent quays, and the long rows of high buildings that line the harbor and extend to the base of the picturesque mountain by which the town itself is overtopped. On one hand, the mighty St. Lawrence rolling onward to the ocean expands into a broad smooth sheet in the distance, with the verdant island of St. Helen dividing its channel opposite the town. On the other, the swift current dashing against the piers seemed but as the dyng struggle of the rapids, visible as far as the eye could reach. The distant shores of the river with which the azure of the sky blended, and lastly the colossal bridge itself, with its glistening roof as a fillet of silver stretched across the tide by the industry of man—all this formed at once a most pleasing and impressive picture.

The arrival of the royal party was announced by a salvo from the field-battery posted above the bridge, which the guns on St. Helen's Island and the war steamers in the harbor echoed in their turn.

A tremendous huzza greeted the Prince as the richly ornamented car, which the Grand Trunk Company had built for the occasion, came in sight. Handkerchiefs and parasols were waved all along the line, and from the scaffolding the wildest enthusiasm burst forth, which soon extended to the crowd assembled outside the enclosure. The Prince with his retinue having ascended the great platform erected on a level with the entablature, received the following address, presented by the Hon. John Ross, President of the Executive Council, Minister of Agriculture, and President of the Board of Directors of the Grand Trunk Railway:—

May it please Your Royal Highness,—

The Directors of the Grand Trunk Railway Company of Canada beg leave to offer to Your Royal Highness a respectful welcome to the Province.

(1) A correspondent of *l'Ere Nouvelle* suggests the following corrections:—1. The Prince arrived at Three Rivers at 5 o'clock p. m., not at night as the erroneous reports in other journals led us to say. 2. The manner in which we alluded to the Athabaska and the Piles Railroads might convey to some of our readers a false impression; the majority, however, know that the first is not finished and the last not yet commenced.

The Canadian Parliament has made the completion of the Victoria Bridge the occasion on which to invite our most gracious Sovereign to visit her Canadian possessions; and, in welcoming your Royal Highness to Canada as her representative, they have referred, with just pride, to this great work as evidence of the results achieved through the union of British capital and skill with Canadian enterprise and progress.

The Victoria Bridge, as your Royal Highness is aware, has been constructed in the face of the greatest engineering difficulties. It is the connecting link of eleven hundred miles of railway, extending from the extreme western limits of Canada nearly to its eastern boundary, and also affording an outlet to Provincial trade to the Atlantic when the rigour of our climate closes the natural channel by the St. Lawrence.

This great national highway has been carried through by a vast outlay of British capital, fostered by the most wise policy and generous aid of the Canadian Parliament; and, as now completed, will develop and promote not only the interchange of commerce and intercourse between the various districts of this widely-extended Province, but will also secure to it a large share of the rapidly-increasing trade of the West.

Canada now possesses a complete system of railway communication, combined with an internal navigation of unrivalled extent; and, in your future progress to the West, your Royal Highness will observe the best evidence of the wisdom and energy which have thus been applied to the development of the resources of this great Province.

The Directors have now to express their profound gratitude to their most gracious Sovereign, and to your Royal Highness for your consideration in honoring this enterprise with your presence; and they pray that your Royal Highness will now be pleased finally to inaugurate the completion of the Victoria Bridge, and thus to permit the greatest engineering work of modern days to be associated with the auspicious occasion of the first visit of the Heir Apparent of the Throne to Her Majesty's loyal Province of Canada.

To which His Royal Highness made the following reply:—

*Gentlemen*,—It is with mingled feelings of gratification at the duty which I am called upon to undertake, and admiration of the magnificent spectacle of successful science which is before me, that I proceed to comply with your invitation, and, in the name of the Queen, to inaugurate a work as unsurpassed by the grandeur of Egypt or of Rome, as it is unrivalled by the inventive genius of these days of ever-active enterprise.

I regret that the great man, whose name is now doubly enrolled in that page of my country's history in which its worthies are inscribed, has not lived to see this day. I regret that ill-health prevents the presence of another who labored with him to plan and execute this vast design; but to them, and to the eminent firm and those employed by them in carrying out the works, no less than to your countrymen, whose energetic exertions first gave birth to the scheme of which this Bridge is the consummation, the thanks of the great community of North America are due.

Your Sovereign has testified her appreciation of the magnitude and importance of the enterprise, by deputing me to come so far to commemorate on the spot, on her behalf, the completion of a monument of engineering skill, which will, henceforth, bear Her name, and convey to future generations, another proof, in addition to the many which exist, of the successful industry of the great people committed by Providence to Her rule.

May this ceremony be auspicious to all concerned. May the Railway, and this Bridge, which is its connecting link, realize all the expectations of its promoters, and continue throughout the great future of this Province a source of permanent and ever-increasing prosperity.

His Royal Highness having concluded, Mr. Hodges, the contractor under whose supervision the bridge was built, came forward and presented him with a medal of gold struck to commemorate the occasion, and an elegant silver trowel with which the Prince proceeded to lay the last stone that crowns the great western portal of the bridge. A gaily decorated arch, with the words "*Finis Coronat Opus*," stood over the spot where this interesting ceremony took place. As the last notes of *God Save the Queen* died away the royal party left the platform and took their

places in the train, which started immediately for the centre table. Here the last rivet, which was of silver, was hammered in by His Royal Highness. The whole party then returned to the Station, where about six hundred guests partook of a déjeuner given by the Company. After the customary toast to the Queen and Prince Consort, His Excellency the Governor General proposed the health of the Prince of Wales, who in his turn responded by giving, "The health of the Governor General, prosperity to Canada, and success to the Grand Trunk Railway."

His Royal Highness visited the Company's workshops and received an address from the artisans who built the bridge, to which he made the following reply:—

*Gentlemen*,—I accept with peculiar pleasure an Address from artisans and working-men who have, by the sweat of their brow and the skilled labour of many a hard day's toil, contributed to erect this monument to the greatness of their country—a structure scarcely less honorable to the hands which executed than to the minds which conceived it. I mourn with you the loss of Robert Stephenson. In your regrets you bring to mind that it was from your class that his eminent father sprung. I no further remind you, that England opens to all her sons the same prospect of success to genius combined with honest industry. All

cannot attain the prize, but all may strive for it, and in this race victory is not to the wealthy, or the powerful, but to him to whom God has given intellect, and has implanted in the heart the moral qualities which are required to constitute true greatness. I congratulate you upon the completion of your work. I earnestly hope it may prosper, and to you who have made it to its present grandeur, and to your families, I heartily wish every happiness.

These remarkable words drew forth great applause and loud acclamations from the men, who naturally were very enthusiastic.

This was completed with the greatest effect an enterprise formerly looked upon as a mere chimera, and which only a few years ago seemed to able engineers to be insurmountable difficulties.

The first idea of bridging the St. Lawrence is attributed to the Hon. John Young; and certainly the following extract from an article which appeared in the *Economist*, in 1846, would seem to justify the assertion. The terminus of the St. Lawrence and Atlantic Railroad was the subject under consideration—the Grand Trunk Railway not having been projected at that time, though, as our readers know, both these lines are now amalgamated:—

"But where is the terminus of the St. Lawrence railway to be? Let us examine the advantages of the several points that present themselves for the terminus; if it is made at Longueuil, or if it is placed immediately opposite the city, a little above St.

Helen's Island, long solid wharf, (owing to the shallowness of the water,) will have to be built to enable freight cars to reach vessels coming from the interior. Ferry boats will be required to convey passengers across the river, and a natural consequence must be, that a great portion of the business will be done on the opposite shore. But a still greater objection is, that at the very time we most require a railroad to carry off what produce may be left on board for shipment, all communication is closed—we mean in the spring and fall. How, then, is the difficulty to be got over? We reply, by building a bridge across the St. Lawrence. This is no visionary scheme; we speak advisedly when we say that it is perfectly practicable. Such a bridge should be erected from this side, a little below Nun's Island, at which part of the river the water is quite shallow, and the shoving is nothing like so violent as lower down the river."

It was through this gentleman's advice that the first survey was made by Mr. Morton, the engineer employed by the St. Lawrence



and Atlantic Railway Company. The place pointed out by him as the most eligible is very near to the one chosen by the Grand Trunk.

When it had been determined to make the attempt, Mr. Keefer, Mr. A. Ross, and the celebrated engineer Stephenson were all consulted; and the share that each had in the devising of the plan has lately been the subject of a controversy, with what result we leave for others to decide.

Early in the summer of 1854, the work was commenced. The total cost was not to exceed one million and a-half sterling. To build the piers it was necessary to sink coffer-dams, so that by pumping out the water the bed of the river might be laid bare; but much difficulty was experienced on account of the loose boulders and drift sand which had to be removed.

On the 22nd July 1854, the first coffer-dam was successfully completed; and on this occasion, after a lunch, the novel feat of dancing upon the bed of the St. Lawrence was performed. This was renewed when the corner stone of the last pier was laid, the 12th August 1859. On the 17th September, the engineers sent out from England tested the tubes which had been finished, and the 24th November of the same year the first train passed over the bridge.

Our cuts represent:—1. The Bridge from St. Lambert (western side). 2. The entrance. Besides the inscription on the outer portal there is on the lintel over the entrance to the tube this one:—"Built by James Hodges, for Sir Samuel Morton Peto, Baronet, Thomas Brassey, and Edward Ladd Betts, contractors." 3. Putting up a tube. 4. Section of a pier and ice-breaker, with section of tube resting upon it. (1)

The iron plates of which the tubes are built were imported from England, each one numbered and ready to rivet in its place. The amount of calculation which this must have involved may be easily imagined.

Mr. Boxer thus describes the curious operation of riveting the plates together:—

"The rivets are an inch in diameter, and are arranged in rows. They were heated in portable furnaces, which were moved from place to place as the work proceeded. From these forges the rivets were taken up with tongs by one of the boys attending and thrown to the riveters on the stage above; and it was extraordinary to remark with what dexterity and precision these lads would throw the rivets and make them curve over the stage and fall to right or to left on any spot they desired. The rivets were then placed in the holes punched for them, and the ends firmly clenched with heavy hammers before cooling.

The rivet head, thus formed, is in a rough shape, and is finished by placing a steel cup-shaped tool upon it, which, being struck with a heavy hammer, the head of the rivet becomes formed perfectly smooth and convex in the steel mould. The contraction of the length of the rivet, in cooling, draws the plates close together with considerable force.

It required no small amount of nerve for the inquisitive visitor to pass through the fiery ordeal. As he gradually approached through the dark tube, the hollow sounds of the heavy hammer on the iron plates reverberated from side to side with a thousand echoes on the ear; but when he arrived at the actual scene of work, it would be difficult to describe the feelings of the looker on. The strokes of the hammers no longer had a deep sonorous sound, but fell with a hard and clanging ring upon the ear that threatened to rupture its tympanum—the darkness of the place—the dim glare of the smoky furnaces—the fiery darts shooting around, and the dark and shadowy objects flitting here and there, like spirits of another world, altogether had such a bewildering effect upon the senses, that the classical reader, for a moment, might fancy himself in the regions of old Vulcan, surrounded by his Cyclops forging the thunderbolts of Jupiter."

The piers, to which very formidable ice-breakers are attached as may be seen by the cuts, are built of dressed stone, filled-in with large blocks of the same material, and united together with hydraulic cement. It was necessary to guard against the expansion and contraction of the tubes, caused by different degrees of temperature. A description of the means taken to effect this would take up more space than we can devote to the subject.

Before the construction of the Victoria Bridge, the greatest tubular bridge in the world was the Britannia, over the Menai Straits, connecting the Island of Anglesea and the Islet of Menai

(1) We are indebted for the use of these wood-cuts to Mr. Lovell and Messrs. Hunter and Pickup, Publishers of Mr. Boxer's "Victoria Bridge Guide."

to Wales. This also was built from the plans furnished by Robert Stephenson, and under his direction. It was finished in 1850.

The following table of some of the dimensions of these wonders of modern skill and industry will be found interesting:—

	Britannia.	Victoria.
Length, without abutments .....	1,513 ft.	6,600 ft.
Total length, with abutments.....	1,311	6,084
Greatest span of tubes.....	460	330
Number of piers.....	2	24
Cubic feet of stone used in piers.....	1,300,000	3,000,000
Tons of iron used in tubes.....	8,000	10,000
Number of rivets used.....	1,000,000	2,000,000

It is the extraordinary span of the tubes of the Britannia Bridge, which none but the boldest genius could have attempted, that renders this structure so wonderful.

Such is the work which H. R. H. came to inaugurate. As to the practical results that may be expected to follow this great undertaking, and the effects it may have upon the commerce of North America, we may perhaps be permitted to reproduce an extract from our *Journal* of last January:

"Its completion acquires additional importance from the fact that it coincides with that of Canada's great line of railway as far as Rivière du Loup, 114 miles below Quebec, on the southern shore of the St. Lawrence, and also with the completion which is soon expected to take place in the railway lines between Chicago and New Orleans; whilst at the same time the Grand Trunk, completed to Sarnia, now connects with lines to Detroit and Chicago. Thus ere another year will have elapsed, passengers will be enabled to take the cars at New Orleans and reach Portland, or Rivière du Loup, in four days. From the seaboard or the Gulf of St. Lawrence, by following the route along the shores of the great Lakes and the Mississippi, the Gulf of Mexico will be reached in less than a week. The time required to travel from Portland to Chicago, 1129 miles, will be 48 hours, from Chicago to Cairo, 365 miles, 18 hours, from Cairo to Columbus, 35 miles, 1½ hour, and from Columbus to New Orleans, 526 miles, 26 hours. Total, 2045 miles in 93½ hours. Under the new postal arrangements between the governments of Canada and the United States the mails from Chicago can be transmitted to Portland by the Grand Trunk within 48 hours.

"It has been suggested by the Chicago press, that if the Grand Trunk Company were to guarantee a reasonable interest to the Michigan Central Company or to that of the Northern branch of the Michigan Southern, to renew all their rolling stock, and alter the gauge of their road to 5 feet 6 inches, trains might make a continuous run to that city. There, during winter, grain could be loaded, taken to Portland, and from thence shipped to Europe. As matters now stand, however, freight has to be transferred but once in the entire run, and, from this circumstance alone, a large increase is to be anticipated in the trade of Chicago. Importers of that city can order their goods direct from Liverpool, and, within twelve or fifteen days after they shall have been despatched, have them laid down at their doors. The emigrant will find this line to afford every facility, and those who would be relieved of the risk with which, while travelling, the carrying of considerable sums of money is attended, can obtain drafts on the agents of the company. The advantages possessed by this great route cannot fail to secure for Canada a large share of that traffic, not only between the Western and South Western States and Europe, but also between the former and the States bordering on the Atlantic. It is impossible to over-estimate the importance of this immense carrying trade, including as it does mail contracts and the conveyance of passengers, which alone is a considerable item when we take into account the constant flow of emigration towards the interior of the continent.

"It is a most remarkable thing that this almost interminable line of railroads should traverse the immense territory once owned by France in that part of the American continent which was then, as it is now, known as Canada and Louisiana, the very territory where our chivalrous predecessors were at such pains to establish and to defend a line of missionary stations, of forts and of trading posts. At that period, when they had to expose themselves to such hardships and perils in going from Quebec to New Orleans, what would they have thought if it had been prophesied that this very route would be travelled over by carriages in less than three days?

"Such, however, has been the glorious destiny of the land."

Immediately after the inauguration of the Victoria Bridge the Prince drove up to the house prepared for his reception. This residence is owned by the Hon. John Rose and is situated at the foot of the mountain, commanding a fine view of the town with the surrounding country, and the noble river. The decorations and furniture were very elegant—the latter of Canadian walnut and bird-eye maple.

In the evening a general illumination of the city followed, with fireworks from the bridge. The Court-house, the Banks and the shops in the principal streets exhibited transparencies representing all sorts of figures; with jets of gas forming wreaths and mottoes,

and an endless variety of party-colored lanterns. The festive arches had been constructed so as to admit of being lighted up, and produced a very pretty effect. From the water side where the view was more extended a dreamy scene of light met the eye. The flitting outlines of the high buildings, though still well defined against the dark sky, gradually diminished in brilliancy as they receded from the observer; the vessels in the harbor, with their sparkling cordage describing undulating lines of variegated fire; the rockets and fireworks darting up incessantly, and casting their vivid light upon the huge bridge—all this formed a scene of indescribable grandeur.

Orders had been given to stop all vehicles, as the crowd pressing through the streets in every direction rendered them impassable. The Prince who had ventured out, and who was not at first recognized, had his carriage brought to a stand; but this little incident only served to betray his incognito, and immediately the most enthusiastic cheering greeted him on all sides.

On Sunday His Royal Highness attended Divine Service at Christchurch Cathedral, a very graceful Gothic edifice only recently finished. The sermon was delivered by Lord Bishop Fulford, lately elevated to the dignity of Metropolitan.

The following Monday, His Royal Highness having witnessed the Indian games, and having stood to see several Temperance Societies and Companies of United States militiamen file off before him, held a levee at the Court-house, where upwards of two thousand gentlemen were presented. He also received many addresses: one, presented by His Lordship Bishop Anderson of Rupert's Land, was on behalf of the people of the Red River settlement; another was from the surviving militiamen of Lower Canada who fought in the war of 1812,—couched in the following terms:—

*To His Royal Highness Albert Edward, Prince of Wales, &c., &c.*

Prince,—The Veterans of the Militia of Lower Canada crave permission to approach your person to tender to Your Royal Highness the homage of their respect and of their prayers.

The Battalions formed in our Counties, in our Villages and in our Towns, for the defence of our country, during the war of 1812, number now but few among their ranks.

Our companions have fallen, some on the field of battle, others under the scythe of time; for, Prince, years have rolled by since then. Then we served your ancestors.

We, their survivors,—soon no doubt in our turn to pass away like them,—cherishing religiously in our hearts the memory of that eventful period, seize with delight this auspicious occasion—the last we can hope to have—to present to Your Royal Highness, and in your person to your august mother, our beloved Queen, the assurance of our unaltered loyalty and devotion.

Prince, most of those who fought at Lacolle and Chateauguay are gone from among us, and the blood of their survivors courses in their veins more feebly than of yore; but we rejoice to say that the race of 1812 has its successors, and that the youth of Canada know the history of their sires, and, should occasion arise, will not belie it.

Montreal, 25th August, 1860.

This address was signed by Sir Etienne Taché, Hon. J. A. Quesnel, Col. Wm. Berczy and a few others whose names we were unable to obtain. The subjoined reply was subsequently received from the Duke of Newcastle:—

REPLY.

Sir,—I have the honor to communicate to you the thanks of His Royal Highness the Prince of Wales, for the loyal Address presented to him by the Veterans of the Militia of Lower Canada.

It is very gratifying to His Royal Highness to receive these expressions of devotion and attachment to the Queen from gallant men, who, in years gone by, have deserved so well of their country. He only regrets that so few now survive to testify to their ancient spirit.

His Royal Highness accepts this Address with the more pleasure, because happily we can now look upon the deeds of our brave countrymen without any other feelings than those of friendship and regard for

the nation against whom they fought. Hostility to our neighbours is buried in the plains where they struggled for victory, but the honor of each nation survives for ever.

The ball given by the citizens in honor of their Royal guest came off in the evening. The Reception Committee had concentrated all its energies upon this great fête, and had made it the special object of its care. A large building had been erected for the purpose in the form of a circular pavilion, measuring about 900 feet in circumference. The vast ball-room, encircled with a deep gallery, was about 215 feet in diameter, and its decorations, among which were the signs of the Zodiac, with many other emblems, stood boldly out from a delicate pink ground, leaving a most pleasing impression upon the sense. The orchestra, supported by wreathed columns, was in the centre of the room.

The gay assembly consisted of over 4000 persons; and as it lay away to and fro under the dazzling light of nearly 2000 jets of gas, a scene of Eastern enchantment met the gaze of the beholder. The Prince opened the dancing with the Hon. Mrs. John Young, the wife of the President of the Reception Committee. Besides the Prince's retinue, we notice among the strangers of note who were present, Lord Lyons, British Minister at Washington; Lord Mulgrave, Governor of Nova Scotia; Lady Franklin, so celebrated by her perseverance and devotedness under cruel affliction; the Marquis and Marchioness de Chandos, and Lady Georgina Fane, sister to the Earl of Westmoreland, who played an important part in the world, both as a soldier and a diplomatist.

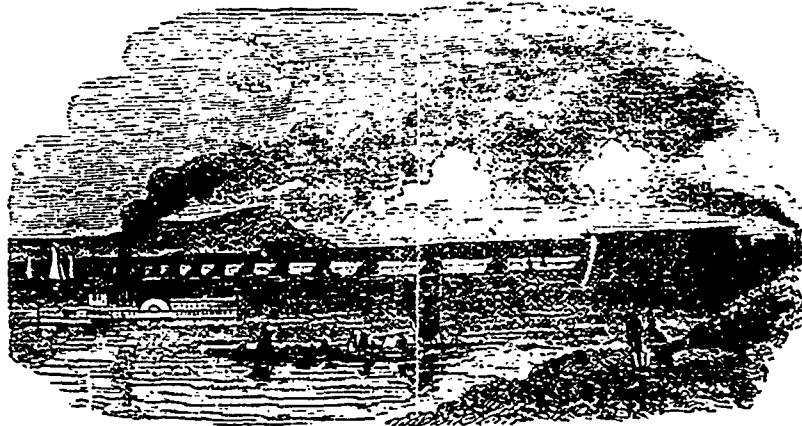
The Prince went by the Grand Trunk Railway as far as Dickenson's Landing on Tuesday, and returned by the river, descending the rapids, and no doubt enjoying the exciting and novel spectacle. In the evening of the same day he attended the concert given in the Ball-room, and at which over 8000 persons were present. The

first part of the programme consisted of sacred music sung by the Oratorio Society, an association principally formed by the pupils of the McGill Normal School. A *cantata* composed for the occasion, the music by Mr. Sabatier, the words by Mr. Edouard Sompé, made up the second part. It was executed by the Musical Union which mustered 250 artists and amateurs. The third and last division of the programme comprised Operatic selections sung by artists whom the Committee had engaged in New-York, and among

whom figured Mlle Adeline Patti, Mde Strakosh, Brignoli, and An-di. The Prince arrived as the *cantata* was beginning, but finding himself fatigued by the day's exertion, he left the room as soon as it was ended, and did not hear the *selections*. A clever translation of the French libretto of the *cantata* by Mde Léprohon, was followed by those who did not understand French, and contributed to the success of this composition.

Wednesday, after a review of the Volunteers at Logan's Farm, the afternoon was spent in making an excursion to Dorval Island, the residence of Sir George Simpson, Governor of the Hudson's Bay Territory. This gentleman, we regret to say, did not long survive the honor of having that day offered the hospitality of his roof to his Royal visitor.

Dorval Island faces the village of Lachine, where, as at every other place visited by the Royal party, an enthusiastic and cordial reception awaited them. This pretty village, situated at the head of the celebrated rapids of the same name, the most dangerous in the St. Lawrence, derives its name,—if a wide spread legend may be trusted,—from an expedition undertaken by Chevalier Tonti, some say by LaSalle, for the purpose of discovering a direct way to the Celestial Empire. In the year 1689, one of the most sanguinary deeds recorded in the annals of the country, was perpetrated here. The Iroquois crossed the lake in the night, and massacred the inhabitants. Few escaped the butchery, and to this day the epoch is referred to in the parish as *the year of the massacre*.



Near the village is situated the entrance to the Lachine canal. This fine work was begun in 1821, and finished in 1835, and is 8½ miles long. The ferry forming a connecting link in the line of the Montreal and New York Railway, plies regularly from this point to Caughnawaga.

The drive along the bank of the river to this little place, and through the Tanneries to town, is one of the most interesting. The ever roaring waters of the rapid lashing the rocks, and breaking into quivering surges with their snow white foam dancing and sparkling in the sun light: the green fields with their groves and orchards, and the neat cottages, which every turn in the road discovers; the hissing locomotives chasing each other over the Grand Trunk and New York lines which meet here; then a steamer, gliding through the hidden canal suddenly appearing to the astonished beholder as if plunging up a field—forms an ensemble in which the wonders of art are seen side by side with the wonders of nature.

A flotilla of bark canoes, tricked out with flags and green boughs, and bearing a hundred Iroquois from Caughnawaga and the Lake of Two Mountains, in their great war costume, came out to meet the Prince. The royal boat, urged on by the oars of the lusty tars who manned her, made for Isle Dorval; the Indians forming a very quaint escort, as with the rapid strokes of their paddles, they kept time to the measure of their song. How strange to hear these descendants of the Mohawks, the allies of England and the foes of France, sing to the heir of the British Empire the old songs of Normandy and Brittany,—for these Indians hardly know any other than those they have learned from the *royageurs*. What a host of historical recollections must have been called to mind by such simple lays as “*Derrière chez mon père, En roulant ma boule,*” and “*C'est la belle Françoise!*”

Having partaken of refreshments at Governor Simpson's the Prince and his suite crossed over to the Indian village of Caughnawaga, and on their return to Lachine, went on board the *Kingston*, descending the rapids in this steamer.

At night the firemen formed a torch-light procession; and the Prince entertained several distinguished guests at dinner, Sir L. H. Lafontaine, Bart., Chief Justice of Lower Canada being among the number.

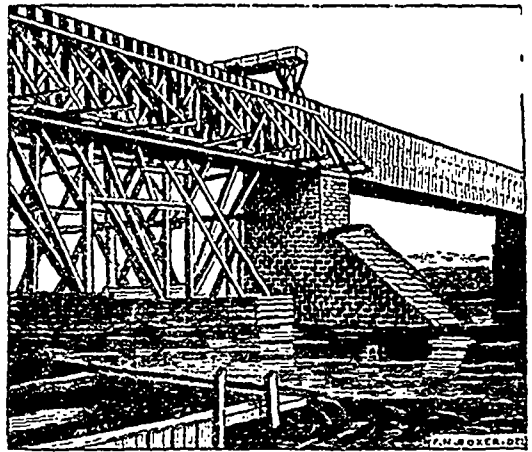
It had been arranged that a whole day should be spent in visiting the country south of the St. Lawrence, as far as Sherbrooke. In this interesting trip the first halt was made at St. Hyacinthe. This handsome little town is of quite modern growth, and is reached from Montreal by the Grand Trunk Railway in one hour and a-half.



The old parish of St. Hyacinthe was formed in 1777, and the following year its registers showed 11 births, 1 marriage, and 7 deaths. It was afterwards subdivided into 15 new parishes, in which were registered during the year 1858, 1881 births, 310 marriages, and 726 deaths. The population of the town is put down by Mr. Lovell at 5000, and by Mr. Labrnière at 3581 (1).

St. Hyacinthe has a fine college,—one of the largest in the country, containing at present 264 students; a very fine bishop's palace,—the seat of the Bishop of the diocese,—a convent of the nuns of *La Présentation* (the mother-house of this order in Canada), and another of the Sisters of Charity; and 8 other schools. The number of pupils in all these institutions being 1170.—Two

churches, several important manufacturing establishments,—one an organ manufactory;—several work-shops and mills, the railway station, a market, a new Court-house (in course of construction), and many handsome dwellings. Situated in the heart of a most productive agricultural district, this thriving place has quite a busy aspect. The brick buildings give it the air of an American town, though some spots still retain their original character, and we may instance as a perfect type of the Canadian manoir, that of the Dessaulles family.



Thousands of people, almost all French Canadian farmers from the surrounding parishes, who had gathered at the railroad station to await the arrival of the Prince, burst out into loud and prolonged acclamations, as H. R. H. appeared. Carriages had been held in readiness, in which the royal visitors were conducted through the streets of the town to the college. Flags were floating from the house tops, and arches of evergreen adorned the way. At the entrance to the grounds of the college stood a triumphal arch on which were inscribed these words:—

“*L'intelligence grandie par l'instruction gouverne le monde*”

A balcony standing out from the façade of the college, and embellished with foliage, also bore this inscription: “*Salut à notre roi futur.*” His Royal Highness was received at the main entrance by the Superior, who was surrounded by his staff and many priests from the neighboring localities, and was led to the Examination hall, which had been decorated with banners, and with inscriptions on the walls in letters of gold. Facing the throne was this one:—

III Kal., Septemb. MDCCCLX.

Perpetuum decus, alma dies, his redivus affers.

Over the throne was written:—

*Non Anglica, quondam ullo se tantum telus jactabit alumno.*

Having received the addresses of the college, town and county, the Prince ascended the great cupola, where a fine view of the environs may be enjoyed. Fields rich with the growing crop, and groves of maple, stretch away towards the horizon, the isolated mountains of Belair, and Rougemont, rearing their huge forms high above the plain; farther in the distance Mount Johnson and the Vermont ranges melt into soft aerial tints, their outlines growing fainter and fainter until they are completely lost. Below, the Yamaska, emerging from deep savannas, flows at the feet of the beholder, and not far from this spot is spanned by two bridges—one built for the railroad, the other on the line of the highway. The pretty little town itself with its gardens, its trees and parterres has assumed its holiday attire; and a picture is presented in which active industry and rural life mingle together, leading the contemplative mind to dwell at the same time upon the mighty stir of trade, and the peaceful calling of the husbandman.

On leaving this college, as on leaving the Laval University and the Ursuline Convent, His Royal Highness was doubtless impressed with a high opinion of the Roman Catholic clergy of Lower Canada, and of the many and flourishing institutions founded by it in the province.

The College of St. Hyacinthe was founded by Mr. Girouard in 1811. The first building, erected under his care, was, as may be

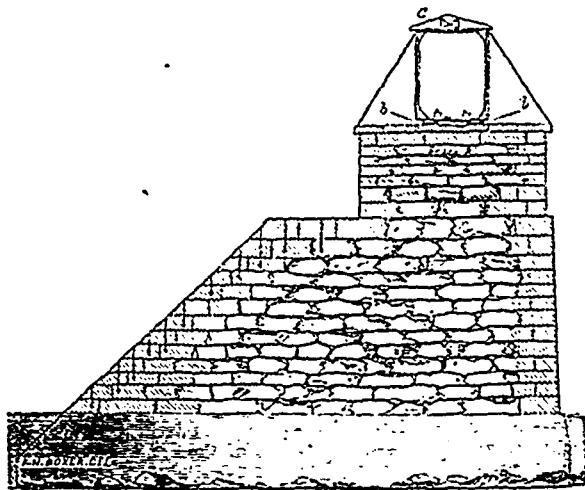
(1) *St. Hyacinthe: Essai par Mr. De Labrnière*; published in 1859.



readily conceived, far from equalling in importance that which has taken its place. The present building was opened in the autumn of 1853. Its front measures 200 feet, and the wings 150 feet each; the whole is built of stone, three stories high. The library contains about 12,000 volumes. The natural philosophy and natural history collections are large. The town is to a great extent indebted to this establishment for its prosperity. St. Hyacinthe supports a newspaper published in the French language, and two literary institutes.

His Royal Highness then directed his course to Sherbrooke, the most important place in the Eastern Townships. These townships occupy the whole space between the old seigniories and the line 45°, and were settled by emigrants from Great Britain and the United States. French Canadians began settling there only within the last few years, and are making rapid progress.

The inhabitants of Sherbrooke, according to the last census, number 3000, chiefly English and Anglo-Americans. Bishop's College is situated near Sherbrooke, — at Lennoxville. This University was founded under the auspices of the Bishops of the Church of England, and its Charter provides for a classical course of the highest order. A high-school or preparatory branch has recently been added to this institution. This town also possesses a Roman Catholic college, a protestant academy, a convent controlled by the nuns of the *Congregation de Notre-Dame*, and several other schools.



Sherbrooke is the centre of a juridical district, and sends a representative to Parliament. It lies on the St. Francis, at a point where this river receives the waters of the Magog, and extends on both banks of the stream. Water-privileges are numerous, and many mills have been built; there are also several manufactories and workshops; and a public library. Two journals (English) are published here.

The Prince arrived at 2 o'clock p. m., and was welcomed by a large concourse of people met for the purpose; thousands were sturdy farmers who had flocked in from all the surrounding townships, and the loudest demonstrations of joy were spontaneously offered. As at the former station, the streets were adorned with flags and evergreens.

Having received an address from the Mayor Mr. Robertson, His Royal Highness was escorted to the house of the Hon. A. T. Galt, Minister of Finance. The royal carriage was literally filled with bouquets thrown from the windows along the route, by the ladies of Sherbrooke. A levee followed; but on this occasion the rules of etiquette concerning dress were not strictly adhered to, the Prince being himself in plain clothes. The Council of the University of Lennoxville also presented an address. At this reception Mr. John Felton, an old naval officer, and resident of the town, who had been unjustly deprived of his rank, was reinstated. The deepest emotion was excited by the joy of this old seaman, one of Nelson's shipmates, and this act will be among the most pleasing souvenirs of the royal visit to the country. After a luncheon at the Hon. Mr. Galt's, at which a great many guests assembled, H. R. H. and suite returned to Montreal. Here the citizens turned out en masse to admire the grand pyrotechnic display which took place in the evening; and the Prince honored with his presence a second ball given in the pavilion.

(To be continued in our next.)

### Addresses presented by Educational Institutions to His Royal Highness the Prince of Wales.

TRUSTEES OF THE HAMILTON CITY SCHOOLS.

May it please Your Royal Highness,—

We, the Chairman and members of the Board of School Trustees for the city of Hamilton, beg to approach Your Royal Highness with all loyal and dutiful respect, and, in our own name, as also in the name of all the Teachers and pupils in the several schools under our care,—the highest of which you have deigned to honor with your presence,—we most heartily and loyally greet you on your auspicious arrival in our city, and gratefully bid you a joyous welcome.

Amid the great manifold blessings we enjoy under the benign sway of our most Gracious Sovereign, your august and honored mother, we specially prize the system of general education established in the province, which, if matured and maintained, will soon render a good common education,—the young Canadian's birthright,—altogether irrespective of his class, color, or condition, and free access to the school-house, the privilege of all. In all our schools, and in their appropriate lessons, the great principles of religion and patriotism, loyalty and charity, are kindly but faithfully inculcated. And we feel assured that the condescension of Your Royal Highness in visiting this and other schools of learning in the Province, will not only greatly encourage the work of education, but will also foster and perpetuate in the hearts of the young, that profound sentiment of devoted loyalty which endears the tie that unites us, as a people, to the British Crown, and which will hereafter strengthen the pillars of that illustrious throne, which, in the providence of God, you may be called to occupy.

We gladly avail ourselves of the occasion to renew our assurances of loyalty to the Queen, and our personal regard for Your Royal Highness.

May the recollections of your present extended tour, be to you a future satisfaction; may your further journeyings be prosperous, and your return home safe and happy.

### Report of the Superintendent of Education, for Lower Canada, for the year 1859.

(Continued from our last.)

In consequence of the removal of the Government offices from Toronto to Quebec, the Laval Normal School, which occupied the building known as the Old Château, was dislodged, and the classes for 1858-'59 were closed a month before the usual period. The house formerly occupied by the Rev. Jesuit Fathers in Dauphine Street was leased by the Government, and by the active exertions of the Rev. Mr. Langevin, the Principal, and the prompt execution of his suggestions by the Department of Public Works, the school was but little interrupted by the unlucky occurrence. The classes were even re-opened at the ordinary period, and the institution has been installed in its new position much more conveniently than I at first thought possible. There is however one cause of regret—namely, that there is no open ground near in which the pupils may take their recreation, as important as the score of health as it is for relaxation of the mental powers. This circumstance, taken together with the other inconveniences of a temporary abode, comes in support of my argument, previously advanced, for the erection, at the earliest opportunity, of permanent buildings for our Normal Schools.

The Laval School has in the course of the year suffered a severe loss by the death of Mr. Emile de Fenouillet, professor of literature, history and the French language. His pupils, who had, under his care, made great progress in those branches of education, as well as his brother Professors, whose esteem he had acquired, lavished on him to the last moment tokens of the deepest affection. I am bound to testify to the justice of the eulogy which the Rev. Mr. Langevin, the Principal, pronounces in his report on the merits of the deceased. Mr. de Fenouillet was a native of the South of France, and both at home and here, in his adopted country, successfully cultivated literary studies and literary projects. The *Journal de l'Instruction Publique* has lost in him a talented and zealous contributor.

The place of Mr. de Fenouillet is now filled by Mr. Napoleon Lacasse, who has held the diploma for a Model School, and been distinguished for many years past in his profession as a teacher. Hitherto, M. Lacasse has shewn himself fully entitled to the confidence evinced by those who called him to fill his present important office.

M. Juneau, the teacher of the Model School having been appointed School Inspector for the Counties of Levis and Dorchester, has been succeeded by M. Cloutier, the teacher of the Model School of St. Nicholas, who holds the diploma of the Laval Normal School as a Model School Teacher.



I have, in the course of the year repeatedly visited the three Normal Schools, and been present at their public examinations; I have also taken part in the private examinations of candidates for teacherships in the Jacques Cartier School, and I venture to affirm, that on all occasions, the pupils did credit to the zeal and capacity of their professors.

The number of pupils at the Jacques Cartier School, in the present year, has exceeded that of former years, and among them there has been a greater amount of talent and acquirements, and I think a more decided vocation for the teachers' profession. It has been more easy to maintain order and good discipline than heretofore. Thirty-one new students have been admitted, and there have been more than fifty candidates for admission. As the boarding department can admit no more, the regulation requiring a strict examination as preliminary to admission, intrinsically good in itself, has been vindicated by the circumstances.

Of the 31 new students, 26 come from the former District of Montreal, and 5 from that of Three Rivers. Those of St. Francis and Ottawa, which, with the two mentioned, comprised all the limits of this School, have not as yet furnished any pupils.

The progress of the pupils in French Grammar, taught by M. Devisme with a rare degree of zeal and ability, has this year been remarkable. The lectures on the history of Canada, delivered by the Principal, have been largely developed, and the Rev. Mr. Verreau has spared no pains of re-earch nor expense to attain the greatest possible precision in the narration of interesting facts relating to the early establishment of Europeans in America. At his personal expense he has, with praiseworthy generosity, caused several unedited documents to be copied in France.

The lessons on the various branches of physical science accompanied with demonstrations and experiments, although not supposed to form skilful professors in any of them, serve to convey to the pupils much useful knowledge which may become the foundation of future studies, a key to the understanding of many interesting works, and a text-book of ideas which are indispensable to instructors of youth, useful to explain a series of works similar to those of the National Schools of Ireland, or to give lessons on familiar subjects (object lessons).

M. Ossaye, a distinguished agriculturist, has condescended to deliver to the pupils, gratuitously, a series of lectures on agriculture and rural economy. These are given every Saturday at 4 p. m. In addition to the lectures, he conducts them to some of the best managed farms in the environs of Montreal, including one conducted by himself for the gentlemen of the Seminary, and on those occasions gives practical explanations which form a natural and appropriate peroration to his precepts. It is, no doubt, very desirable that model farms should be annexed to the Normal Schools, in order that pupil-teachers might, at the proper season, attend them by turns and be initiated more perfectly in the practice of agriculture, and particularly of gardening, which is to become to them so important a source of subsistence. Meantime, awaiting the realization of these ideas, the principles of rural economy which they will acquire, must have the same advantages as those general ideas which I mentioned above, in respect of other sciences. They have already had the effect of drawing attention to the agricultural resources of the country, of creating a zeal for their development, and of inspiring ideas relative to the first of the arts, far different, as they confess, from what some of them once entertained.

The public lectures on General History by the Rev. Mr. Desmazes, and on Philology and French Grammar by Mr. Devisme, have been attended by a considerable number of strangers. There is ground for hoping that in time our rising generation will fall into the European custom of attending public lectures delivered gratuitously. I may remark that no better use could be made, in this climate, of the long winter evenings. The pupils drew up reports of the above lectures, and the best of them have appeared in the *Journal de l'Instruction Publique*. The Rev. Mr. Desmazes, who, without other connexion with the Normal School than that supplied by his love for learning and the interest which he feels in the institution, has kindly assumed, during two years, the office of delivering lectures on General History, is entitled to the warmest thanks, not only of the Government, but also of all who have benefited by the lessons which he has with equal ability and generosity given them.

The tables contained in the Report of Mr. Verreau, the Head Master, shew that the pupil-teachers have devoted much of their time to the Model School. In that department they have made great progress in the teaching of analytical reading, geography, arithmetic, and the art of delivering lectures on familiar subjects (object lessons.)

An addition has been made in the course of the year to the Museum of the Institution of a collection of Canadian birds, consisting of 160 individuals, the greater part of which were acquired for half their value from Mr. Inspector Germain, who had himself collected them. Some of the pupils have learned the art of preserving subjects of Natural History, which will be a means of gradually increasing the several collections now in the Museum at small expense, and an advantage to the pupils themselves. The educational institutions in this country, which are hitherto unprovided with Museums might thus, as I have observed in a former report, form collections of Natural History, and at the same time inspire their pupils with a taste for the science itself.

At the McGill School, the year is divided into two terms. In the first term of the past year there were 83 pupils; in the second, 77. Several left during the first. The whole number attending the school within the year is 83, as before observed.

In this, as in the Laval School, steps have been taken to qualify some of the pupils to receive an academical diploma, such teaching being supplementary to, or in excess of the regular programme of study, and to be considered as experimental. The applications made for teachers holding such diplomas induced me to authorize the trial, but the studies will be altogether optional.

I attended the public exercises and examinations of the McGill School, and visited it during the year, and I am bound to express my approbation of the progress made in the several branches taught, particularly in the art of giving lessons on familiar subjects (object lessons,) in literary composition, arithmetic, and the various natural sciences. The success which has attended the labors of Professor Fronteau in teaching the French language, is very satisfactory, particularly if we consider the short time allowed for that study in the programme. The Head Master, and Professors Hicks and Robins, devote their energies, with the most praiseworthy zeal, to the teaching of the several branches of their department.

Within the last year an Infant School has also been added to the Model School, with excellent success, and, as the females form a large majority among the pupil-teachers, this addition to the plan of the school will no doubt prove a means of rapidly introducing superior modes of teaching the very young in all the schools in which they are employed.

The Laval School, which I frequently visited, with great satisfaction at the success attained, not only at the public examinations, but also during the class lessons, seemed to realize all that the most sanguine can look for in such an institution. Both the late Head Master and his successor have been earnest in their exertions, and it is worthy of remark that all the pupils who have attended the classes have been conspicuous for their assiduity, while some have displayed talents and ability of a superior order. They appeared to possess a solid and practical knowledge of French Grammar, the pronunciation of that language and its elocution being, moreover, objects of particular attention, and the perfection attained therein very great. The art of teaching Geography, and the delineation of Maps on the Black-board are also pursued with much success. I make mention of some few of the branches only which particularly struck me, but it is fit to remark, that all who visited the school with me were astonished, as indeed I was, at the results which they beheld. The Ursuline Ladies who have charge of the boarding establishment of the female pupil-teachers, and who take part in the teaching, are entitled to the gratitude of the Government and the public in general; the good behaviour of the pupils and their progress in the study of the English language as well as in other branches entrusted to those Reverend Ladies deserve great praise.

The two Model Schools attached to the Laval School have received a large share of the attention of the Principal during the year, and he has effected several important improvements in the methods of teaching in both.

The whole number of pupils in the Model Schools attached to the three institutions is 669: that is to say, in the three divisions of the Model School belonging to the McGill School, three hundred; in the Male Model School depending on the Laval Normal School, one hundred and ten; in the Female School, one hundred and seventy-five; finally, in the Model School belonging to the Jacques Cartier Normal School, eighty-four. These numbers, added to the 219 pupil-teachers, make a total of 888 pupils who have received instruction in the course of the year in the Normal Schools. The whole amount expended by these institutions within the year has been \$36,810, of which sum \$9,431 proceeded from fees paid by the pupils.

While the Normal Schools are thus preparing teachers, the department have aimed at improving the condition of those

engaged in teaching, omitting no opportunity of elevating the honorable office which they fill in public opinion, and of encouraging them to persevere in their work, setting at nought the strong temptations which beset them and allure them to other pursuits. We have seen that the Professors' chairs in the Normal Schools have been given for the most part to teachers of some standing, and that nine of our best teachers have received that honorable and lucrative promotion—lucrative, comparatively speaking, although the remuneration paid to the professors in our Normal Schools is still far from what it should be, considering the importance of their office and the arduous nature of their occupation.

(To be continued.)

### Decision by the Court of Appeal, Dec. Term.

ADAMS ET AL., APPELLANT, VS. THE SCHOOL COMMISSIONERS OF THE SCHOOL MUNICIPALITY OF BARNSTON, RESPONDENT.

This was an action to recover a sum of money, being the balance due for the erection of a Model School at Barnston. The Plaintiffs were the assignees of the debt from the builders, and the Defendants the School Commissioners. The Commissioners who had authorized the work, had admitted their liability. The set which came after these also admitted liability, and even gave a bond and mortgage on the property of the School Commissioners for its payment. The debt, however, was now repudiated by the Defendants, on the ground that their predecessors had exceeded their power in contracting the debt, inasmuch as that the School-house cost £250, while the law limited the amount, which might be expended in that manner to £150. The Court below had dismissed the action, and the appeal was by the Plaintiffs.

His Honour Mr. Justice MONDELET now said that the case of the Plaintiffs might seem to be sustained by the 19th Vic., which permitted a special assessment to meet judgements against School Commissioners, or "legal debts admitted by such Municipality." Now, it might appear at first sight that this law authorized the payment of the debt, at present in discussion, and which had been admitted to be due by those who formerly constituted the Corporation. But upon considering the whole subject more attentively, it would be found that though the words of the law were general, authorizing the payment of all lawful debts admitted by the Corporation of School Commissioners, yet that this debt, having been contracted for an amount in excess of the £150 permitted by the law, was not lawful, but unlawful—that, therefore, the Municipality had no power to contract it, and as little power to ratify what was bad from the beginning. The judgement below must be confirmed.

MEREDITH J.—

The principle of this judgment is that the responsibility of corporations is measured by their powers. That is incontrovertible. The question then is simply if the Corporation had power to make this contract. The rule is that a corporation has no power not specifically given to it, or absolutely necessary for its performance of the duties required of it. Now the School Commissioners were authorized by the act to do whatever was required for building or repair of Model School houses, provided that no rate should be levied for building a Superior or Model School house, of which the amount should exceed £150. As the Commissioners therefore, could not obtain this money directly by levying a rate they could not do it indirectly by contracting a debt,—otherwise the protection given by the Legislature to the rate payers would be defeated. It had been said that the Commissioners might have funds at their disposal irrespective of the assessments. They might; but the Court had no evidence that they had and could not presume it as it was not proved.

AYLWIN J.—

There was a fatal defect in the declaration. It was brought on what was called a bond, by which after declaring that the Commissioners were indebted the property belonging to the Corporation of School Commissioners was mortgaged for the debt. But the law expressly prohibited alienation of the property of School Commissioners. It was well that a judgment of this kind had been obtained. Otherwise men would suppose that they had only to get into office in order to bind their fellow-citizens, and even mortgage and sell their properties. It was not because a municipality might think an Ivory Palace required by the cause of education, that the people should be taxed for it. Judgment below confirmed.—(*Montreal Herald.*)

## MONTHLY SUMMARY.

### EDUCATIONAL INTELLIGENCE.

—We learn from the *British American Journal*, edited by Dr. Hall, that at the last semi-annual meeting of the Governors of the College of Physicians and Surgeons for Lower Canada, it was resolved that medical students should no longer be admitted to examination, unless they can show that they have followed a course of lectures on Botany as prescribed by law.

—The habit of smoking had become so inveterate among the pupils of the French colleges that some of the younger boys, says the *Cosmos*, could smoke from six to ten cigars in a day. The fatal influence of nicotine manifested itself in some by a stunted physical growth and *weakened intellects*. A circular of the Minister of Public Instruction was issued, directing attention to this lamentable abuse.

EXAMINATION.—On Thursday, 19th December the pupils attending the schools controlled by the Montreal School Commissioners passed very creditable examinations, at which the City Council was represented by its committee. All present were well satisfied with the proficiency of the scholars, and the manner in which the money had been spent.

—A public examination of the pupils of the Panet Street Protestant School took place on the 13 instant. Prizes were distributed by the Hon. P. J. O. Chauveau, Superintendent of Education, in the presence of his Worship the Mayor and the Special School Committee of the City Council, the Board of Examiners, Principal Dawson, and of the parents and friends of the pupils.

COLLEGIATE SCHOOL.—PRESENTATION.—On Saturday, the 21st. the pupils at this School, before the holidays, presented their master, Principal Charles Nicols, with an elegant Ice Pitcher and Silver Goblet, as a mark of their appreciation of his unwearied efforts in labouring for their educational advancement. The Address, on presentation of the testimonial was read by the Junior Moniteur, Mr. John Little, and the testimonial itself was presented by the Senior Monitor, Mr. Jas. Warner. The Vice-Principal Alfred Walsh, Esq, was also presented with a handsome paper knife and silver pencil case, accompanied with a suitable address, for his kindness and attention to the pupils in Lower School.—*Montreal Herald.*

—His Royal Highness the Prince Consort, Chancellor of the University of Cambridge, being pleased to give annually a gold medal for the encouragement of English poetry, the Vice Chancellor gives notice that the prize will be given this year to such resident undergraduate as shall compose the best poem on "The Prince of Wales at the Tomb of Washington." N. B.—The exercises are to be sent in to the Vice Chancellor on or before March 1, 1861 and are not to exceed two hundred lines in length.

### LITERARY INTELLIGENCE.

—At a recent meeting of the Society of Arts in London, its Chairman, —the celebrated Professor Owen, said: "His Royal Highness (Prince Alfred) had promoted the purpose of science by collecting some of the most perfect fossil remains of South Africa which had ever reached England, and these he had sent to him accompanied by a note characteristic of His Royal Highness's intelligence and urbanity."

—We notice by English papers the death of the Revd. Dr. Croly, author of the *Court of George IV.*, Salathiel, Marston, &c. He died suddenly of disease of the heart.

—Another distinguished writer died during the month — Baron Bunsen, long Prussian Minister in England.

—Mr. Petiteclair, author of several Canadian petit comedies, which lack neither spirit nor originality, died some time ago. Several poetical essays republished by Mr. Huston in his *Répertoire National*, are from his pen. His death was followed by that of another Canadian Essayist — Mr. Myrand, author of an historical sketch on the subject of public instruction in Canada, noticed in our *Journals* at the time of its appearance. Mr. Myrand was Chief Translator to the Legislative Assembly, a situation which he filled with distinguished ability. He died aged 42 years, after a protracted and severe illness, brought on by excess of labor. His many esteemable qualities will ever be fondly remembered by his friends.

—The Montreal Historical Society has purchased the library and very valuable collection of M. S. S. left by the late M. le Commandeur J. Viger.

—Mr. Gilmory Shea, of New-York, one of the corresponding members of the above society mentioned in our last number, is said to be engaged in superintending the reimpression of a series of old French works on America. For this purpose a font of types has been cast so as to secure

exact fac-similes of the old editions. Among the works thus republished are these: *La Vie du Père Chaumonot*, and *La Relation du Père Dablon*. The latter is not to be found in the *Relations* published by order of the Government of Canada. Mr. Shea is Editor of the *New York Historical Magazine*, and well known by his works and publications, among which are, the *History of the Discovery of the Mississippi*, the *History of the Catholic Missionaries among the Indians of the United States*; the *History of the United States for the use of schools, &c., &c.*

#### MISCELLANEOUS INTELLIGENCE.

—The telegram of the news of the *Canada* in our last impression contained the announcement of the death of the Earl of Aberdeen, K.G., K.T., P.C., F.R.S. We have not yet received any particulars of this event by mail, but possibly we may do so to-day. The passing away from this mortal scene of a statesman so old and so eminent as he that has gone, calls for some notice from a public journalist even in this distant dependency—for the recalling of a few brief facts concerning him which have long been of public record. He was born in London on January 28th, 1784, and was consequently nearly 77 years old when he died. Great political events, the greatest in the modern history of Europe, took place within these 77 years, in which the deceased statesman was something more than an interested spectator. From any of the hand-books or companions to the House of Lords we may learn, that the Right Hon. George Hamilton Gordon, the 4th Earl of Aberdeen, was the oldest of six sons of the late George Lord Harlow. He received his early education at Harrow, where he was a schoolboy with Lord Palmerston, the Earl of Ripon, Sir Robert Peel and Lord Byron. In 1802 he succeeded to the Scottish peerage, on the death of his grandfather the third Earl. He graduated as M.A. at Cambridge in 1804. After spending a couple of years in a tour in France, Italy and Germany, going as far as the Levant, he was elected one of the Representative peers for Scotland in 1806. He was re-elected in 1807, and again in 1812. In 1813 he was appointed Ambassador Extraordinary and Minister Plenipotentiary at Vienna. He soon after joined the Allied armies and accompanied Francis II. throughout the campaign which led to the treaty of Paris in 1814, of which as Plenipotentiary he was one of the signers. In the same year he was created a British Peer being gazetted Viscount Gordon of Aberdeen. He was twice married; first to the daughter of Abercorn; second to the daughter of the Hon. John Douglass. He was the author of a work on Grecian architecture, which he published in 1822. He was also one of the original contributors to the *Edinburgh Review*, to whom Byron applied the line,

"The travelled Thane, Athenian Aberdeen."

In 1828 he became a member of the Administration of the Duke of Wellington, as Chancellor of the Duchy of Lancaster, and in a few months afterwards became Secretary of State for Foreign Affairs, which office he held until the breaking up of the Ministry in 1830. "In the course of his first administration of the foreign affairs of the country," remarks a writer, "he had an opportunity of putting to the test his principal of non intervention,—the frank and unreserved recognition of the *de facto* sovereign of each country, without reference to his abstract right and title." Thus Lord Aberdeen was the foremost of those who induced the British Government to recognize the newly chosen "King of the French." He gave a frank and cordial support to the repeal of the Test and Corporation acts; also to the act for Catholic Emancipation. A writer holds that his opinion on this measure modified the sentiments of the Duke of Wellington. After the fall of the Wellington Administration Lord Aberdeen was succeeded at the Foreign Office by Lord Palmerston. In opposition the retired Minister bitterly assailed the policy of foreign intervention of his successor. In 1834 Lord Aberdeen became Colonial Secretary in the Tory Government formed by Sir Robert Peel, the Duke of Wellington taking the Foreign Department. From this time to his death he became a steady Peelite, and as such he is at the present day, popularly the best known. The fidelity with which a little knot of able politicians attached themselves to their leader Peel through all fortunes, is a fact which is worthy of particular notice in the history of political parties in Britain. In 1835 the Peel ministry broke up and Lord Aberdeen was again in opposition to Lord Palmerston in the Foreign Office, whose policy of intervention he assailed on precisely the same grounds as before. In 1841 Sir Robert Peel again came into power, and gave Lord Aberdeen the Foreign Office, which he held till the fall of the ministry in 1846, after the passing of the Corn Law measure, which killed the Ministry, broke up the Conservative party, which so deeply affected the fortunes of the country, and the end of the consequences of which on the destinies of the empire we have not seen. Again in opposition, Lord Aberdeen resumed his old hostility to Lord Palmerston, and in 1850 took very strong ground on the Greek question, which created much agitation, and at one time seemed to threaten war. After the untimely death of his old leader, Peel, Lord Aberdeen became the acknowledged head of the Peelite party—perhaps party is too strong a term—apply to this little band of men of brilliant abilities. Lord Aberdeen remained in opposition to the Russell and Derby Administrations which succeeded that of Peel. In 1852 the Queen sent for him, and he succeeded in forming a Ministry which lasted till 1855. Thus during these three years, for the first and last time in his long political career, he became Premier of Great Bri-

tain. His Ministry was necessarily a coalition one. Parties had become so broken up by the course which Sir Robert Peel had thought it right to pursue in the passage of the Corn Law Act, that no other kind of Ministry was possible. The Aberdeen coalition Ministry was yet bitterly assailed, because of the diverse elements which were united in it, particularly by the master of sarcasm, Mr. D'Israeli. "England has not loved coalitions," he bitterly told the author of the motion which killed the Government of which he was a member, and he always preached afterwards with particular delectation from that text. Lord Aberdeen's Ministry fell in consequence of the passing of Mr. Roebuck's motion in the House of Commons, for a committee to inquire into the state of the British army before Sebastopol. The resolution was not directly one of want of confidence; but indirectly it was very strongly so. The Government opposed it as such, so nothing else was left for them but to resign. The nation felt that they had very badly conducted that war; that they had in fact compromised, by their carelessness, the honor of the British name. Lord Aberdeen, who was now an old man of more than three score years and ten, must have felt keenly the mortification of the situation, although we believe there never was any personal blame attached to him. After the fall of his Ministry he did not take much part in politics until the day of his death. He was ever regarded as the particular friend of France, and probably did more than any other man to promote a good understanding and alliance between France and Britain.—*Montreal Gazette*.

—His Royal Highness Prince Alfred has left the *Euryalus* 50, to enable him to obtain experience in the navigation of a larger ship, and he joins the *St. George* 90, in January, when, having visited Africa in the frigate he will have an opportunity of seeing the western continent, his new trip being to the West Indies and North America. Some of the other midshipmen of the *Euryalus* will be transferred with His Royal Highness to the *St. George*.

—A machine, constructed by a Quebec mechanic, says the *Canadian*, is now used in the Post-Office of that city, by means of which a great number of letters can be stamped in any given time. He intends taking a patent for his invention.

—The Order of the Garter was conferred on the Duke of Newcastle by Her Majesty the Queen, at Windsor Castle, December 17.

—The press employed in printing this *Journal* and the *Journal de l'Instruction Publique* is now, and has been for some time, worked by means of an Ericson Engine. We translate from our French *Journal* for December, just issued, the following extract:—

"We already noticed, in our last number, the Ericson Engine used in Mr. Eusebe Senecal's establishment. Our readers will forgive us if we again speak of it. But it seems to us that this engine, so simple and so ingenious, is destined to work a complete revolution in mechanical science by its safety, the saving effected and the ease with which it can be managed. Mr. Senecal tells us that the heating of this machine, with a cylinder of 18 inch diameter, will require 70 lbs. of coal per diem, costing about 25 cents. This is a great saving, when we compare the quantity of fuel consumed by a steam engine. It is of about three horse-power, but some are made of greater strength. However, it appears that where a very high power is required, these engines cannot be employed advantageously; still perhaps with the improvements constantly introduced, they may ultimately replace steam-motors.

"Ericson devoted thirty years of his life to the realization of the idea he had conceived. In making his experiments he built engines of all sizes, with cylinders from 6 inches to 60 and even 70 inches in diameter. The cost of the Ericson engine is doubtless great, but the increasing demand will tend to lower this. We are pleased that a Canadian has introduced this new motor in Montreal. Certainly this is progress."—*D'Ordre*.

The terms of subscription to the "*Journal de l'Instruction Publique*," edited by the Superintendent of Education and M. Jos. Lenoir, will be FIVE SHILLINGS per annum, and to the "*Lower Canada Journal of Education*," edited by the Superintendent of Education and Mr. J. J. Phelan, also FIVE SHILLINGS per annum.

Teachers will receive for five shillings per annum the two Journals, or, if they choose, two copies of either the one or of the other. Subscriptions are invariably to be paid in advance.

4,000 copies of the "*Journal de l'Instruction Publique*" and 2,000 copies of the "*Lower Canada Journal of Education*" will be issued monthly. The former will appear about the middle, and the latter towards the end of each month.

No advertisements will be published in either Journal except they have direct reference to education or to the arts and sciences. Price—one shilling per line for the first insertion, and six pence per line for every subsequent insertion, payable in advance.

Subscriptions will be received at the Office of the Department Montreal, and by Mr. Thomas Roy, agent, Quebec; persons residing in the country will please apply to this office per mail, enclosing at the same time the amount of their subscription. They are requested to state clearly and legibly their names and address and also the post office to which they wish their Journals to be directed.