

## Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- |                                     |   |                                     |   |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/>            | Coloured covers /<br>Couverture de couleur  | <input type="checkbox"/>            | Coloured pages / Pages de couleur   |
| <input type="checkbox"/>            | Covers damaged /<br>Couverture endommagée   | <input type="checkbox"/>            | Pages damaged / Pages endommagées   |
| <input type="checkbox"/>            | Covers restored and/or laminated /<br>Couverture restaurée et/ou pelliculée   | <input type="checkbox"/>            | Pages restored and/or laminated /<br>Pages restaurées et/ou pelliculées   |
| <input type="checkbox"/>            | Cover title missing /<br>Le titre de couverture manque  | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/<br>Pages décolorées, tachetées ou piquées  |
| <input type="checkbox"/>            | Coloured maps /<br>Cartes géographiques en couleur  | <input type="checkbox"/>            | Pages detached / Pages détachées  |
| <input type="checkbox"/>            | Coloured ink (i.e. other than blue or black) /<br>Encre de couleur (i.e. autre que bleue ou noire)  | <input checked="" type="checkbox"/> | Showthrough / Transparence  |
| <input type="checkbox"/>            | Coloured plates and/or illustrations /<br>Planches et/ou illustrations en couleur   | <input checked="" type="checkbox"/> | Quality of print varies /<br>Qualité inégale de l'impression  |
| <input checked="" type="checkbox"/> | Bound with other material /<br>Relié avec d'autres documents  | <input type="checkbox"/>            | Includes supplementary materials /<br>Comprend du matériel supplémentaire   |
| <input type="checkbox"/>            | Only edition available /<br>Seule édition disponible  | <input type="checkbox"/>            | Blank leaves added during restorations may<br>appear within the text. Whenever possible, these<br>have been omitted from scanning / Il se peut que<br>certaines pages blanches ajoutées lors d'une<br>restauration apparaissent dans le texte, mais,<br>lorsque cela était possible, ces pages n'ont pas<br>été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion<br>along interior margin / La reliure serrée peut<br>causer de l'ombre ou de la distorsion le long de la<br>marge intérieure. |                                     |   |
| <input checked="" type="checkbox"/> | Additional comments /<br>Commentaires supplémentaires:  |                                     | Continuous pagination.  |

# JOURNAL OF EDUCATION,

Upper  Canada.

Vol. VIII.

TORONTO: NOVEMBER, 1855.

No. 11.

CONTENTS OF THIS NUMBER.

	PAGE
I. Education and Prosperity in U. C. from a Canadian Point of View.....	161
II. The Scenery of Canada. By the Rev. Dr. Lillie.....	165
III. Inaugural Discourse of John W. Dawson, Esq., F.G.S., Principal of McGill College, Montreal.....	165
IV. PAPERS ON PRACTICAL EDUCATION.—1. Educational Influence of Music. 2. Gymnastic Exercises. 3. Education of French Girls.....	170
V. MISCELLANEOUS.—1. What will they say in England? (Poetry.) 2. The Noble Dead of the Crimea. 3. The Royal Family and the Fall of Sebastopol. 4. The Graves in the Crimea. 5. Arctic Expedition—Return of Dr. Kane and Lieut. Hartstein.....	171
VI. EDUCATIONAL INTELLIGENCE.—1. Canada Monthly Summary. 2. Trinity College, Toronto. 3. British and Foreign Monthly Summary. 4. United States Monthly Summary.....	178
VII. LITERARY AND SCIENTIFIC INTELLIGENCE.—1. Monthly Summary. 2. Canadian Natural History. 3. Eclipse of the Moon. 4. The British Association at Glasgow. 5. The New Reading Room of the British Museum.....	174
VIII. Departmental Notices.....	176

but now that both have been in operation sufficiently long to produce some satisfactory results, the public and the press alike join in expressions of congratulation on the past, and in ardent anticipations of continued prosperity for the future.

Two events of some interest have recently conspired to call forth an expression of this feeling in the province. The first, was the recent tour of the Governor General of Canada, and his arrival at the new seat of government; and the other was the farewell visit which the Governor-in-Chief of the Windward Islands made to the west before leaving Canada to assume the reins of government in these Colonies.

We have already inserted some of Sir Edmund Head's references to our educational system, in reply to addresses which had been presented to him. The remaining addresses, presented by various educational and literary bodies, together with his Excellency's replies, we now insert in this number of the *Journal*.

EDUCATION AND PROSPERITY IN UPPER CANADA, FROM A CANADIAN POINT OF VIEW.

Colonial patriotism, in its restricted sense, is a noble instinct in the Colonist. Duty and affection naturally bind our hearts to the land of our fathers: the home of our childhood; but a higher duty, and a no less strong affection, should lead us to love the land we live in, its laws and its institutions. Loyalty to the Sovereign and reverence for the good and great of the Empire should ever characterize us as Colonists; but a sacred obligation rests upon Canadians, whether native-born or adopted, to cherish feelings of a sincere and ardent patriotism for their own land. It is true that, hitherto, many adverse influences have prevented the growth of this feeling; but, nevertheless, an attentive observer might have witnessed with pleasure how gradually and silently it has, during the last few years, been developing itself, until to be a Canadian Colonist is now an honor and distinction, even beyond the boundaries of our own Province. This has been strikingly exemplified in the recent case of an eminent Canadian Colonist having been selected by Her Majesty to fill a distinguished post in the Imperial service. So noble and yet so disinterested, so delicate and yet so just a tribute to Canadian worth and patriotism, has never before been paid by the Sovereign. Let us regard it as the inauguration of a new era in our colonial history, from which to date a brighter future.

Until very recently, our institutions were undeveloped, and our systems of municipal government and of education were unformed;

The addresses delivered on the occasion of the farewell visit of the Honorable Francis Hincks, being non-political, were also less formal than those presented to the Governor General; besides presenting a fuller picture of the general prosperity of the Province. This was the more appropriate, since all parties concerned were, as actors, more interested in a recital of the facts referred to, than a gentleman who had just arrived among us. The references to the prosperous state of our Common Schools must have been particularly gratifying to the late Inspector General, who was himself the author of the School Act of 1843, which has formed the basis of the present school law; and who has ever proved himself the enlightened friend of the Common School System of Upper Canada. In the address presented to the Hon. Mr. Hincks from the County of Oxford, the following passages occur: "We now enjoy a system of public instruction which will compare favorably with any other country; a system of municipal government which secures to every locality its just share of influence and consideration, an expanded and expanding commerce, improved agriculture, a replenished treasury, boundless public credit—in short, within the period adverted to, every interest of the country, whether moral or material, has been quickened, and is now advancing with a rapidity almost unparalleled. For these happy changes, sir, the people of Canada acknowledge themselves very much indebted to your public services. They do not forget, however, that you have been aided and supported in these services, by your late and former honorable colleagues, and especially by the illustrious nobleman and exalted statesman who, until recently,

presided in Her Majesty's name over the affairs of this Province, whose names will stand beside your own in the future history of the country."

From the speech of V. Hall, Esq., delivered on the same occasion, we quote the following: "This appointment is the first proof that has been given that Canada is something more than a colony. Through our own indomitable energy we have placed ourselves in such a position that the British Empire now considers us a part of itself. We have earned it by our appearance at the Great Industrial Exhibition, and now Britain thinks it desirable to obtain from us a part of our talent. If we make such giant strides in the future as we have done in the past, England will certainly begin to look upon us as the Mother Country! Gentlemen, England has treated us with a liberal and generous spirit, and now we may look upon ourselves as a nation and not as a colony. Yet we have that affection for her, that we are bound to her stronger than before. She has now so much confidence in our stability and our loyalty that she leaves us without a single soldier to protect her interests, well knowing that we are now ready and willing to defend them ourselves."

The eloquent and patriotic speeches of the Honorable Post-master General Spence, at Brantford, Oxford, and London, furnish abundant material for our purpose, but we restrict ourselves to the following extracts:

"A predecessor of my honorable friend found it difficult several years ago to raise £30,000 in the English market on the bonds of the Province. What is our position now? I need not tell you gentlemen, what amount might now be got. These advantages have resulted from our municipal institutions, our wholesome jury laws, our educational system and from the other measures which have been so successfully given to the country."

Gentlemen, I confess that what I myself lately saw when I came into this great western country—when I saw the consequences of our great railroad system—when I saw the blocks of buildings, gigantic edifices, commodious hotels, springing up as it were in the wilderness—when I see every man engaged actively in the prosecution of his own affairs—when I see all men happy and glad—capital in full requisition—land doubling and trebling in value—produce of all kinds meeting a ready sale—and, when I saw, as I did, on coming along, fifty-five cars loaded with the produce of the farmers, and going to a distant market, to bring back money in return, to this country—when I see all this, I begin to think of the time when my honorable friend had to strike out a system by which our public schools could be supported, I think of the time when Mr. Hincks boldly struck out his scheme for issuing debentures, in order that the schoolmaster might be paid; and when the credit of the Province was so low that he had to resort to some of his own friends to convert this paper into money, in order to sustain the credit of the school system." (Great applause.)

Mr. Hincks leaves Canada shortly. Ere fourteen days shall have elapsed, he will have left the shores of this his adopted country. We all wish that he may return in the evening of his days to have his heart gladdened at our prosperity. What has he left behind? Look at that municipal system by which you have been enabled to produce works as vast as any in England or in the world. Look at that system in all its ramifications—look at our Legislature—now freed from parish business, which made that legislation contemptible in bygone years. What Canadian heart but feels light now at the position which his country occupies in the world, when he can land at Liverpool or London, or any of the great cities of Europe, and say, I am a Canadian! Look at our educational system—our beautiful common school-houses, and our grammar schools which are being dotted over the whole surface of our country."

The following is the remainder of the addresses presented to Sir Edmund Head, during his recent tour, with His Excellency's replies. The *Hamilton Spectator* of the 3rd instant states, that while in that city, the Governor General intimated to the School Trustees his desire of visiting the Central School before leaving for the Seat of Government. Punctual to the time appointed, His Excellency, accompanied by Sir Allan McNab, was received at the school by the Trustees and the Head Master. His Excellency visited each of the classes in the School, and listened with evident satisfaction to the recitations, particularly to examinations in astronomy and philosophy, with which he was pleased to express himself highly gratified, as also with the exercises in reading and arithmetic.

Among those present on the occasion were several of our leading citizens. At the conclusion of His Excellency's visit, O. Springer, Esq., Chairman of the Board of School Trustees, presented the following address:—

We the Trustees and other officers of Common Schools in the City of Hamilton, beg leave on the occasion of your Excellency's visit to the Public Schools of this city, to express our feelings of respectful

consideration to Your Excellency, and our grateful acknowledgments for the distinction thus conferred upon our schools for the first time by a representative of Her Majesty. This attention on the part of Your Excellency is the more cheering to us, from the fact of its being spontaneous, nor would it have been unsolicited by us, but that the inspection of local Common Schools has not usually been among the subjects deemed suitable to be intruded upon the attention of those holding your Excellency's exalted rank. The Common Schools of this city, forming part of the great Provincial system so munificently established by the Legislature, afford the opportunity of a rudimentary education to all classes. Our schools are free of expense to those who seek education, upon the principle which affirms the right to this kind of instruction to be as common to every member of the community as the right of personal liberty, or amenability to the laws. We beg on this occasion to advert to the fact that our Public School system is not matured although projected on a noble basis, and its departments worked with admirable ability; and we would hail this present mark of your Excellency's attention, not only as an evidence of deep interest in this great subject, but also as an earnest of your Excellency's enlightened aid in rendering the system yet more efficient. In conclusion, we would express the lively satisfaction with which we, in common with all our fellow-citizens, have observed your Excellency's progress through Western Canada, evincing as it does a determination to know from actual observation the requirements and capabilities of this new and extensive country, and we devoutly trust that Providence may daily confer upon us as a people the advantage of your Excellency's Administration of our affairs.

His Excellency was pleased to reply, in substance as follows:—That the degree of interest felt by him in our Schools should not be measured by the length of time which he could devote to his present visit, which was necessarily limited, on account of being obliged to hasten to Toronto; that he was highly gratified by his present inspection of the School, and felt that its management reflected great credit on the Head Master. That he would avail himself of some future opportunity of again visiting the School, when he felt no doubt that his present favorable impressions would be greatly strengthened. His Excellency further complimented the interest which was exhibited by our citizens in the establishment and maintenance of our present admirable system of Schools.

On the 2d instant the Governor General reached Toronto. Among the various addresses presented on his arrival were the following:—

#### UNIVERSITY COLLEGE.

We the Officers and Members of University College, desire to approach your Excellency with renewed assurances of our devoted loyalty to Her Majesty, and with the expression of our confident expectations of the beneficial results that will accrue to the Province from your Excellency's administration of its government. Connected as we are with an institution intended, under your Excellency's visitatorial supervision to disseminate literary and scientific knowledge and to promote the interests of the community by diffusing the blessings of Education of a high order, we feel that we may justly anticipate your Excellency's countenance and support in the important work in which we are engaged. Nor can we doubt that such encouragement will be freely extended, when we call to mind that your Excellency has yourself had practical knowledge of the advantages which arise from the culture afforded by similar institutions,—and that you have already evinced, as the Governor of a sister Colony, your appreciation of the benefits of academic training. Permit us most respectfully to offer our cordial welcome on your arrival in our city, and to add our hope that your residence in Toronto may be as agreeable to yourself and your Excellency's family, as we feel persuaded it will be to us and to our fellow-citizens.

#### REPLY.

I am happy to acknowledge the great importance of your excellent Educational Institution, the advantages of which I fully appreciate. While thanking you for the intended compliment, I cannot venture to anticipate the beneficial results you confidently expect will accrue from my administration of the important trust it has pleased Her Majesty to charge me with. I return you my sincerest thanks for the cordial welcome you have extended to me.

#### TRINITY COLLEGE.

We, the Vice-Chancellor, Masters, and Scholars of the University of Trinity College, Toronto, beg leave to tender to your Excellency our respectful congratulations, upon your entrance on your official residence in this city. We are assured that your Excellency cannot, in your public capacity, be indifferent to any effort which is made to promote sound learning within this Province: and we trust that we may, on our part, never forget the peculiar obligations under which institutions, such as that which we represent, must ever lie to the cause of order and of loyalty. Permit us, Sir, to add that we recognize, with the highest satisfaction, in the person of your Excellency, a member of one of the ancient Universities of England, whose distinguished

academical career must alike qualify and dispose him to regard with generous sympathy every endeavour to secure to the youth of Canada a share of those intellectual advantages which are so richly enjoyed in the mother country. It is our earnest prayer that your Excellency's administration of the Provinces, which Her Majesty has entrusted to your care, may conduce alike to the public welfare, and to your personal honour and happiness.

## REPLY.

I receive your Address with much satisfaction. The benefits of a sound University Education cannot, I conceive, be over estimated. Accept my thanks for your assurances of loyalty and respect, and attachment to the gracious Sovereign whose representative I am.

## UPPER CANADA COLLEGE.

In respectfully welcoming your Excellency to the city of Toronto, we, the Principal and Masters desire to express our feelings of satisfaction in having near us one to whom the interests of Upper Canada College have been so happily entrusted. The position which Upper Canada College has ever occupied, as the Chief Grammar School of the country, seems to justify us in looking for that encouraging support from your Excellency, as our Visitor, which it has been our privilege to receive from your Excellency's predecessor. We trust that should your Excellency visit Upper Canada College you will be pleased with the soundness of its system; and it is gratifying to us to add, that this system is now being disseminated through the Province by the instrumentality of pupils of Upper Canada College who, without any special training thereto, are undeniably among the most able and successful of the teachers of the District Grammar Schools. And not only this, but to the Universities of home and of this country, to the Bar, the Pulpit, the Legislature and the Battle Field, has Upper Canada College sent forth her sons, and in all have they won for themselves an enviable distinction. We gladly avail ourselves of this opportunity to express the belief that your Excellency's administration of this important and flourishing part of the dominions of our beloved sovereign, will be attended with increased happiness to its people and honor to yourself.

## REPLY.

All that I have heard of the institution with which you are connected, leads me to believe it to be one of the highest value. It is your business to lay the foundation for future statesmanship, and professional eminence, by enabling the youth of Canada to profit by the aids to be derived from sound learning, and from the eloquence and wisdom of antiquity. Without this training your lawyers, your physicians, your theologians, and your statesmen, would not be on a par with those of other nations. I receive therefore, with much pleasure, the address which you have just read; it is, I fear, too flattering to myself, but I thank you for it, as a welcome on your part to the City of Toronto.

## VICTORIA COLLEGE.—MEDICAL FACULTY.\*

We the President, Professors and Students of the Toronto School of Medicine, the medical department of the University of Victoria College, beg most respectfully to approach Your Excellency in terms of warm gratulation on the auspicious occasion of Your Excellency's assumption of residence, with Lady Head and family, in the Western Metropolis of Canada. We beg to assure Your Excellency of our unabated attachment to Her Most Gracious Majesty, whose reign has been alike august in peace and glorious war. We feel assured that Your Excellency's love of literature and distinguished mental refinement, cannot fail to enlist Your Excellency's warmest sympathies in behalf of every literary and scientific institution in this prosperous and rapidly progressing portion of the British Empire, now placed by our Gracious Sovereign under the auspices of Your Excellency. The progress of our School, as that of our country, has been steadily onward, and has been secured by the self-relying effort which has characterized every other successful Canadian enterprise. The annually increasing number of its pupils, and the estimation in which its graduates are held throughout the country, evince the consideration it enjoys from an intelligent and enquiring people. As the medical department of the University of Victoria College, we shall continue to labor faithfully to respond to the high requirements necessary to render it a fitting adjunct to so noble and prosperous an Institution.

## REPLY.

The study of Medicine is recommended to every one by its intrinsic interest, as well as by its usefulness in preventing and alleviating the sufferings of mankind. I sincerely trust that your University may long promote the sound and successful cultivation of the theory and practice of this noble art. I thank you for your congratulations, and for the welcome to Western Canada conveyed in your address.

## MECHANICS' INSTITUTE.

\* \* \* \* \*  
As a patron of literature and science, your Excellency will, no doubt, be gratified to learn that the Mechanics' Institute of this City has been twenty-three years in existence: that it embraces a good Library and Reading Room, with a considerable amount of Philosophical apparatus: that it numbers five hundred and sixty members: that during the winter months a regular course of weekly voluntary Lectures is delivered, of an interesting and improving kind, by our most eminent scientific men: and that so highly has the influence of this Institution been appreciated by the community, and so liberal has been the support extended to it, that latterly the Managers have been enabled to erect a large and substantial edifice to subserve the great purposes for which it has been established. In promoting a love of knowledge and a taste for scientific pursuits amongst the industrious classes of society, the officers of the Mechanics' Institute believe that they are not only contributing to the personal elevation and happiness of the individual members of the body—but to the formation of that social order and security which spring from the diffusion of sound knowledge and correct moral principles among the population. Substantial freedom and good government rest, they believe, upon the basis of general intelligence and morality.

## REPLY.

It affords me great pleasure to receive at your hands these assurances of congratulation, and to learn from the Address now presented to me, that the valuable Institution with which you are connected is in a prosperous condition. I consider that you have it peculiarly in your power to soften the toil of the working man, and to elevate the minds of the industrial classes. I feel the importance of such Institutions, and shall always be ready and anxious to promote their success.

The following Addresses from the Canadian Institute were presented on the highly interesting occasion of laying the corner stone of the Institute building, on Pembroke street, on the 18th instant. The references of Sir John Beverly Robinson, the Chief Justice of Upper Canada, to the "strenuous efforts of the Government and Legislature of this Province for the diffusion of elementary instruction among all classes of the people" were characteristic of the Chief Justice, and were peculiarly graceful and appropriate,—since the future prosperity of the Canadian Institute, and all kindred associations, can only be finally attained in a community where education is diffused "among all classes of the people."

## THE CANADIAN INSTITUTE.

We the President, Council, and Members of the Canadian Institute of Upper Canada beg leave to renew the assurance of our devoted loyalty to Her Majesty, and to express to your Excellency the high gratification with which we see, in the Representative of our Gracious Sovereign—one who by the distinctions achieved by him as a member of the most ancient University of the Empire, has given the best evidence of his personal interest in the cause of learning. Permit us, on this the first occasion of our unitedly addressing your Excellency, most respectfully to offer to you our cordial welcome to the Capital of Upper Canada, and to express to you the satisfaction with which we are animated by the assurance that while your wisdom and experience will guide you in those responsible administrative duties which lie beyond the sphere of our objects, your distinguished academical career furnishes a guarantee for your generous sympathy and encouragement in all that relates to the progress of those objects for the promotion of which we are associated together. The Canadian Institute, founded in the year 1849, and incorporated by Imperial Charter in 1851, has been established for the encouragement of learning and the development of science and the arts throughout the Province. Originally instituted by a small body of gentlemen, united for the purpose of promoting one special branch of practical science, it has since extended its aim so as to embrace the widest range of a Scientific and Literary Society, and now numbers upwards of 400 members resident in all parts of the Province. The steps adopted for carrying out these comprehensive objects have been: *Firstly*.—The formation of a Library of scientific reference available to the public at large, and which, now that an amalgamation has been effected with the Toronto Athenæum, and the books of both Institutions have been united, already constitutes the nucleus of a Library from which valuable results may be anticipated. *Secondly*.—The establishment of a Museum with a special view to the illustration of the natural history and mineral products, and the economic and industrial resources of the Province, as well as the ethnological and archeological contributions to history, which specially pertain to this important section of the new world. *Thirdly*.—The reading of original scientific and literary communications and discussion of the subjects thus in-

\* Presented at the Levee on the 19th instant.

roduced at weekly meetings held in Toronto during the winter session; and fourthly.—The publication of a monthly journal, which has now been in successful operation for more than three years, and forms not only a report of the proceedings of the Institute and of other scientific bodies in the Province, but is designed to embody a record of the intellectual and economic progress of Canada, as well as to furnish an abstract of scientific proceedings throughout the world. In accomplishing these objects, the Institute has gratefully to acknowledge the liberal encouragement of the Governor, by means of an annual grant of money and free accommodation furnished in the Government House. The withdrawal of the latter, consequent on the transference of the Seat of Government to Toronto, added to the requisite increase of space rendered indispensable for completing the scheme of establishing a Provincial Scientific Library and Museum, have mainly contributed to force upon us the necessity of providing adequate and becoming accommodation in a building of our own. In furtherance of this, we have to acknowledge the gratifying recognition of the public benefits already resulting from the Institute in the important aid extended to us by the Provincial Government for this special object, in addition to the liberality of many of our own members; and especially the valuable gift of this site, presented to the Institute by George W. Allan, Esq., and now to be dedicated with your Excellency's gracious aid to the cause of Canadian science and scholarship. Animated by the assurance of your Excellency's cordial sympathy in such a cause, we hail your presence among us this day as an evidence of your approbation of the objects aimed at in our union as members of this Institute, and of your appreciation in the value of such institutions for promoting the diffusion of knowledge and the advancement of science and sound learning, on which the true glory of this great empire is founded, and by which the future greatness of this Province must be advanced. Permit us, then, to crave of your Excellency on this auspicious occasion, when we are assembled to found a building to be devoted exclusively to the peaceful objects of intellectual emulation, that you will be graciously pleased to commence the work for us by laying the first stone.

## REPLY.

If my presence here to-day can benefit the institution to which you belong, I feel that you have a double claim upon me. Indirectly, I have been the means of turning you out of house and home; the least I can do is to help in inaugurating you in your new dwelling. But the intrinsic usefulness of a society such as yours, is the strongest reason why I would do my best to promote its interests. The means which you have adopted for diffusing a taste for science and literature seem well calculated for attaining their end. Your museum, your lectures and your journal, all tend to produce those feelings which are essential to progress in knowledge of all kinds. They encourage the conviction that every fragment of information, and every scrap of knowledge is valuable, without reference to its immediate practical utility. A fact established is so much gained towards the sum total of human knowledge, and no man can say in what train of reasoning that fact may hereafter form a stepping-stone. The stores of your library will serve to supply the refinement of taste and the cultivation of the intellect, which enable one man to impart knowledge to another in its most attractive form—which make the act itself of learning a relaxation and a pleasure. I receive with the utmost satisfaction the assurance of your loyalty to our gracious Queen. As regards myself personally, your address is far too flattering in every way; but I thank you for your welcome to Toronto, and I trust that my readiness to lay the first stone of this building will be likewise a mark of my desire to promote on all occasions the interests of the Canadian Institute.

G. W. Allan, Esq., the Vice-President of the Institute, then handed a document to the President and said—I have much pleasure in presenting you with a deed of this ground, as the site of a building for the Institute. In doing so, permit me to express my great satisfaction at having it in my power in any way to promote an institution in whose welfare I take so deep an interest, having been connected with it from its earliest commencement. Having watched its progress to its present state of prosperity, I look forward with no small degree of pride as a Canadian, to the time when this society shall be entitled to take rank among similar institutions of name and standing. I trust this day's proceedings will give a fresh impetus to the society. When I recollect the very different scene this very site presented not many years ago, when this ground was covered with a dense forest, and now about to be adorned with a building dedicated to Science and Literature, I am cheered at having been in any way instrumental in aiding an institution whose fame, I trust, will extend far beyond the limits of Canada.

The President replied as follows:—

Mr. ALLAN.—The Canadian Institute accepts with grateful acknowledgments your very liberal gift; and I feel that I could scarcely express too strongly the sense entertained by the Council and Members of the Institute for the obligation which you have conferred upon them. They are well aware of the pecuniary value of the donation, for they

are not ignorant of the large price which in this prosperous city can be readily obtained for land less eligibly situated. And I need not tell you how materially the value has been enhanced by the grant coming so opportunely, at the moment when the patronage of the Legislature has enabled the Institute to proceed in the erection of a building, and when they only wanted a proper site on which to place it. This they now possess, through your kindness. And the Canadian Institute, and its friends, will seldom look upon the handsome and commodious structure by which they intend this ground shall be adorned, without recalling how much they are indebted for it to your respect for science and to your known disposition to co-operate heartily and generously in every measure by which the character of your countrymen may be elevated and their rational enjoyment promoted.

The Rev. Mr. Grasett then offered up the following very appropriate and impressive Prayer:—

O Almighty God, Father and Creator of all; thou who by wisdom didst make the heavens and lay out the strong foundations of the earth, we bow before thee and humbly offer up our prayers and supplications for a blessing on our present undertaking.

In all our works we depend on thy protection and power. Enable us to begin, continue and end them all in thee; for, O Lord, there is no wisdom like thy wisdom, no power like thy power, and therefore no dependence secure from disappointment, but that of making thee our trust.

Make us always mindful that in the important purposes for which we are here associated, we have constant need of that illumination to guide us, which cometh down from above. And do thou so bless our endeavours that those who shall here pursue the study of thy laws and of thy works, may be impressed with a due sense of the motives from which they should act, and the ends which they ought to seek in the whole course of their life. Thus may they pass their days and pursue their investigations with comfort and satisfaction to themselves, and, through thy mercy in Christ Jesus, enter into thy eternal rest when the hour of their departure shall arrive.

We pray thee to sanctify the pursuits of this Institute and of every kindred Society, and cause them to redound to thy glory and to the good of mankind. O let not infidelity be suffered to extend its deadly influence among men. And do thou not only preserve the profession of Christianity in the world, but pour forth the Grace of thy Holy Spirit on all who believe in its truth, that they may shew forth a greater zeal in its cause and adorn it by a more holy example.

Grant that the days of peace may return, and with them abundance of grace. Let the light of thy Holy Word and the blessings of civilization resulting therefrom spread abroad in all lands. O hasten on and delay not the day, when all, from the least to the greatest, shall have a true knowledge of thee and of thy ways—when men shall beat their swords into plowshares, and their spears into pruning hooks, when nation shall not lift up sword against nation, nor learn war any more. But if it be not yet thy will to put an end to the distress of nations, we earnestly pray thee to shew mercy to afflicted individuals, by making the sufferings which they have to endure in this life the means of their looking for that blessed hope, and the glorious appearing of our Saviour Jesus Christ.

Make us all sensible of what we owe to thee, for our quietness at home; for the uninterrupted administration of the means of grace; and for the blessings of civil and religious liberty which we so abundantly enjoy. Give us grace to make such a diligent use of these blessings, as to be daily improving in faith, holiness, charity, and all other christian virtues; that whatever be the events which, in thy righteous providence, thou mayest permit to take place in the world, or however they may affect us in our temporal circumstances, our souls may hereafter be received into thy heavenly kingdom.

These mercies we ask in the name of Our Lord and Saviour Jesus Christ; through whose mediation we hope for them, and to whom, with thyself, O Father, and the Holy Ghost, be glory for ever and ever. Amen.

The stone having been adjusted, the President then addressed His Excellency as follows:—

Though the Society, whose home is to be on this spot through many years, as we hope, of increasing usefulness, is but of recent origin, its members form already a numerous body, and are widely dispersed over the Province. It will give great pleasure to those of them who are absent, to learn, as it has to those who on this occasion are present to witness, the auspicious commencement of our projected building, and they will be grateful to your Excellency for the part which you have condescended to take in this proceeding. The efforts of the Canadian Institute to accomplish the objects for which it was organized, must for a time be feeble; and in speaking of the benefits which we trust it may be the means of conferring, it becomes us to express our hopes rather than our convictions. Yet the country which is to be the field of its operations, is said by your Excellency to be one of great promise; and, if it shall please the same good Providence, which has given to us in such abundant measure the elements of material progress, to bless us with the continuance of peace, and to maintain among our



people the same respect for law and order which has hitherto honorably distinguished them, it cannot be unreasonable to expect that some among the natives of Canada will become eminent in the walks of science, and obtain a celebrity which will shed lustre on the country of their birth. The Government and the Legislature of this Province, which have made such strenuous efforts for the diffusion of elementary instruction among all classes of the people, have done much to encourage the Canadian Institute in the early stage of its progress; and we have no reason to doubt that they will extend to it their continued countenance and support.

His Excellency said—Mr. President and Gentlemen of the Council, before quitting this spot I must express my perfect concurrence in those hopes which you have just given utterance to. I see every reason to hope that the future of Canada will make her as distinguished in Literature and Science as she is in her present progress of a material character. I see additional reason to hope this, when a single individual—Mr. Allan—has shown such zeal and liberality in the cause by the gift made on the present occasion. It gives me a double pleasure to assist in laying this foundation stone when so noble a donation has been made by one of the individual members of the society.

To complete this present paper, we give, in addition to the interesting extracts from recent publications inserted in this *Journal* for June and August 1855 (pp. 81-84 and 116-118), the following passages from the Rev. Dr. Lillie's admirable essay on "Canada, Economic and Social."

"The present Common School system of Upper Canada had its commencement in the passing of a law in 1841—introduced by Hon. S. B. Harrison—embodying the principle of granting money to each county on condition of its raising an equal amount by local assessment. (Dr. Ryerson's Report for 1852, pp. 267, 268.)

"School Acts, amending and improving that of 1841, were passed in 1843 and 1846—the former being introduced by the Hon. Francis Hincks, the latter by the Hon. W. H. Draper,—then Attorney General, now one of the Judges of the Court of Queen's Bench. The Hon. J. H. Cameron (then Solicitor General) introduced in 1849 an Act, which was passed, establishing a system of schools in cities and incorporated towns. In 1850 these two Acts were incorporated in one introduced by Hon. Francis (then Inspector General) Hincks; which further embodied such improvements as experience had suggested and the progress of the system required."

"It is to the honour of the political parties in whose hands the Government has been placed, that in whatever else they may have differed, one spirit appears to have animated them in regard to this—one of the most momentous of the country's interests.

"In 1844, the Rev. Dr. Ryerson—to whose intelligence and zeal we owe so much both of what is best in our school system and of the efficiency of its working—was appointed Superintendent of Schools for Canada West; an office which we trust he will long retain, enjoying in it the privilege of rendering to his loved native land services still more valuable than those for which she is already so deeply indebted to him."

\* \* \* \* \*

"Christianity forms,—as of right it ought to do among a people believing it to be from heaven,—the basis of the system, in the working out of which the clergy of all denominations are, to a large extent, combined with the people, at the same time that sectarianism is carefully avoided; the right of the parent to direct the religious instruction of his child respected, and the master protected against being called upon to teach that of which he disapproves."

\* \* \* \* \*

"The manner in which the Common School system is working is, on the whole, highly satisfactory. All parties concerned,—the municipalities, the boards, and the people on the one hand, and the officers on the other,—throw themselves into it with a zeal which entitles them to grateful commendation, and which is full of promise for the best interests of the country. The spirit in which the municipalities have met the liberality of the Government in its allowance of £3,000 per annum towards the establishment of Libraries is beyond all praise, the sums which some of them have voted for this purpose being very large.

"By the Act £1,000 per annum is granted in aid of the pupils in attendance on the Normal School, in addition to the sums already mentioned as allowed for its general support. The service which is being rendered the country by this excellent and admirably conducted institution is very great. And it is being well appreciated, for from every quarter application is being made for teachers trained there, whom a general disposition is being manifested to treat with liberality. The parties charged with the work of instruction in the Institution, are eminently qualified for the positions they occupy, and enjoy in large measure, not simply the confidence but the respect of their pupils—who, as a general thing, conduct themselves in a way which does credit alike to themselves and the country—and of all who stand

in official connection, or have the pleasure of acquaintance with them. Of the teachers of the Model School—in which the teachers in training have the opportunity of exercising themselves—the same thing is true. Throughout the whole establishment, including Dr. Ryerson's Assistant [now Deputy Superintendent] and the Clerks in the Education Office, the spirit of the Superintendent appears to have been caught, each one feeling that an important and honorable work is entrusted to him, and throwing himself—and herself—with a hearty zeal into it. Enjoying the best opportunities of knowing what has just been stated, I feel the testimony I bear to be due to all parties, but to none more than the Government and the country at large, whose enlightened liberality has originated and is so generously fostering our whole Educational arrangements.

"To the late Governor General, his Excellency the Earl of Elgin—who laid the corner stone of the Normal School Building, and paid the institution a parting visit just before leaving the country—it is but justice to mention that he gave annually two valuable prizes of books for the encouragement of the study of Agricultural Chemistry, besides manifesting in other ways, in every way in his power, an affectionate interest in the establishment."

### THE SCENERY OF CANADA.

The Rev. Dr. Lillie, in his essay on Canada, thus speaks of its scenery:—

The sublimity of Niagara will be admitted by every one possessing a heart, who looks upon it; and the surpassing beauty of the Thousand Isles. While, however, these may claim the pre-eminence, they are far from standing alone. To say nothing of our Lakes (than a sail on which, on a fine summer's day, nothing can well be more delightful), our river scenery will vie with that of any country I have seen. Even with the scenery of the Ottawa, neither that of the Mississippi nor the Missouri is to be compared. The Grand River exhibits much beauty, especially in the neighborhood of Paris and Galt, and between these two places on the south side. The spring and summer views in the neighborhood of Dundas are exhilarating in a high degree; and that from Hamilton Mountain transporting. It would not be easy to find language which could justly describe the scenery of the St. Francis, the Richelieu, Lake Memphramagog, the Yamaska, the Hills of Dunham, with many other portions of Lower Canada. Let a man of taste pass over the country, and his eye and heart will drink in delight everywhere. Who that has only once seen our forests in autumn will lose the recollection of them? But I must forbear. Canada is—and I have seen the greater part of it—emphatically a beautiful country.

Buckingham thus speaks of a sunset witnessed by him on the St. Lawrence (5th September, 1840) between Quebec and Montreal:—"The sunset upon the river was one of the richest and most beautiful that I had for a long time witnessed, and would be thought an exaggeration if faithfully depicted on canvass. I remember nothing in the Mediterranean or the Indian Ocean equal to it; and only one sunset superior, which was that seen amid the forests of Tennessee, in the autumn of the last year." (162, 163.)

We take a low and unworthy view of it if we regard the beauty which the God of Nature has scattered so profusely around us, merely as a source of enjoyment; though it be that—and a source of it, too, in perfect harmony with our rational nature—it is an important means of mortal, not to say spiritual improvement, when used aright. Be it ours, then, while drinking in the joy which it inspires, to realize the higher benefits of which it is designed as the vehicle.

\* \* \* \* \*

In beauty Toronto will compare, whether its public or private buildings be looked at, with any city of its size to be found elsewhere. The Provincial Lunatic Asylum, Trinity College, the Normal School, the two Cathedrals, the Banks, the new Mechanics' Institute, and the Ward Schools recently erected, reflect credit on the country. So do the long lines of splendid stores, and the elegant villas which abound on every hand.

### INAUGURAL DISCOURSE OF JOHN W. DAWSON, ESQ., F.G.S., PRINCIPAL OF MCGILL COLLEGE, MONTREAL.

Mr. President, and Ladies and Gentlemen,—In entering on the duties to which I have been called in this place, it gives me very much pleasure to have an opportunity of bringing before this large and intelligent assemblage a few thoughts relating to those great educational objects in which I trust we are all deeply interested—objects which, I believe, can in no way be better or more rapidly advanced, than by the public discussion of the principles on which they are based and the methods by which they are to be attained.

Before entering, however, on the proper subjects of this discourse, you will pardon me, as a stranger, for saying a few words on the circumstances in which I appear, before you. Invited by the governing body of this University to occupy an important place in its management and in the work of instruction within its walls, I might, had

I considered my own many deficiencies and the probable difficulties of the position, have entertained many doubts as to the propriety of entering on it. Believing, however, that in connection with this Institution, and in this the chief city of British America, I should have the best opportunities of promoting the study of the subjects to which I have devoted myself, and at the same time of advancing the cause of education, I determined without hesitation to cast in my lot with yours; and I humbly trust that with the blessing of God on diligent effort, I may be able to carry out the objects of my appointment.

At a time when literary and scientific pursuits are so widely ramified, every one who aims to do anything well must have his special field of activity. Mine has been the study of nature, especially in those bye-gone aspects which it is the province of geology to investigate. My only other special qualification for my present position depends on the circumstance that the wants of my native province have induced me to devote much time to inquiries and pursuits relating to popular education. I come to you, therefore, as a naturalist and educationist, trusting that I may be enabled in these capacities to render myself useful, and asking for my youth and present inexperience in the affairs of this institution, your kind indulgence, and for the work in which I shall be engaged, your zealous co-operation.

It is of course altogether unnecessary in addressing such an audience as the present, to dwell on the value of education in general. All who hear me will admit without hesitation that mental and moral culture are the only true foundations of the usefulness, prosperity, and greatness of individuals and of nations, and that no department of the social machine should be more zealously watched, more highly esteemed, or more liberally supported, than that which professes to train for a successful entrance on the business of life, those who will be the men and women of a few years hence. Nor need I insist on the truth that, in young and growing countries, where all is in a state of growth and transition, where boundless industrial resources are waiting to be drawn forth, where new social and political institutions are to be built up; and above all in a free country, where every one must think and act for himself in the most important concerns of life, and where any one, however humble his original position, may rise to places of the highest trust and influence, we should be content with nothing less than the highest possible education of the greatest possible number.

Such principles are now universally recognised in their bearing on Common School education, and they are not less applicable to the higher instruction with which we have now to do. In the higher institutions of learning, as well as in the lower, success must be attained by seeking as wide an utility as practicable, with as high a standard as possible of preliminary qualification and final culture. Nor are the difficulties of securing these ends in the higher walks of education less than in the lower. Experience rather tends to show that they are greater and less easily overcome.

It is a grave and common error to suppose that collegiate education has reached a point where it may safely remain stationary,—that its course has been unalterably fixed by authority and precedent. It is an equally serious and prevalent error, to take it for granted that it has attained its full extent of development when its benefits are confined to a few professional men and persons of wealth and leisure. Such views cannot in the present state of the world lead to the highest prosperity of collegiate institutions, nor cause their humanising and elevating influences to be extensively felt on the mass of society. Happily in our day wider views are becoming prevalent, and no subject has of late been more extensively agitated in educational circles than University reform. This reforming spirit has not only stamped its impress on all the newer Colleges, but has made a powerful impression on the oldest Universities on both sides of the Atlantic; and its tendency is to make the carefully elaborated learning of all the great academic centres become more fully, than it has yet been, the principal moving power in the progress of practical science, of useful art, and of popular education. As illustrations, I need only refer to the reforms now in progress in the great English Universities, to the recent establishment of a Technological Chair at Edinburgh, to the Scientific Schools of Harvard and Yale, to the special courses of practical science in the new London Colleges, and in the Queen's Colleges of Ireland, and to the similar improvements in Brown University, in Amherst College, and in the University of Toronto. The statutes of our own University contemplate similar improvements, and in its Medical School we already see an illustration of the splendid success which may attend their full introduction.

We may well ask, why should it not be so? In a period of great mental activity, when the world is straining after new truths and new utilities, and casting its old sloughs of prejudice and error, why should the Universities lie behind? Should they not rather move in the van, and annually send forth their students armed with the newest weapons to do battle with the most recent errors, and prepared to explore the regions that lie beyond the circle of present knowledge. These modern views of University reform, in truth, mark most fully and accurately the true place and utility of the higher education. The College is

intended, in the first place, to take the young man where the School leaves him, and develop its elementary training into the more matured mental habits of the man of business, the professional man, and the scholar. It finds its subjects schoolboys; it aims to leave them men fitted to act creditably in the circumstances of their age and country, and to mark out and pursue those courses in life to which their tastes and powers incline them. In the second place, while it is the province of the University to preserve the literature of the past, it does so for the benefit of the present; and if it endeavours to gather into one focus the scattered sparks of light eliminated in different countries and by different minds, it does so that it may pour their accumulated radiance on the part of every young aspirant to honour and usefulness. In this view its stores of ancient and foreign learning, are not so much intended to form the character and limit the aims of the student, as to place him on a vantage ground whence he may mature a higher character, and if possible work out nobler results. In the third place, since the maintenance of collegiate institutions must practically depend on the acceptance of the great truth, that the progress of every society must be in proportion to the amount of enlightened mental activity that can be brought to bear on it, it follows that this practical collegiate instruction should not only leave all who move in the higher walks of life and more learned professions, but should be extended as far as possible to all whose pursuits are in any way connected with science, with literature, or with refined taste.

The practical results to which such views lead with reference to the collegiate instruction suited to Canada, may be summed up as follows:

1st. Our college courses must not attempt to gain support by descending to the level of the schools; but must depend on that portion of the young men of our country who desire a higher and more extended course of instruction, and are willing to devote a few years to this object.

2nd. To merit success, our collegiate institutions must endeavour to provide a course of study embracing all the important subjects included in such courses in other countries, and these taught in such a manner as to establish the value of their degrees by the success of their graduates in active life.

3rd. To secure wide usefulness, collegiate institutions should be prepared to give the preparatory instruction demanded for the learned professions, and special courses of practical science suited to the circumstances of those who, while they desire instruction in some of the departments of college study, do not require to attend to all.

To the illustration of these points, more especially in their connection with our own institution, I design to devote the remainder of this discourse, even at the risk of dwelling on subjects, that to some of my hearers, may appear trite and common-place, but which yet are so important and so much misunderstood or misrepresented, that I think no apology necessary for adverting to them at some length.

First then, it is essential to the character of college instruction, that it shall succeed in time and excel in elevation the teaching of the best elementary schools. The question of time involved in this statement, though sufficiently simple and intelligible, is in reality one of the greatest obstacles to the success of collegiate institutions in these Colonies. The demand for labour is so great, and the avenues of lucrative employment open to any one who has received a good school education are so numerous, that it is difficult to induce young men to devote several years to an expensive and tedious course of collegiate instruction, when the time and money so expended might materially advance their fortunes in life. In like manner those who enter on a college course often arrive too young, and with a too slender amount of previous instruction, and have reason to complain in after life that they have been driven through their more advanced education while their minds were too immature fully to appreciate the studies in which they were engaged. I am aware that an influence of this kind, rooted in the social state of the country, cannot easily be reached by argument. It ought, however, to be taken into the account that the higher mental training is valuable for its own sake, and even if not directly necessary for the particular business which the young man may have in view, may at a future time be indispensable to enable him to act creditably and usefully in other positions into which he may rise or be thrown by the urging fluctuations of life. No man can fail to find a liberal education a pleasant and useful companion through life, adding new charms to every innocent enjoyment, giving grace and dignity to the character, and making itself practically useful in a thousand unexpected ways. In the great majority of cases the ultimate loss from hurrying young men from the schools into the work of life, is far greater than the immediate gain from the saving of the time that would be occupied by the collegiate course.

The higher education from the College does not, however, rise above the instruction of the school, merely because it follows it in time, but because its subjects are changing in their tastes and powers. The perceptive powers and memory very early attain perfection, but the reasoning faculties, the imagination, and the taste, are of slower growth, and the function of the school usually ceases just when they are beginning to manifest themselves in their strength. The higher

course of instruction finds its true place in ministering to these growing powers: it leads the student into subjects for which he had neither taste nor ability; it stores his mind with new facts in departments of knowledge to which the teacher in the preparatory school could not usefully direct his attention; it leads him to the grouping of the individual items of his knowledge under the principles to which they are subordinate, and thus to arrange and systematise his ideas, and rise to those general views which constitute science properly so called. It thus not only enlarges his views of nature of art, and of his own constitution and relations; but gives him the mastery of his knowledge for practical purposes. It cultivates his powers of expression and of literary taste and criticism, and thus gives him readiness and self-reliance as a thinker, a speaker, and a writer. It opens up to the mind boundless fields of useful and pleasurable exertion; thus stimulating it to healthy activity, and causing it to cast aside the lower excitements which the less instructed youth deems manly, and to nerve itself for earnest labour, by self-denial and the hard tasking of its powers. It dispels narrow views and prejudices, and liberalises the mind; while it arms it against the errors and impostures that on every side make their prey of the ignorant. It thus has, in relation to the growing powers of the student, an outward or objective utility, depending on the extent and practical value of the instructions which it affords, and a subjective utility depending on the high and harmonious development which it gives to the powers of the soul itself; and both these require that it should be in its nature and scope superior to the instruction of the schools, and that it should be communicated by the most eminent men who can be obtained in its several departments.

It may be said that this is what college education should be, rather than what it is. In good institutions of learning, however, it does rise to this position, and under the next branch of the subject we have to consider more in detail the means by which it does so.

II. To merit success, a collegiate institution must endeavour to provide a course of study embracing all the important subjects included in such courses in the more improved Universities of other countries, and these taught in such a manner as to establish the value of its degrees by the subsequent success of its graduates in the active occupations required by our country. When we enquire, however, what are the elements of the course of study adapted to these objects, we enter on one of the battle-grounds of university reform. One authority maintains that it is too much the practice to condemn young men to pore over Greek and Latin during the most precious years of life, when the wide field of modern literature and science lies open before them. Another urges the honoured example, the profound scholarship, the gigantic mental achievements of our ancestors, in defence of the course of instruction which they have handed down to us. Among those who hold the former view, there are so many subordinate differences of opinion as to the extent and manner in which scientific studies should be introduced. Among those who hold the latter, there is no small controversy as to the relative preponderance of classical or mathematical learning.

On such a subject, it becomes us to exercise a wise caution. We should not blindly follow time honoured precedents, nor rashly venture on new and untried projects. It will be well for us here, with that wise spirit of eclecticism, which the common sense of the people of this country is daily applying to our political institutions, our school systems, and our industrial pursuits, to study experience abroad, and gather from every source that which approves itself as useful, and suited to our peculiar circumstances.

The more ancient English Universities were, in their origin, rather theological and monastic, than educational, in the modern sense of the term. As a writer in the *Quarterly Review* well expresses it:—"the education of young men is one of their objects, but distinctly not the primary one—that is, at *studendum et orandum*, to encourage the systematic study of the arts, first by way of preparation, and then of divinity, by persons enabled by the munificence of the founders to consecrate their time to deep reading." The first end of the University was thus rather to preserve learning, and to support those who devoted themselves to it, than to attempt its diffusion. The means adopted to secure such ends must clearly be different from those proper to the objects of Colleges in such countries as this.

In the revival of learning, when it began to emerge from the cloister, and to take its place in the active life of the world, the absence of indigenous learning obliged even the most progressive and original educationists to appeal rather to the learning of the past than to that of their own time. It was only by disinterring the rich treasures of classical antiquity, that literary capital could be obtained wherewith to commence the work of mental elevation. Nothing could, in these circumstances, be more natural and proper than that the best existing models of style and thought should be made the basis of liberal education. Mathematical science, itself a product of the mind of antiquity, at the same time claimed attention, and some of the earliest educational controversies turned on the rival claims of classical literature

and mathematics, as means of mental training and educational progress.

Such controversies were, however, inseparably connected with the greater question of practical science, as contrasted with that barren philosophical spirit "meanly proud of its own unprofitableness," which runs through the whole of classical antiquity and the middle ages. We greatly err, if we suppose sound practical views on this subject to be altogether of modern discovery. No one can better state the most advanced doctrines of University reformers than Bacon: "*Meditor instaurationem philosophiæ ejusmodi, quæ nihil inanis aut abstracti habeat, quæque vitæ humanæ conditiones in melius provehebat.*" We are still but carrying into practice this great principle of the Baconian philosophy, and the views of our most advanced educationists are but the echoes of the great expositor of the inductive method. In proof of this, I may quote the following general statements from the latest discourse of Dr. Wayland, so well known in connection with the improvement of the higher education on this continent:—

"First, every branch of study should be so taught as to accomplish both the results of which we have been speaking; that is, it should not only increase our knowledge, but also confer valuable discipline: and it should not only confer valuable discipline, but also increase our knowledge; and if it does not accomplish both of these results, there is either some defect in our mode of teaching, or the study is imperfectly adapted to the purposes of education.

"Secondly, there seems no good reason for claiming pre-eminence for one study over another, at least in the manner to which we have been accustomed. The studies merely disciplinary have valuable practical uses. To many pursuits they are important, and to some indispensable. Let them, then, take their proper place in any system of good learning, and claim nothing more than to be judged of by their results. Let them not be the unmeaning shibboleth of a caste; but, standing on a level with all other intellectual pursuits, be valued exactly in proportion to their ability to increase the power and range and skill of the human mind, and to furnish it with that knowledge which shall most signally promote the well-being and happiness of humanity.

"And, thirdly, it would seem that our whole system of instruction requires an honest, thorough and candid revision. It has been for centuries the child of authority and precedent. If those before us made it what it is, by applying to it the resources of earnest and fearless thought, I can see no reason why we, by pursuing the same course, might not improve it. God intended us for progress, and we counteract his design when we deify antiquity, and bow down and worship an opinion, not because it is either wise or true, but merely because it is ancient."

To the same effect are the following remarks of the enlightened and scientific nobleman, who presided over the last meeting of the British Association, in his introductory address, a production which should be studied by every friend of popular education;

"And this, gentlemen, brings me to say that the advancement of science depends above all things, on securing for it a better and more acknowledged place in the education of the young. There are many signs that the time is coming when our wishes in this respect will be fulfilled. They would be fulfilled, perhaps, still more rapidly, but for the operation of obstructing causes, some of which we should do well to notice. How often do we find it assumed, and that those who urge the claims of science are desirous of depreciating some one or more of the older and more sacred branches of education! In respect to elementary schools we are generally opposed, as aiming at the displacement of religious teaching; whilst in respect to the higher schools and colleges, the cudgels are taken up in behalf of classical attainment. But surely no enlightened friend of the natural sciences would seek to challenge this imaginary competition. We cannot too earnestly disclaim the idea that the knowledge of physical laws can ever of itself form the ground-work of any active influence in morals or religion. Any such idea would only betray our ignorance of some of the deepest principles of our nature. But this does not affect the estimate which we may justly put on an early training in the principles of physical research. That estimate may not be the less a high one, because it does not assign to science what belongs to other things. There is one aspect in which we do not enquire to plead the cause of science as an element in education, and on that, therefore, I shall not dwell. I mean that in which certain sciences are recognised as the essential bases of professional training, as, for example, when the engineer is trained in the principles of mechanics and hydrostatics, or the physician in those of chemistry. Of course, with every new application of the sciences to the arts of life this direct influence will extend. But what we desire, and ought to aim at, is something more.

It is, that abstract science, without special reference to its departmental application, should be recognised as an essential element in every liberal education. We desire this on two grounds mainly; first, that it will contribute more than anything else to the further advancement of science itself; and secondly, because we believe that it would



be an instrument of vital benefit in the culture and strengthening of the mental powers."

As the question stands in our time, it really depends on the fact that the seeds of classical and mathematical knowledge so widely sown by the revivers of learning, have borne, and are bearing, so vast and varied fruit, in the growth of modern literature and science, that the educator scarcely knows how to select from its overflowing riches. Hence, if we adopt as our guide, the utilitarian maxim of Bacon, and define our utility to consist, first, in mental culture for its own sake, and, secondly, in the application of that culture to the material welfare of our race, the questions remain—Are these ends to be attained by a limited or wide course of study, by confining ourselves to the subjects which were originally employed to revive sound learning, or by having recourse largely to modern literature and science? and, To what extent can these be profitably combined in the limited time allowed to our course of study?

I shall endeavor to answer these questions by glancing individually at those branches of study which appear essential to a thorough and useful course of instruction, with some remarks on the relative degrees of prominence which should be assigned to them, and their place in our own University. I shall take them in their historical order, rather than in that in which they are taught.

First, then, on the distant verge of hoar antiquity, we have that old Semitic literature which may hold to that even of Greece the language which Plato ascribes to the Egyptian Priests. "Ye Greeks still remain ever children; nowhere in Hellas is there an aged man. Your souls are ever youthful; you have in them no knowledge of antiquity, no ancient belief, no wisdom grown venerable by age." The first and most important representative of this early oriental light, is the sacred literature of the Hebrew—that simplest, yet noblest of the tongues known to our schools, the vehicle of God's earliest communications of His will to man—a literature which sheds a brilliant beam of light along the whole path of civilization, widening and deepening in intensity as it reaches our time, and as a more careful and accurate criticism develops its hidden beauties, and makes known more fully its significance. I could wish that the critical study of the Divine literature of this venerable tongue, in all its varied literary and moral beauties, were more than it ever has been a popular, as well as professional, subject of collegiate instruction. Other early oriental literature remains might, I think, in connection with biblical literature, well claim the attention of the student, and should form important branches of our course of history. More especially is this true of the interesting historical remains of Egypt and Assyria, which bring before us in such vivid reality the oldest empires of the world, revealing the origins and elementary forms of the arts which we have been accustomed to admire in their secondary development in Greece. Early Oriental literature has hitherto been confined principally to theological education. It is represented in McGill College by our chair of Hebrew and Oriental Literature, though, I am sorry to say, that as yet we have no class in this department; but I trust that this and other parts of our course, which might be made useful as preparatory studies for the Christian ministry, may soon come into demand, in connection with the affiliation of theological seminaries to our University.

Descending to a more modern period, we have the noble literature and language of the Hellenic races, themselves learners from the East, and it would seem incapable of fully appreciating the sterner and more exalted religious ideas of the Semitic nations; but gifted with a vividness of imagination, a delicacy of taste, and acuteness of intellect, that have enabled them to transmit to us models in literature, art, and abstract science, that cannot be excelled. Certain grand prominent points in this literature are landmarks in the progress of the human mind. The greatest of epic poems, breathing at once the air of the east and west, burst on us at the very threshold of Greek literature. A little farther on the father of European history presents his enquiring and thoughtful countenance. Passing over a crowd of inimitable poets, dramatists and orators, many of whom still live as powers in the earlier and later periods of this literature, mathematicians, physicists, naturalists, and metaphysicians, whose influence is still strongly stamped on our modern science. Finally, the extensive diffusion of the Greek tongue, after the conquests of Alexander, rendered it the fitting vehicle for the dissemination of the truths of the Gospel, a circumstance which, independently of all other considerations, must forever embalm this fine language in the learning of all Christian nations.

Roman Literature represents the true middle age of the world, connecting forms of thought and of civilization which have altogether passed away, with those which under various modifications still subsist; and linking the language, the politics and the jurisprudence of the present inseparably with those of the past. Its study thus becomes, without taking into the account the merely literary merits and beauties of the Latin authors, an object of undeniable importance to the professional man, the man of science, and the English scholar.

The large obligations that we owe to the literature of classical anti-

quity, as well as its present value, are thus sufficient to retain it as an important element in the higher education. The only danger is that the time of students may be so occupied and their minds so filled with such studies that they may go from our colleges armed with an antique panoply more fitted for the cases of a museum than to appear in the walks of actual life. Such results of the too exclusive devotion to ancient literature have undoubtedly given rise to just complaints, and in some instances have threatened to sweep away such studies altogether from the collegiate course; while there can be no question that the wide-spread dissatisfaction arising from this cause, and from the apparent want of applicability of collegiate studies to the ordinary pursuits of life, has been largely influential in withdrawing public sympathy and support from the higher institutions of learning. In avoiding these evils, however, it is by no means necessary to rush into the other extreme. We cannot yet afford altogether to neglect classical studies, even as purely practical branches of learning. No one who weighs aright their influence on his own mental growth can doubt this. Even those of us who have been prevented by the pressure of other studies and the attractions of other tastes from following out their studies into a matured scholarship, have to thank them for much of our command over our own language for much breadth of view and cultivation of taste; for much insight into the springs of human thought and action, and even for some portion of our appreciation of that higher light which we enjoy, as compared with those ancient nations, which with all their wisdom and civilization knew not the true God, and in consequence of that deficiency appear to our more enlarged views, even in their highest philosophy, but as children playing with the "golden sands of truth."

It is fortunately a well established principle that the power of verbal memory attains perfection much earlier than that of reasoning and generalization. Hence the lingual drudgery of early classical study is properly the work of the preparatory school, and the student should enter college prepared to relish the higher beauties of classical literature, to study them with a discriminating and philosophical spirit, and in some degree to mature his acquaintance with them without any delusive devotion of his time and attention. Such it is to be hoped, with the aid of our excellent High School, will be the course pursued in McGill College; and I think the public may rest assured that, under the careful and conscientious teaching of Dr. Davies, nothing really important in this department will be overlooked, while those members of the Faculty of Arts, who have the charge of other departments, will take care that it attains no undue pre-eminence.

Turning to those departments of learning which, in their origin or full development, belong to our own time, we are bewildered by the crowd of studies which urge their claims, and it is here that the grand difficulty meets us of compressing a sufficiently thorough acquaintance with a sufficiently wide field of learning into the narrow limits of a College course. There are, however, certain subjects of sufficiently large importance to permit no hesitation as to their claims.

I may here merely refer to the *modern European languages*, respecting the practical value of some at least of which it is unnecessary to say one word. The French and German languages are well represented in our institution by Mr. Markgraf, and within the last few days we have arranged to devote an additional hour to these subjects, so as more fully to subdivide the classes; an arrangement which I have no doubt the students will welcome as a boon.

But I would desire more particularly to notice, as deserving a high place in collegiate education, our own *English tongue*, which bids fair, like the Greek of old, to be the principal vehicle for the world-wide diffusion of the highest ideas in science, in politics, and in religion; and which possesses models of lofty thought and of elegant expression equal to anything in classical antiquity, and more intimately connected with our better political institutions, our higher religious views, and our greater advancement in the arts of life. The philosophical study of its grammar and philological relations, the principles of style and composition, the critical examination of its highest literary productions, and the history of its literature, are of paramount importance to men in any profession or occupation that may at any time require them to speak in public, or to write their mother tongue.

Connected with the last mentioned studies in our course of instruction, are Logic, Mental and Moral Science, subjects which it appears to me are invaluable as a means of intellectual training, abounding in rich and suggestive speculations, and in true and subtle trains of argument, turning the mind inward to study its mysterious essence and operations, leading the student on the one hand to those obscure regions in which many of the mightiest intellects have stumbled and fallen, and on the other to those clear and beautiful methods which are the working tools of modern philosophical enquiry. It forms, when properly viewed, at once a rich mine of mental culture, and an excellent preparation for every-day business. It is true, that taken in the mass, no department of knowledge is more overloaded with worthless trifling or dangerous error; yet for this very reason it demands attention, and all the more labor on the part of the judicious teacher to keep himself abreast of the progress of investigation, and to seize those great

leading points which are of real value. The two last departments belong, in the McGill College, to Dr. Leach, whose scholarly attainments and long connection with the Institution as the head of its Faculty of Arts, have established for him an high place in your respect and confidence, and I hope that the committal of this important department of English literature and mental philosophy to his care, will be regarded as a pledge that much is to be made of it in our course of instruction.

We must now, however, direct our attention to the Physical Sciences, based on mathematical truth and on experiment; sciences which, independently of their intrinsic charms and value, have in our day established a connection so intimate with every department of mechanical, manufacturing and agricultural art, that without them the mutual welfare of nations cannot be sustained, much less advanced. I fear that the practical busy world scarcely yet recognizes this dependence of art on abstract science. Art, it is true, has often taken the lead of science and developed results before their causes were understood; but this is sometimes rather apparent than real, and on the other hand inventions which have their origin in scientific principles have become so rapidly diffused and so generally practised, that we are apt to forget the long series of investigations, the agitation of obscure scientific questions, and the indirect influences of even the doubts and difficulties of learned investigators, which have conspired to strike out the first parts of such practical applications. The more we enquire into this subject the more will we be persuaded that the difference between the stationary condition of the arts in some ancient and modern semi-civilized nations, and their rapid progress among us, consists, to a great extent, in the more or less active pursuit and general diffusion of abstract science. Science has a double reward, first in the interest of its new facts and the ennobling general views to which it leads, and, secondly, in its valuable and often unexpected applications. The long series of inquirers who, from Galvani and Volta down to our own time questioned the occult and mysterious principle of galvanic electricity, were each rewarded by beautiful and striking discoveries, though they anticipated as little as the world that looked carelessly on their experiments. The result in that wonderful telegraph communication, that now, in the hands almost of children, is at once the latest and greatest marvel of practical science, and a potent aid to commerce and civilization. The scientific investigator and the academical professor may not be actual inventors; but they furnish the knowledge which leads to invention, and they train the leading minds of society to appreciate and bring it into successful operation. Hence the school of abstract science is really one of the great moving powers in the material prosperity of nations.

Under this head it is unnecessary to refer to the importance of Mathematics as a means of rigid mental discipline, of industrial art, and of scientific progress; nor is it necessary even to name all those important branches of Physics which come under the denomination of Natural Philosophy. I rejoice to say that Professor Howe, who has earned so high a reputation as the head of the High School, will in the present month, without, however, withdrawing himself wholly from the oversight of the school, in which he is to have the aid of an assistant master, assume the chair of Mathematics and Natural Philosophy in the College, and will as soon as possible commence a course of lectures on Physics, illustrated by the excellent apparatus of the Institution, which has been for some time lying idle.

Chemistry, whose claims are equally great with those of any department of Natural Philosophy, has not hitherto formed a part of the undergraduate course in this Institution, but it is hoped that before next session arrangements will be made to make the course now delivered in connection with the Medical Faculty, accessible to the students of arts in one of the sessions of their course.

I now come to the great group of sciences included under the name of Natural History, and comprising all that we can learn by the observation and arrangement of the works of creation, both in their present aspects and in those which they have presented in past time. Natural History, as cultivated in our time, is young and of rapid growth, and is even now only taking the place which its value as a means of training the observing powers and of enlarging our conceptions of nature, and as an auxiliary to industrial and fine art, demands for it. Zoology and Botany have for some time been necessary parts of medical education in many of the principal medical schools, and they will henceforth be accessible to students here. Geology and Mineralogy have been recognised by the governments of most civilized countries as important aids to material progress, and that they are so regarded here is witnessed by the admirable survey now in progress under my friend Mr. Logan, than whom no one would, I am sure, rejoice more in the diffusion of such a knowledge of his science as should render his labors more generally useful by making them better understood, and should increase the number of original enquirers. I hope before the close of the present month to commence a course of lectures on Natural History, for the benefit of the students of the Medical Faculty and Faculty of Arts, and of such other persons as choose to avail themselves of it. I hope, also, in connection with this department, to form a Museum of

Natural History, and shall be very thankful for any aid that may be given by individuals or public bodies towards such a collection.

Such is a very general view of the course of instruction adopted by us, and, as we believe, adapted to the present wants of this country, as a preparation for the learned professions and for general usefulness.

Can any parent doubt that such a course of instruction is worth its time and cost; or that when conjoined with the moral and religious training which it is the highest study of every parent to impart, it will tend to enable his children to do credit to his name and memory.—Many who in this province have risen to wealth and consideration, have not enjoyed the benefits of a liberal education, yet these may be necessary to enable their children to retain the position which their fathers have acquired; and I can assure them that no man worthy of the name will ever cease to bear in grateful remembrance the parent whose toil has realized and whose affection has bestowed the means of mental culture and of high and honourable usefulness. I was lately informed by a gentleman connected with Harvard University, that a large proportion, probably a majority, of the principle business men, natives of Boston, are graduates of that university. Perhaps no other city could say as much, and I think in this fact we may trace at once a cause and indication of the high intellectual tone, the successful commercial and municipal management, and the admirable school system of a city which claims the title of the Athens of America. May the time come when McGill College may be to Montreal what Harvard has been to Boston.

In connection with our general course, there is one very important topic to which I would here refer—the moral discipline of the university. I know it to be an objection urged against academical institutions, that they foster tastes anything but practical or useful, that their pupils often acquire frivolous tendencies, and habits adverse to business usefulness. Where numbers of young men are congregated at a distance from home, and under defective discipline it must be admitted that such evils are too often produced. They originate mainly in the bad habits which they are allowed to communicate to others; and are aggravated by a want of earnest practical character on the part of instructors, and the consequent failure to excite enthusiastic devotion to the subjects of study. They are also promoted by the collection of students in college boarding houses often little adapted for any efficient oversight of their manners or morals. By a more domestic system of boarding for pupils from a distance, by attention to the interests of the students, and by keeping them fully employed, we hope here to avoid those evils. One feature of this institution which may be regarded by some as of injurious influence in this respect, is its want of connection with any religious denominations. This, however, by no means implies that it shall be irreligious. On the contrary, it may be the object of the careful attention on the part of the college authorities, that each student shall be placed in communication with authorized religious teachers of the denomination with which he is connected, and shall attend their ministrations. I think I may pledge myself for all the gentlemen of the college faculties, that we shall be happy to fulfil this office in the case of any young men whose guardians may entrust us with it, as well as on every fit occasion to cultivate religious sentiments and respect for the great precepts and doctrines of christianity.

III. Our third general statement was that our University *should provide professional courses of study, and also selected or special courses, for those who, while they desire instruction in some departments do not require to attend to all.*

In the first of these directions of useful exertion, McGill College already occupies a high and honourable place. Its Medical Faculty is second to none in America, and presents one of the noblest instances anywhere to be found, of the results which may be attained by the almost unaided exertion of able men thoroughly devoted to their work. Its announcement for the present Session shows a staff of eleven Professors, providing for all the important branches of Medical Science. It has a library of 2,200 volumes, an extensive series of preparations, and excellent arrangements for hospital practice and dissections. Its pupils in last Session numbered sixty-eight, derived from all parts of Canada; one-half of them being from the Upper Province, a proof, not of the absence of competition, for there are other good schools, but of the pre-eminence of this. It has sent forth, since 1833, one hundred and fifty graduates, most of whom are engaged in practice in Canada, a few in Great Britain, and several in the army, to the commissions in which the graduates of this School are now eligible. The value of such a school consists not merely in its furnishing within the Province a thorough medical education, but in its power to adapt that education to the modifications of practice which in every country result from climatal conditions and endemic influences. Nothing in connection with education in this city, offers more just cause of pride, or of hope for the prosperity of our institution, than the success which has attended the labours of the Medical Faculty.

The nature of the preparatory training for the legal profession practically limits the classes of our Law Faculty to the students within the city, but it is gratifying to know that the character of the instruction

and the advantage which it affords in shortening the term of apprenticeship, have secured the attendance of a very respectable proportion of those students. I have much pleasure in stating that the Law Faculty will commence its operations in the present session with an augmented staff of instructors. It will number two Professors, and two Lecturers, all men of high standing, and prepared to give instruction in Commercial, Civil, and Criminal Law, Jurisprudence and Legal Bibliography and Customary Law, and the law of Real Estate. Under these new arrangements increased efficiency may be anticipated; and we hope, in connection with a course of commercial instruction, to make at least one of the classes of the Law Faculty more extensively useful than to the merely legal students.

The department of Theology cannot be introduced into McGill College, but the advantages of the institution are available for all the preliminary training of a secular character that may be required; and by the provisions in its statutes for the affiliation of other institutions, it offers its assistance to any theological seminaries that may be erected in its vicinity.

In the direction of a school of practical science all that has yet been done is to offer access to any of our lectures to all persons who may desire to attend them without entering themselves as regular students, and the provision of popular evening lectures for the benefit of the public. It is in great part to facilitate attendance on these means of instruction that the classes have been temporarily removed from the original buildings of the University to the Hall in which we are now assembled.

During the present winter it is intended to deliver a popular course which will embrace the subjects of Natural History, Chemistry, Natural Philosophy and Civil Engineering, a combination of interesting and important subjects which should attract large audiences. It is also proposed to make the College Library, now containing a large number of valuable works, available as a public library of reference, by allowing any person to consult books on obtaining an order from any of the Governors or Professors.

These provisions, however, by no means exhaust the field of usefulness in this direction; and it is in contemplation, in the session of next winter, to institute in connection with the Faculty of Arts certain Special Courses, bearing on some of the principal lines of industrial occupation, in the hope that in this way we may induce many young men who would otherwise receive none of the benefits of collegiate education to attend to certain selected classes. We propose, then, to attempt the establishment of the following Special Courses, each to extend over two years, and to entitle the student, on examination, to a certificate or diploma.

1. A course of Civil Engineering. This will embrace English Literature, Mathematics, Natural Philosophy, Chemistry, Geology and Mineralogy, Surveying and Civil Engineering, including the construction of machinery. Such a course will be exceedingly serviceable, not only to all young men about to enter on the profession of Civil Engineering, but to many others more or less closely connected with the public works or manufactures of the Province. In this department of engineering we hope to enlist the talents of one of your Civil Engineers whose name is favorably known wherever the public works of Canada have been heard of.

2. We also hope to commence a Course of Commercial Education, including English Literature, History and Physical Geography, Mathematics, Chemistry, Natural Philosophy, Natural History, Modern Languages, Commercial Law; and if suitable arrangements can be made, Lectures on Political Economy. It is scarcely necessary to point out the advantages to the young men of Canada, and of this city in particular, which much must result from the successful establishment of such a course.

3. A further extension of our Courses of Study may be effected in the direction of Agriculture. Throughout the Colonies attention is now being directed to these scientific principles of farming which have effected such wonders in Great Britain, and the introduction of which is imperatively demanded in all the older and more worn out districts of this country. I have no doubt that there are within reach of Montreal a number of enquiring and intelligent young farmers, who would gladly avail themselves of such a course during the winter months. It would include the following subjects:—English Literature, Natural History, Natural Philosophy, Surveying, Agricultural Chemistry, Practical Agriculture, and Management of Farm Animals.

These special courses will, I believe, rather build up than detract from our general under-graduate course, while they will certainly extend our usefulness, and give us increased claims on the support of the community; and thus tend ultimately to increase the demand for collegiate instruction, while in the meantime they will give an important impulse to practical science and the arts of industry.

I have now closed the view which I proposed to give of the course of collegiate instruction adapted to the circumstances of this country. I have endeavored to give a plain statement of its true place in relation to the lower institutions of learning, of the elements which should enter

into its course of study, and of the modes in which its influences, may be extended and rendered practical, and I have endeavored to apply these views to the condition and prospects of this University. I have not wilfully over-estimated the capabilities of this institution, nor promised anything that, with our present means, may not be accomplished. I trust I have shown that we are disposed to work for the benefit of the public, and to offer to it substantial advantages in return for such measure of countenance and support as it may afford to us; and I trust that our efforts may be so far successful that no Canadian may be able justly to complain that he is under the necessity of going beyond his native Province for an education that will enable him to take his place side by side with the best educated men of other countries.

The present seems to be a time highly favorable for enterprise in the higher education of Canada. With natural resources and political institutions inferior to those of no part of the world, British America appears to have entered on a course of industrial and mental development whose results it is hardly possible to predict. The storms of party animosity which once convulsed these Colonies have to a great extent subsided into an honorable rivalry in the promotion of the great interest of the country. The highest public employments are opened to the ambition of all; great public works and mining and manufacturing enterprises are calling for skilled labor; agriculture is passing from its rude soil-exhausting stage to the rank of a scientific art; increasing population and wealth are constantly opening new fields for professional labor; the extension and improvement of elementary education are at once requiring higher attainments on the part of those who aspire to public positions, and offering to them the support of a more enlightened public opinion. The demand for educated men must thus constantly increase, and it is by fostering good collegiate institutions that this demand can be supplied in the best way—by training among ourselves the minds that are required.

In conclusion, allow me to congratulate the citizens of Montreal on the munificent endowment on which this Institution is founded, and on the important circumstance that its management and its benefits are limited to no sect or party; but, as literature and science ever should be, are open to all. Let us hope that, standing on this broad basis, McGill College may ever exemplify the wise motto of your city arms, and that the utmost possible success and permanence may attend the united efforts of its friends in behalf of good learning.

## Papers on Practical Education.

### EDUCATIONAL INFLUENCE OF MUSIC.

"O Music! sphere-descended maid!  
Friend of Pleasure—Wisdom's aid!

Where is thy native simple heart,  
Devote to Virtue, Fancy, Art?"—COLLINS.

It is only within the last few years that Music has been recognised as an important element in elementary education. Considering that there is an innate desire in human nature to listen to the sweet voice of harmony, and that most people gratify that taste in some way or other, a knowledge of music is thought a necessary qualification for a schoolmaster. The great amount of good, which it is capable of effecting, enhances its value in the eyes of educators. Supposing that it formed no element of social life, the masses would get some sort of melody for themselves, however questionable its sort. The gratification of employing the vocal powers in the formation of melodious sounds, entices nearly every one to its practice.

Children, in their earliest infancy, are much affected by its sounds. When peevish or ill, how quickly the mother's soft lullaby soothes their spirits, and hushes them to rest. As soon as they can totter on their legs, they form in busy groups round the straggling fiddler and the strolling barrel-organ. Are they absent for any time from home? Be sure the parent knows the cause, if music floats on the wind. When school-life commences, the morning hymn of grateful adoration is listened to with eager attention, and, ere long, the voice of the new comer is heard joining in the strain.

To foster this feeling, in order to make it an assisting agent in the formation of the moral character, music is required to be practised in most elementary schools, and, where feasible, a little of the theory taught. Its influence in schools is great; indeed, the emotions produced in the children are indescribable. It soothes and softens the passions; affects and refines the feelings; and rouses the laggard into life. Are the children's spirits high, noisy? A soft melody will prove as effectual as oil to a troubled sea! Witness the effect produced upon the most unruly, as some dead warrior is borne to his last resting-place. At the beat of the muffled drum, and the solemn strains of the "Dead March," a solemn silence reigns around, a calm steals over every face, and the tear of sympathy dims many an eye.

To this working of the feelings, by the employment of soft airs, many

teachers owe much of their success in religious instruction. Before giving a Bible Lesson, it is desirable that the feelings of the children should be made consonant with the sacredness of the subject. This is done successfully in most cases, by beginning with a hymn, and thereby "diffusing round an holy calm." On the contrary, when they are exhausted by mental activity, or by other causes, a march to the sound of some lively measure will restore vigour and banish gloom.

Music may be made the channel of conveying choice poetry to the mind. In fact, Poetry and Music are twin sisters, for they

"Grew together,  
Like to a double cherry, seeming parted,  
But yet an union in partition,—  
Two lovely berries moulded on one stem."

By such means the morals may be improved, and the taste cultivated. The poetry of a song will ever be remembered, while any recollection of the tune remains. Patriotic sentiments and loyalty may thus be implanted in all. National airs help to cherish a love of fatherland, and energize the hearts of patriots and warriors when battling in their country's cause. In the late attack on the Malakhoff by the French, it is said that one of their divisions sang in chorus a national air. What a contrast it must have been to the roar of cannon, and the roll of musketry! How their courage must have been strengthened by the remembrance of their native land, called forth by that song!

As life advances, when school days end and daily toils begin, young people's hours of labour will often be enlivened by humming the merry tunes of their learning days. Whether they work in the field, the dairy, the mill, or the factory; the "ploughboy's whistle" of the one, the "milkmaid's song" of the other, and the choruses of the rest, will soothe their labouring hours, and give a freshness to their toils. The following extract on the advantages of singing, well illustrates the point. "If you would keep spring in your hearts, learn to sing. There is more merit in melody than most people are aware of. A cobler who smooths his wax ends with a song, will do as much work in a day, as one given to ill nature and fretting would effect in a week. Songs are like sunshine; they run to cheerfulness—to fill the bosom with such buoyancy, that for the time being, you feel filled with June air, or like a meadow of clover in blossom."

Cultivate a taste for good music in the young, and it will be a means of saving them from much misery, in their after years. Many young persons are drawn to places of intemperance, by the attraction of low and immoral songs, encored by jarring cups and tinkling glasses. Had they been taught to appreciate the art in all its beauty, tap-room music would grate harshly on the ear, and they would seek to gratify their taste by establishing a choral meeting of their own.

The training of children in the art of singing will lead them, in later years, to join with heart and voice, in the services of the Church during divine worship. One of the distinguishing characteristics of religious worship now, is the spiritless manner in which the congregation take part in the service. The beauty of the Service would shine forth and produce a soul stirring effect, if old and young combined their voices in singing the hymns of praise "with the spirit and with the understanding also."—*Papers for the Schoolmaster.*

#### GYMNASTIC EXERCISES.

One of the principle causes, if not the cause, of the attenuated and pallid appearance of Americans is doubtless the neglect, or rather the violation, the habitual violation, of the rules laid down by nature for muscular development. The class of men in this country whose occupations are such as almost necessarily lead to the formation of sedentary habits, is very large; larger, perhaps, in proportion, than that of any other commercial nation. And this will account in a measure for the fact that various complaints, generally the concomitants of insufficient physical exercise, are more prevalent here than elsewhere. Our young men being thus confined to the limits of a counting room, at a time of life when the open air and constant motion of the body are indispensable, it is not surprising that they should be in manhood so sadly deficient in muscular vigor, and exhibit so little of athletic developments that are looked for in the sterner sex. With many such their lot is their fate, or is imposed as a necessity from which there is no escape, and for these there is some excuse for the loss of health and life. But what shall be said of those who make no effort to ameliorate their condition, or of that still more culpable class who from mere indolence suffer their bodies to waste away, to sink into premature old age, actually paying a premium for crooked spines, humped backs, round shoulders, attenuated limbs, and drooping heads?

In Germany the old men thought they saw the youth degenerating both physically and socially, and, after severe study and mature reflection, recommended, by eloquent appeals through the public prints, the adoption of vocal and gymnastic exercises as characteristic of the German race. In a short time gymnastic and vocal societies were organized throughout the whole extent of Germany, which have resulted in a highly favourable revolution in the physical condition of the people. It is not really necessary to proper and healthful exercise that one should be provided with parallel bars, etc., for there are many

things at hand that may be substituted for them, which can be made, with no expense or trouble, equally efficient. Flat irons, it is suggested by a contemporary, can be used to develop the muscles of the arms and chest, and leaping or racing may be practiced to strengthen the whole body, and render the step light and the stature erect. If such simple exercises were practiced daily in the open air by the youth of the country, there would soon be a diminution in the many defects which mar the appearance and impair the health of the people.

#### EDUCATION OF FRENCH GIRLS.

We like to see how the people of other nations manage their educational affairs. A lady writes from Paris:

"The fear of the title of artist or blue-stocking restrains many a respectable young French girl from pursuing those studies which might open to her a brilliant career, or at least adorn her intelligence and distinguish her for great acquirements. A young girl said to me the other day: 'Madame Sevigné knew Latin, it is true, and that is why she wrote French better than all other women; but we must not know Latin—we should not find husbands if we did.' It is an accomplishment to know English, and perhaps German or Italian, provided one does not know too much, for too much knowledge is a dangerous thing. But the French girls do really excel ours in the knowledge of their country's history and literature, and fourteen centuries of changing races and monarchies require immense study and effort of mind and memory. A young lady here is not well educated if she does not know by heart La Fontaine's fables, and the noble specimens of style from Bossuet, Massillon, Bourdaloué, and Sevigné. She must never hesitate in the proper plays of Racine, Corneille, and Molière, or be at a loss in Florian.

"The school editions of history are repeated yearly over and over again verbatim, as well as the geographies (such as they are), and the schedules of the lives and works of all distinguished French authors, Biblical History, many of the Psalms, all of the Evangelists, besides the Catechism, must play smoothly on the tip of the tongue before the girl's first communion. Comprise with these the intolerant etiquette which a proper *savoir faire* in society commands, and you will comprehend that a young Parisian head can not remain idle before her marriage."

Upon the whole, we rather like the French method. A little more freedom and a little less rote would improve the French system however.—*Ex.*

#### Miscellaneous.

##### WHAT WILL THEY SAY IN ENGLAND?

*A Crimean Song, by the Reverend J. S. B. Monsell.*

What will they say in England? When the story there is told?  
Of deeds of might on Alma's height, done by the brave and bold:  
Of Russia, proud at noontide, humbled at set of sun;  
They'll say 'twas like old England! they'll say 'twas nobly done!

What will they say in England? When hushed in awe and dread;  
Fond hearts, through all our happy homes, think of the mighty dead;  
And muse in speechless anguish, on father, brother, son;  
They'll say in dear old England, God's holy will be done!

What will they say in England? the matron and the maid,  
Whose widow'd, withered hearts have found the price that each has  
paid;  
The gladness that their home has lost, for all the glory won;  
They'll say in Christian England, God's holy will be done!

What will they say in England? Our names both night and day,  
Are in their hearts, and on their lips, when they laugh or weep or pray;  
They watch on earth, they plead with heav'n, Then forward to the  
fight!

Who droop; or fears, when England cheers! And God defends the right!

##### THE NOBLE DEAD IN THE CRIMEA.

From the eloquent and touching speech of the Rev. Norman McLeod, at the recent Glasgow Crimean Banquet, we quote the following beautiful and thrilling passages:—"It is not premature in us 'to think of those who sleep,' whose battle is over, whose gallant hearts beat no more, and to remember, in silence befitting their memories, those who have fallen in the Crimea! Those who have fallen! Alas, my Lord Duke, how many do these words include! How many



have fallen since the day that splendid army poured itself, like a great western wave, along the shores of Eupatoria, and dashed up the heights of the Alma; and breaking over the embattled ridge, with a loud roar of defiance, swept onward to destroy the mighty fortress, no power on earth being able to say, 'Hitherto shalt thou come, but no farther?'—(Cheers.) Those who have fallen were gathered, as no troops ever were before, from different regions of the earth. The soldier from the banks of the Nile and Jordan sleeps beside those from the Po and the Seine, the Tay and the Tremmel, and from a circumference which sweeps from the deserts of the East to the forests of the far West—from Australia to the North Sea, more than ten thousand times ten thousand mourners turn their weeping eyes to one common centre dear to them all—the teeming grave-yard around Sebastopol—where beloved ones lie interred, "in one red burial blent." Among the fallen are men of almost every age and rank. Veterans are there who had grown grey in the service of their country; whose names are familiar in the history of the last war; who might have lived and died with honour unstained amidst the sweet scenes and domestic quiet of their happy homes, but who, with that splendid chivalry which never beat higher than it now does among our military men, went abroad at the call of duty, braved the dangers and the sufferings of the campaign with their comrades, meekly bore many a hard speech uttered against them with the quiet dignity of conscious integrity, and the self-respect that will now explain itself to injustice—until at last some, like Cathcart or Strangways, were killed in the midst of battle; others died from their wounds, or, like the noble Raglan, exhausted in body and mind, yielded to the fierce assault of disease. The young, too, are among the fallen—the pride of many a home—their ardent enthusiasm, their brilliant courage, and bright hopes and honourable distinction suddenly arrested by the cruel cannon ball: most attractive young spirits, like one who came to me to remember the Lord, who died for him, ere he went himself to die, clasping his colours to his breast on the field of Alma. Christian men are among the fallen, good soldiers of Jesus Christ, who were not ashamed of the Cross while they grasped the sword, but who, in keeping their own spirits as they did, were even greater than those who take a city. Oh, my Lord Duke, from being secretary of a society here for supporting missionaries in the hospitals, reading all their journals sent to me, and also from being the minister of the largest parish in Scotland, I have many sad opportunities of realising the breaches which have been made by war in the homes of the humble, of whose losses, however, the busy world hears little. During the last few days only, I can recall a widow bowed down with grief for a most kind husband, who had survived the campaign till the last terrible assault,—and a sister, who had there, also, lost her only support,—and a mother, who had always brought me with pride her son's letters, but who now, with sobs of agony, gave me one to read, written by a warm-hearted comrade, who told her how her son died beside him near the Redan, and who heard him say, with his latest breath, "Oh, my poor mother!" I mention these things because I know that you intend the humblest soldier among the fallen to be remembered to-night as well as the most distinguished officer. (Cheers.) And can we, my Lord Duke, let me ask, in conclusion, for one moment believe that those men have died in vain; and that the best blood of Europe has been poured out like water on the ground, never in any form to be gathered up again? It cannot be. I think it would be inconsistent with our faith in the wisdom and goodness of the universal Governor of the world. History itself contradicts so hopeless a view of the future, and connects too closely with righteous wars such enlarged measures of good obtained by the human race, to make us doubt for one moment that the blood of the army, as well as that of martyrs, will prove to be the seeds of the church. And it is because I believe this; because I believe that this great war, whether it ends soon or after many years, will be overruled by the Prince of Peace for advancing that "kingdom which cannot be moved," the kingdom of righteousness, peace and joy. It is because I believe that the very justice with which we have treated Turkey, and fought for her, will but more clearly demonstrate the fall of Islam to be from circumstances of the most disinterested character on our part. Because I believe that the deaths of the thousands who have perished, and whose graves may be typical of more beautiful spots in the moral wilderness, and may ultimately prove the life of thousands, hundreds of thousands of the human race in coming generations. But as a Christian pastor and a Christian patriot, I can propose with cheerfulness a toast to the memory of those who have fallen in the Crimea."

#### THE ROYAL FAMILY AND THE FALL OF SEBASTOPOL.

The English papers tell us how the royal family received the news of the fall of Sebastopol. They were at Balmoral, in Scotland, when the joyful tidings arrived:

"At ten o'clock in the evening the Queen received the glorious intelligence that Sebastopol "was in the hands of the Allies." Her Majesty directed that the intelligence should be generally communicated.

The Prince, attended by Earl Granville, Major-General the Hon. C. Grey, Colonel the Hon. C. Phipps, and E. Becker, Esq., immediately proceeded to the summit of Craig Gobhain, where a quantity of fire-wood had been collected. The joyful tidings had circulated rapidly through the neighborhood, and the Highlanders were seen approaching in groups in every direction. The main body was led by Ross, her Majesty's piper, late of the 42d Highlanders, playing the favorite national airs. A considerable number of people was soon assembled, and the creation of a bonfire was but the work of a few minutes, and upon the arrival of the Prince and the party accompanying him it was lighted, and blazed high into the air, amid the loud and oft-repeated cheers of the assemblage. Some whisky having been procured. "The Health of the Queen and the Prince," and of "The Brave Armies of the Crimea," were drunk, while the air rang with acclamations. The Prince of Wales and Prince Alfred, attended by Mr. Gibbs, shortly after arrived. The Queen and the Duchess of Kent, with the ladies of the suite, viewed the distant scene from the windows of the castle. It was one of surpassing wildness and beauty. The country for a considerable distance was lighted by the vast bonfire, the ruddy gleams from which were reflected from the windows and walls of the castle. The picturesque figures of the Highlanders, who had now collected in considerable numbers, were seen against the flames, and their shouts were heard far and wide through the glen, while the occasional sound of the discharge of fire-arms from distant localities proved how rapidly the long-wished for intelligence had travelled. A little before twelve o'clock the whole concourse of peasants, workmen, gillies, and others descended from the craig, and, assembling before the castle windows, sang "God Save the Queen;" and, after three hearty cheers, gradually dispersed."

#### THE GRAVES IN THE CRIMEA.

In times to come it will be a chosen terminus of Saxon pilgrimage, this Cathcart's Hill. Whether the traveller beholds from its humble parapet the fair aspect of the imperial city guarded by threefold mightier batteries than now, or sits upon the broken wall to gaze upon the ruins of Sebastopol, he must, if he has any British blood in his veins, regard with emotion that little spot which encloses all that was mortal of some of the noblest soldiers who ever sprang from our warrior race. He will see the site of those tedious trenches where the strong man waxed weak day after day and the sanguine became hopeless, and where the British soldier fought through a terrible winter with privation, cold, frost, snow, and rain, more terrible and deadly than the fire of the enemy. With the Redan, the Malakoff, the Quarries, the Mamelon, Gordon's attack, Chapman's attack, under his eyes, he will revive with the aspect of the places where they stood the memories of this great struggle, and renew the incidents of its history. How many more of our gallant officers this cemetery may hold it is impossible to say; it is too full already. It is a parallelogram of about 40 yards long by 30 yards broad, formed by the base of a ruined wall which might in former days have marked the lines of a Tartar fort, or have been the first Russian redoubt to watch over the infancy of Sebastopol. Although many an humble tumulus indicates to the eye of affection the place where some beloved comrade rests till the last reveit, the care and love of friends here and at home have left memorials in solid stone of most of those whose remains are resting here. The first of the graves towards the front and west of the cemetery consists of a simple mound of earth. I know not who lies below. The second is marked by a simple slab, with the following inscription:—"Sacred to the memory of Lieutenant H. Tyron, Rifle Brigade, killed in action on the 20th of November, 1854." He was a thorough soldier, brave, cool, and resolute, and in the terrible crisis of Inkermann he used a rifle with more deadly certainty and success than any of his men. In the struggle for the "Ovens" or "Quarries," on the 20th of November, in which a small body of the Rifle Brigade dislodged a force of the enemy much greater than their own, he displayed such gallantry ere he fell that General Canrobert paid him the rare honor of a special mention in the next "General Order of the Day" for the French army. Next to him repose the remains of a lamented officer. The stone records his name, "Sacred to the memory of Brigadier General Thomas Leigh Goldie, commanding the first brigade of the fourth division of the British army, lieutenant-colonel of the 57th Regiment, who fell at Inkermann, November 5th, 1854." No. 4 is a rude cross of stone, without mark or name. The 5th grave is distinguished by a stone cross at the feet, and at the head is a slab with an ornamented top, beneath which is written "Sacred to the memory of Brigadier-general Fox Strangways, killed on November the 5th, 1854." A few lines in Russian ask the Christian forbearance of our enemies after we have gone for the bones of one whom they would have admired and loved had they known him. No. 6 is conspicuous by a large tombstone, with an ornamental cross at the top, and some simple efforts of the chisel at the sides and base. Come here and read! "Here lieth the mortal remains of Captain Edward Stanley, 57th Regiment, killed at the battle of Inkermann, November



5, 1854, to whose memory this stone is erected by the men of his Company—"Cast down but not destroyed," Corinthians, iv 9." Who does not look with respect on these poor soldiers, and who does not feel envy for the lot of one so honored? There are fourteen other graves in the same row, of which only one is identified. Sir George Cathcart's resting-place is marked by a fine monument, for which his widow has expressed her thanks to those who raised it to the memory of their beloved commander. There is an inscription upon it commemorating the general's services, and the fact that he served with the Russian armies in one of their most memorable campaigns—the date of his untimely and glorious death, and an inscription in the Russian language stating who and what he was who reposes beneath. In the second row to the east there are two graves without any inscription on the stones, the third is marked by a very handsome circular pillar of hewn stone, surmounted by a cross, and placed upon two horizontal slabs. On the pillar below the cross in front is this inscription—"To Lieutenant Colonel C. F. Seymour, Scots Fusilier Guards, killed in the action, Nov. 5, 1854;" beneath these words are a cross sculptured in the stone, and the letters "I. H. S.;" and there is a Russian inscription on the back to save the tomb from desecration. At the foot of the tomb there is an elaborately carved stone lozenge surmounting a slab, and on the lozenge is engraved the crest of the deceased, with some heraldic bird springing from the base of a coronet with the legend "Foi pour devoir, C. F. S. Æ 36." How many an absent friend would have mourned around his tomb. Close at hand is a handsome monument to Sir John Campbell, than whom no soldier was ever more regretted or more beloved by those who served under him, and not far apart in another row is a magnificent sarcophagus in black Devonshire marble to the memory of Sir R. Newman, of the Grenadier Guards, who also fell in Inkermann. With all their memorials of death behind us, the front wall at Cathcart's Hill has ever been a favourite spot for gossips and spectators, and sayers of jokes, and raconteurs of bons mots, or such jeux d'esprit as find favour in circles military. It has now lost the attraction of position, and retains only its graver, more melancholy, and more natural interest.—*Times Cor.*

#### ARCTIC EXPEDITION.—RETURN OF DR. KANE AND LIEUT. HARTSTEIN.

Dr. Kane has returned in safety from his long Arctic sojourn. The object of the expedition was to search for Sir John Franklin. However praiseworthy the object, from the course which Dr. Kane marked out for himself, it was regarded by many of those best acquainted with the Northern region, as very unlikely to be successful. Like many of his predecessors, Dr. Kane has returned to tell what is but a "twice told tale." The story of his travels is shortly told. The Kane Expedition left New York on the 31st May, 1853, purposing to be absent for about the space of two years. The *Advance* succeeded in reaching Smith's Sound on the 6th August following. After many hardships and much risk they gained the northern face of Greenland by the 10th September. Here the vessel was frozen in, and the party was exposed to a degree of cold, seldom if ever experienced by any previous explorers. From this place they commenced to search for the long lost navigators, in March 1854, crossing the ice at a temperature of  $57^{\circ}$  below zero. Dr. Kane surveyed the Greenland coast towards the Atlantic, "fronting due north," until his progress was checked by a mighty glacier which rose 500 feet in height. This he considers to be the only obstacle to the insularity of Greenland, or the only barrier between Greenland and the Atlantic. He also got a sight of the great Polyna or open sea, which is supposed to surround the pole, and of which so much has been lately written. An area of 8,000 square miles was seen entirely free from ice. With a party of volunteers, the Dr. then tried to reach the mouth of Lancaster Sound, with the view of falling in with Sir Edward Belcher's Expedition, passing over the track of Baffin's travel, and riding out a heavy gale in an open boat. He was obliged, however, to return to his ship, after various exciting adventures. The winter of 1854-5 proved a very severe one; the sailors were almost all attacked by the scurvy, and in other respects subjected to privations of which the inexperienced can have but faint ideas; all, however, with the exception of three, finally recovered. Dr. Kane perceiving that no chance remained of rescuing his brig from her icy prison-house, wisely deserted her in lat.  $78^{\circ} 45'$ , and made his way southward by the help of boats and sledges. They left the ship on 17th May, crossed a belt of ice 81 miles in diameter, dragging their boats along with them. Travelling on for 316 miles, they reached Cape Alexander in 31 days, and then embarked on open water, having supported themselves all the time with what they shot by the way. "From Cape Alexander," to use the words of a narrator, "they travelled to the southward, sometimes over ice, sometimes through water, shooting eider duck and seal and collecting enough eggs to keep the party in good condition. At Cape Fork they burnt up their spare boats and sledges for fuel, and left the coast. Striking out into the open sea of Melville Bay, they then steered for the North Danish settlements of Greenland. Here they providentially

landed on the 6th of August, in vigorous health, after their travel of 1,300 miles and eighty-one days of constant exposure. From Oer-niuk, the largest of these settlements, they took passage in a Danish sailing vessel for England. By great good fortune, they touched at Dize, where they were met by Captain Hartstein's Expedition."

The Hartstein expedition, fitted out by Congress, left New York on May 30, 1855, to search for Dr. Kane, whom they happily found under the above circumstances, and whom they have brought back in safety, along with his gallant comrades, arriving on the evening of Thursday last.—*Globe.*

## Educational Intelligence.

### CANADA.

#### MONTHLY SUMMARY.

The British *Whig* notifies the tax payers of Kingston of the fact, that there is a Common School Library in that city, containing 1 800 volumes of standard works of every description, and from which they may draw books as tax-payers. The Library is open every Monday and Thursday evening from 7 to 9 o'clock. . . . The Municipal Council of the County of Simcoe, having, at the invitation of the Warden visited the harbour and pier at Collingwood, a correspondent of the *Northern Advance* thus reports their visit to the Common School at Collingwood, 19th Oct:—A school room was also visited, well supplied with all the modern scientific apparatus for the instruction of children and youth in what pertains to an English education, including an Orrery, Globes, Maps, &c. The Principal of the School not being within at the time, some of the assistants frankly and with much intelligence answered the various questions put to them, and shewed how and for what purpose the various apparatus and instruments were used. It is thought that this establishment, and several others, are much indebted to Mr. Sheriff Smith for their formation, as well as for many munificent gifts. . . . The Municipal Council of the County of Elgin has granted the sum of Ten pounds towards the establishment of a Common School Teachers' Library for the County. The president of the Teachers' Association thus refers to the matter:—So prompt, generous and liberal an action on the part of the County Council, cannot fail to be appreciated by every one who wishes to see the blessings of sound knowledge and wholesome instruction diffused among the rising generation; and to see, as an essential preliminary to this, the qualifications of Teachers much advanced beyond their present standard, this being the immediate object of the grant. This is the first instance in all Canada, that a Society of Common School Teachers has been favored with pecuniary aid by a Municipal body. . . . The Managers of Knox's College have recently purchased from Dr. Clark the house and outbuildings known as Elmsley Villa, which were occupied by the Governor from 1849 to 1851. Several lots in the rear are included in the purchase, and the amount to be paid is £5,250. . . . The session of the College for the coming winter was opened on Thursday, with a lecture by Rev. G. P. Young, on the "Philosophy of Memory" . . . The Local Superintendent for the Township of Niagara, in a letter to the *Mail*, thus refers to the recent examination of the Queenston Common School:—Besides the very healthy condition of the school in knowledge, the order observed deserves eulogy. The regularity with which pupils leave their seats form into classes and resume their seats again and indeed the methodical conduct of each scholar causes the school to present the aspect, not of the copy of a model school, but rather of a model school itself. It has been said that "Order is nature's first law." This principle or motto cannot be kept too prominently before the minds of youth; such habits not only enable the pupil to make greater progress in his studies, but they accompany him through life, making him the gentleman as well as the man of business habits. Among others who spoke in terms of commendation at the close of the examination was A. Shaw, Esq., one of the trustees. He expressed his agreeable surprise at the progress of the School as well as at the order and genteel deportment of the pupils. The commendation bestowed upon the teacher, (of which he was richly deserving) and upon his school, was received with approbation by the visitors present.

#### TRINITY COLLEGE, TORONTO.

The annual Convocation of Trinity College was held in the College Hall, on Saturday, the 27th October. After the usual prayers, the Chancellor, Sir J. B. Robinson, admitted the following gentlemen to degrees:

#### D. C. L.

Hon. John Hillyard Cameron, John Hawkins Hagarty, Phillip Michael Van Koughnet; *Professors of Law.*

B. C. L.

Charles Magrath, Samuel Bickerton Harman.

In addition, the degree of B. A. was conferred on eleven students; M. B. on one. Four *ad eundem* degrees of B. A. were conferred, and one of M. D. The degree of M. A. was conferred on the four gentlemen admitted to the degree of B. A., *ad eundem*. Various prizes were distributed, and nineteen Students were matriculated.

## BRITISH AND FOREIGN.

### MONTHLY SUMMARY.

Mr. Sylvester who was second wrangler at Cambridge in 1837, has been appointed Professor of Mathematics at Woolwich. He had recently occupied the same post at Virginia. . . . The Dowlais Schools, designed for the education of 1400 children, and erected by the late Sir John Guest, at a cost of £7,000, have just been completed by his widow, the Lady Charlotte Schreiber. The whole building is 235 feet long by 100 feet in the centre, i. e., the infant school is 100 feet long by 35 wide and 50 high. The boys' school is 100 feet long by 30 feet wide and 30 high. The girls' school is of the same dimensions. Sir Charles Barry is the Architect. . . . The Earl of Aberdeen, Chancellor of King's College and University, Aberdeen, Scotland, has intimated his intention to appoint the Rev. Peter Colin Campbell, A. M., recently Professor of Greek in the College, to the vacant office of principal. Professor Campbell is a brother of Dr. Campbell, of Niagara, and was a few years ago Professor of Languages in Queen's College, Kingston. . . . Mr. Sidney Herbert, at the close of the Glasgow "Crimean Meeting," made some remarks on the proof given of the value of education by the letters sent home by British soldiers. He found in their letters evidence both of the tenderest affection and the deepest and most earnest piety in all ranks. Some persons deemed that education would make the soldier less prompt in the battle-field; but never did any men do their duty more nobly than those men did theirs,—men who had received that education which enabled them to write descriptions of battles, which the pen of the historian himself might well envy. . . . The late Col. Campbell has left £500 for the purpose of building a school in his native village of Fornightly, and a further sum of £2,500 as a perpetual endowment. The parish ministers, who are named as trustees to carry out this plan, have each of them received the sum of £100. The remainder of his fortune has been bequeathed to King's College, Aberdeen, to be given to the Students as Bursaries, varying from £10 to £20. . . . The Queen has appointed Dr. Allman, of Trinity College, Dublin, to be Regius Professor of Natural History and Keeper of the Museum, in the University of Edinburgh. . . . The Queen has appointed the Rev. B. Jowett, Regius Professor of Greek for the University of Oxford, in succession to the late Dr. Gaysford, Dean of Christ Church. . . . **СТОКГОЛМ**, Sept. 18—In celebration of the fall of Sebastopol, all the students of the University of Upsala assembled about six o'clock in the evening of the day on which the news arrived, on the great square of that city, with flags and banners, and, accompanied by masses of the people, proceeded in solemn procession singing at the same time patriotic songs, to the monument of Gustavus the Great in the wood of Odin. . . . It is stated that a school or college for Turkish youth is about to be established at Versailles, the Sultan having made a grant of 1,500,000 francs for this purpose. Here some three hundred young Mussulmen will be instructed in the European languages, the sciences, and the arts as applied to industry. . . . An important movement, according to the London Morning Herald, is in progress among the most influential of the English Jews, for the establishment of a college for the education of members of the ancient faith of London. With a view of obtaining degrees in the London University, attendance on the classical classes of University College is to be part of the scheme. Hebrew and theology are to be placed under the direction of the chief Rabbi. A school is to be established in connexion with the college. Premises have been taken in Finsbury Square. . . . The Oxford University Commissioners are shortly expected to resume their sittings for the purpose of making their report on the various schemes and communications which have been made to them by the Colleges. The report is looked for with great interest.

## UNITED STATES.

### MONTHLY SUMMARY.

There are now 669 students in the different departments of Harvard University, Cambridge. Of these, 365 are under-graduates, which is the largest number ever on the rolls at one time. . . . The present Freshmen Class at Yale is the largest which has ever entered that college,

consisting of 155 members. The proportion of Southern students is much smaller than for years past. . . . A Female College, intended to be on the largest and most generous scale as to both opportunity and usefulness, was opened at Elmira, N. Y., during the State fair, with addresses by the Rev. Dr. Beman, the Rev. Dr. Cox, Prof. Kendrick of Rochester, and the Rev. Mr. Steele of this city. Among the subscriptions towards its foundation is one of \$5,000. This college has in view the educating of the female mind to as high a point as it is capable of reaching, and it is expected in a great measure to disprove the false position taken by many, that woman cannot attain to the same high qualifications as man in any science or pursuit upon which she enters.

## Literary and Scientific Intelligence.

### MONTHLY SUMMARY.

The *Journal de Quebec*, in a correspondence of M. Gaillardet, October 4, confirms the news respecting the gift of books about to be presented to Canada by the French Government. M. Gaillardet says that the collection, composed of scientific, classical and religious works, is to supply in part the loss occasioned by the burning of the library at Quebec. . . . The King of the Belgians has offered a prize of 3,000 francs to the author of the best history of the reign of the Archdukes Albert and Isabella. It is proposed that in future the writer for such prizes shall choose his own subject. . . . The Belgian Academy, when re-organized, will devote itself to the production of national biography, the publication of archaic Flemish works, and the re-editing of the great writers of the country. . . . The late Baron Stassarts has left the Belgian Academy 2,260 francs a year to found a prize for the best biography. of a gold medal worth 600 francs. A second prize of 3,000 francs is to be given to the author of the best work on some point of national history. The first biography is to be that of the Baron himself. . . . The oldest book in the United States, it is said, is a manuscript bible in the possession of Dr. Witherspoon, of Alabama, written over a thousand years ago! He describes it as follows: The book is strongly bound in boards of the old English oak, and with thongs by which the leaves are also well bound together. The leaves are entirely made of parchment, of a most superior quality, of fineness and smoothness little inferior to the best satin. The pages are all ruled with accuracy, and writtten with great uniformity and beauty in the old German text hand, and divided off into chapters, and verses. The first chapter of every book in the Bible is written with a large capital, of inimitable beauty, and splendidly illuminated with red, blue, and black ink, still in vivid colors; and no two of the capital letters in the book are precisely alike. . . . Monsieur O. Delepierre has written an essay to prove that Joan of Arc, or *Jeanne D'Arc* as she is sometimes called, was not burned at the stake. History says that she was burned at Rouen by the English in 1431 for heresy, but M. Delepierre has discovered records showing that she secretly escaped to Erlon, in the duchy of Luxembourg; that she there married Messire de Hermoise, Knight, and that she was alive in 1444, thirteen years after the assumed burning. M. Delepierre's essay has been privately printed in Paris, under the title of *Doute Historique*. . . . The corner stone of the long-projected building of the N. Y. Historical Society was laid a few days ago with appropriate ceremonies. The building is to be a plain, substantial, fire-proof edifice, and is to cost \$40,000. . . . The Chevalier Bunson has published a new religious philosophical work entitled "Signs of the Times." It is written in defence of freedom of conscience, and specially dwells on the spirit of Christian unions and the direction taken by the Church at present. . . . Professor Craik, of the Queen's College, Belfast, has thrown out the following suggestion, in Mr. Charles Knight's "Town and Country Newspaper," as a possible means of placing the present alliance of France and England on a secure and lasting basis: "A new crisis and a new object may demand a course of some novelty and boldness, and even the application of what may deserve to be called a new principle in the mechanism of politics. What if it were to be agreed between the two countries that every citizen of the one should be held to be also a citizen of the other. Let this be called the principle mutual citizenship or mutual denizenship. Such an arrangement would overthrow or disturb nothing that is now established in either country. But its force of quiet amalgamation would be incalculable and infinite. Even with two governments, it would make the two nations substantially and really one." . . . The London Illustrated News says: Benedetto Pistrucci is no more! Who has not heard of Pistrucci! It was Pistrucci who made (with the exception of the shillings and sixpences) all the coins of King George III. since

the peace of 1815, and the six principal coins of King George IV. . . . The Loudon Stereoscopic Company offer a prize of twenty guineas for the best essay upon the Stereoscope—Sir David Brewster being the arbitrator. . . . The editorship of the British and Foreign Evangelical Review has passed into the hands of Principal Cunningham, of the Free College, Edinburgh. . . . The ten daily political journals of Paris have a total circulation of 161,000, viz. *La Presse* 41,000, *Le Siecle* 36,000, *Le Constitutionnel* 26,000, *Le Pays* 16,000, *La Patrie* 15,000, *Le Journal des Debats* 9,000, *L'Univers* 6,000, *L'Assemblée Nationale* 5,000, *L'Union* 4,000, *La Gazette de la France* 3,000. . . . McCulloch, the author of the Commercial Dictionary, has testified before a committee of the British House of Commons, that the cost of the public printing, and of the paper required for such printing, reaches the enormous sum of £200,000 a year, or nearly a million of dollars. . . . The Earl of Rosse, who has recently completed the largest telescope ever made, alluded, at a late meeting in London, to its effects. He said that, with respect to the moon, every object on its surface of 100 feet in height was now distinctly to be seen; and he had no doubt that, under very favorable circumstances, it would be so with objects 60 feet in height. On its surface were craters of extinct volcanoes, rocks, and masses of stones almost innumerable. He had no doubt that if such a building as he was then in were upon the surface of the moon, it would be rendered distinctly visible by these instruments. But there were no signs of habitations such as ours—no vestiges of architecture remain to show that the moon is or ever was inhabited by a race of mortals similar to ourselves. It presented no appearance which could lead to the supposition that it contained any thing like green fields and lovely verdure of this beautiful world of ours. There was no water visible—not a sea or a river, or even the measure of a reservoir for supplying town or factory—all seemed desolate. This confirms the conjectures of the author of "No More Worlds than One." . . . The Imperial Library of the Court of Vienna contains more than sixteen thousand manuscripts in the Greek, Hebrew, Chinese, Arabic, etc. languages on parchment, and nearly twelve thousand in the European languages upon paper; twelve thousand incunabula, nearly two hundred and eighty thousand modern books, more than six thousand volumes of music, and eight thousand eight hundred autographs of distinguished persons. There are besides in Vienna seventeen libraries, among which the private imperial library and that of the University are the most considerable.

CANADIAN NATURAL HISTORY.

The Ottawa Athenæum have offered the following prizes with a view to promote the study of Natural History in the Counties mentioned. They also furnish a number of suggestions for the presentation of such specimens as may be procured:

Resolved—That this Society do offer Prizes for the best collection of Insects, Reptiles, Crustaceans, Shells, Plants and Minerals, made in all or any of the following Counties: Renfrew, Pontiac, Carleton, Ottawa, Lanark, Prescott, Russell, Leeds, Grenville, Argenteuil and Vaudreuil, the said collections to be sent in on the 1st of October, 1857. The prizes to be as follows:

1. INSECTS, best collection of
  - Coleoptera and } Ex. Beetles, Earwigs, Bugs, Locusts,
  - Hemiptera. } Grass-hoppers, Tree Lice, &c., . . . . . £2 10 0
  - Lepidoptera } Moths, Butterflies, Dragon Flies, May
  - and Neuroptera. } Flies, &c., . . . . . 2 10 0
  - Hymenoptera and } Bees, Ants, Flies, Centipedes,
  - Diptera & Aptera. } Fleas, Spiders, &c., . . . . . 2 10 0
2. Reptiles, and Crustaceans,
  - Ex. Snakes, Frogs, Protes, Crayfish, &c., &c., . . . . . 2 10 0
3. River and Land Shells, . . . . . 2 10 0
4. Best named collection of dried specimens of Indigenous Plants, . . . . . 10 10 0
5. Best collection of Mineralogical specimens, with the name of the locality where found attached, . . . . . 10 10 0

The successful collections to become the property of the Society. Any of the unsuccessful collections may be acquired by the Society upon paying half the foregoing prices.

Should the best collection under any of the foregoing heads prove palpably inferior, the Trustees reserve the right of refusing the premium.

That the following directions be issued for the guidance of those who compete:

TO PRESERVE INSECTS.—Get a box made of White Pine or Spruce, fifteen inches square, and one inch deep. Line it with paper, pasted in. Transfix the insects through the breast with a pin, which drive into the bottom of the box. In the case of such insects as butterflies, moths, beetles, &c., it

is necessary to arrange the wings, feet, and feelers in the natural position before they dry. To kill insects speedily, and without impairing their value as specimens, it suffices to touch the mouth with a drop of spirits of turpentine. Insects too small to impale, may be fixed in their places by a solution of gum arabic or common paste. Keep similar insects as much together as possible, and number them distinctly on the paper underneath, beginning at the upper left hand corner. When the box is filled cover it with a pane of glass, which fix in its place with putty, having previously fastened a small piece of tallow by a pin to the bottom of the box.

Reptiles and Crustaceans are best preserved in the strongest high wines, taking care to cork the bottle closely.

For preserving plants, unsized paper should be used. Books of Botany give the necessary directions for making a Hortus Siccus. The locality where found must be carefully noted.

Mineralogical specimens must be wrapt up separately in paper, and when fragile add cotton wool, as the perfection of the angles and fractures are of great consequence to the scientific. Although the Society do not demand the scientific names, it must not be overlooked that they rigorously require the locality where found to be legibly written and enclosed in the wrapper; writing the locality on a long riband of paper, and rolling it round the specimen, previous to wrapping it, is most secure.

Shells, like Minerals, should be wrapt up separately, and furthermore, require cotton wool in addition in every case, as the edges and hinges often determine specific differences. A label should be rolled around, stating where found, and whether on land, or near, or in a river or brook. Fresh Water Mussels, technically called "Unio," are at present of great scientific interest; and as the specific differences are so trifling, as to be undiscernable except to a student, it is advisable that all specimens found by any competing collector should be preserved and sent in.

The Society, in offering the preceding prizes, do not pretend that they are proffering anything like the money value of the collections solicited, but they desire and hope, that the prizes offered, may be the means of exciting many to embark in the pursuit of science, who otherwise would never have thought of so doing, at the same time that the Museum of the Society would be enriched by their labors, for the mutual benefit of the inhabitants of the Ottawa country generally.

ECLIPSE OF THE MOON.

On the morning of Thursday, October 27th, the moon totally eclipsed for a period of more than three hours; it was invisible at Toronto owing to the weather. Professor Henry M. Harman has furnished the Baltimore American with the following calculations of the beginning, duration, and ending of the eclipse in that vicinity:—

	Hours.	Min.	Mean Time.
First contact with penumbra. . . . .	11	38.6	Oct. 24
Do. do earth's shadow. . . . .	12	37.3	Oct. 25
Beginning of total eclipse. . . . .	1	38.3	Oct. 25
Middle of the eclipse. . . . .	2	22.7	Oct. 25
End of total eclipse. . . . .	3	7.0	Oct. 25
Last contact with earth's shadow. . . . .	4	8.0	Oct. 25
Do. do penumbra. . . . .	5	6.0	Oct. 25
Duration of total eclipse. . . . .	1	28.7	
Do. eclipse with earth's shadow. . . . .	3	30.7	
Do. of entire eclipse. . . . .	5	27.4	

Digits eclipsed 17,556 on the Northern limb of the moon. The centre of the earth's shadow will approach the centre of the moon within about three eighths of the diameter of the latter. The shadow will approach from the Northeast and pass over toward the Southwest. It will be impossible by observation to perceive the beginning of the contact with penumbra. At the time of the first contact with the earth's shadow the moon will be about thirty degrees from the zenith, about ten degrees South of the cluster of stars in the head of Aries.

The moon while totally eclipsed generally appears of a bright copper color, that part under the centre of the shadow having the appearance of tarnished copper. Several instances of the total disappearance of the moon's disc are on record. In 1601, according to Kepler, it entirely disappeared. In 1642, not a vestige of the moon could be seen, though a telescope, with different magnifying powers, was used for the purpose. Also, in 1816; in a total eclipse, it could not be seen from London, even with the aid of telescope.

The appearance of the moon depends greatly upon the condition of the atmosphere. Humbolt remarks that in 1801, when not far from Carthage de Indias he observed a total eclipse of the moon, and was extremely struck with the greater luminous intensity of the moon's disc under a tropical sky than in my native North. (Cosmos, vol. IV., page 483)

## THE BRITISH ASSOCIATION AT GLASGOW.

A very brilliant annual meeting of the *stars* and other *savans* of the British Association and their satellites has just been held at Glasgow. This was the second meeting of the Association in the western metropolis of Scotland, the former having been held in 1840. The arrangements for the present meeting were of the most complete kind. The university classrooms were set apart for the sectional and committee meetings, the City Hall was engaged for the general meetings, the Trades' Hall was opened as a reception-room, and the Merchants' Hall was made available for the meetings of the general committee, who met on Wednesday in last week at one o'clock. Among those present on the platform and in the hall were Prince Lucien Bonaparte, the Earl of Harrowby, Count Frölich, from Sweden; Sir R. I. Murchison, Sir C. Lyell, Sir Charles Pasley, Sir John Rennie, Professor Fleming, Professor Balfour, Dr. Lyon Playfair, Dr. Whewell, Dr. Scoresby, Colonel Sabine, Sheriff Glassford Bell, Mr. Wentworth Dilke, &c.

The Earl of Harrowby was called to the chair, and Professor Phillips, assistant general secretary, read the minutes of the meeting of the general committee at Liverpool in 1854.

Colonel Sabine, as general secretary, read the report of the council to the meeting then held, and which, amongst other topics, congratulated the Association on the probable concentration of scientific bodies in Burlington House. A list of office-bearers was then read and other business transacted.

At five o'clock the Lord Provost of Glasgow gave a grand inaugural banquet in the M'Lellan Rooms. These halls, which were built for public purposes by the late Mr. Archibald M'Lellan, and in which is usually exhibited a collection of works of art of the different European schools, including numerous paintings by great masters (the greater part of the collection having belonged to the late Mr. M'Lellan himself,) were on this occasion superbly fitted up. The saloons are three in number, one of which was prepared as a reception-room, the central one as a dining-hall, and the third as a coffee-room.

Amongst those present, besides names already given, were the Duke of Argyle, as president elect, the Earls of Elgin and Eglinton, Lords Ingestre, Belhaven, and Talbot, Baron Liebig, Sir D. Brewster, and many other eminent men.

The first general meeting of the association took place in the City Hall at eight o'clock. The entire of this great hall was filled with a brilliant assemblage, including a nearly equal proportion of ladies, all in full evening costume. The Earl of Harrowby then introduced, as president elect, the Duke of Argyle, who, after ably reviewing the progress of science, said,—

The advancement of science depends, above all things, on securing for it a better and more acknowledged place in the education of the young. What we desire, and ought to aim at is, that abstract science, without special reference to its departmental application, should be recognized as an essential element in every liberal education. We desire this on two grounds mainly,—first, that it will contribute more than anything else to the further advancement of science itself; and, secondly, because we believe that it would be an instrument of vital benefit in the culture and strengthening of the mental powers. And this brings me to say a word on the value of instruction in physical science, not merely with a view to its own advancement, but as in itself a means of mental training, and an instrument for the highest purposes of education. Even where the researches of physical science can do little more than guide conjecture, or illustrate merely what it cannot prove, how grand are the questions which it excites us to ask, and on which it enables us to gather some amount of evidence. It is sometimes proudly asked, who shall set bounds to science, or to the widening circle of her horizon? But why should we try to do so, when it is enough to observe that that horizon, however it may be enlarged, is a horizon still—a circle beyond which, however wide it be, there shine, like fixed stars without a parallax, eternal problems in which the march of science never shows any change of place. If there be one fact of which science reminds us more perpetually than another, it is that we have faculties impelling us to ask questions which we have no powers enabling us to answer. What better lesson of humility than this? What better indication of the reasonableness of looking to a state in which this discrepancy shall be done away; and when we shall "know even as we are known?"—*The Builder*.

## THE NEW READING-ROOM IN THE BRITISH MUSEUM.

This noble and appropriate building, designed by Sidney Smirke, the architect, is fast progressing towards completion, and has already arrived at that stage by which some idea may be formed of the appearance it will ultimately present. It is situate in the quadrangle at the rear of the main building, and consists of an elegant circular apartment, 140 feet in diameter, and 106 feet in height, surmounted by a very tasteful dome externally

covered with copper to within about two feet of the snow gutter, which of itself, is wider than many of the London footways. At this point, the Seyssel Asphalt Company have applied their material continuing to the gutter, and terminating on the top of the parapet wall, rendering this portion of the building perfectly water-tight. This receives its light not only from the large glazed aperture (about 120 feet in circumference) in the crown of the dome, but also from twenty windows affixed in the springing thereof. Upon the centre of the floor beneath will be a platform for the superintendent, with table cases around for catalogues, and tables to accommodate 400 readers, with free access for attendants, &c. Every attention to the ventilation and regulation of temperature has been paid. Attached are cloak-rooms and other offices, as also ranges of wrought iron book-cases calculated for 102,000 volumes of books, and the whole building being composed of bricks and iron only is completely fire-proof. This new reading room, said to be the largest in the world, is built by Messrs. Baker and Fielder, under a contract of about £100,000. By the general arrangement every facility of access is attained from the libraries in the north wing, as also through the entrance hall of the museum.

## Departmental Notices.

To Municipal and School Corporations in Upper Canada.

## PUBLIC SCHOOL LIBRARIES.

Until further notice, the Chief Superintendent of Schools will apportion *one hundred per cent.* upon all sums which shall be raised from local sources by Municipal Councils and School Corporations, for the establishment or increase of Public Libraries in Upper Canada, under the regulations provided according to law.

In selecting from the General and Supplementary Catalogues, parties will be particular to give merely the catalogue number of the book required, and the department from which it is selected. To give the names of books without their number and department, (as is frequently done,) causes great delay in the selection and despatch of a library. The list should be written on a distinct sheet of paper from the letter, and attested by the corporate seal of the Trustees or Municipalities applying for libraries.

## SCHOOL MAPS AND APPARATUS.

The Legislature having granted annually, from the commencement of the current year, a sufficient sum of money to enable this Department to supply Maps and Apparatus (not text-books) to Grammar and Common Schools, upon the same terms as Library Books are now supplied to Trustees and Municipalities, the Chief Superintendent of Schools will be happy to add one hundred per cent. to any sum or sums, not less than five dollars, transmitted to the Department, and to forward Maps, Apparatus, Charts and Diagrams to the value of the amount thus augmented, upon receiving a list of the articles required by the Trustees. In all cases it will be necessary for any person, acting on behalf of the Trustees, to enclose or present a written authority to do so, verified by the corporate seal of the Trustees.

## TO GRAMMAR SCHOOL TEACHERS.

APPLICATIONS for the office of TEACHER of the PICTON COUNTY GRAMMAR SCHOOL, now vacant, will be received by the BOARD OF TRUSTEES until the TENTH day of DECEMBER next. To be forwarded with Testimonials.

C. S. PATTERSON, *Secretary*.

Picton, 12th Nov., 1855.

ADVERTISEMENTS inserted in the *Journal of Education* for one half-penny per word, which may be remitted in postage stamps, or otherwise.

TERMS: For a single copy of the *Journal of Education*, 5s. per annum; back vols. neatly stitched, supplied on the same terms. All subscriptions to commence with the January number, and payment in advance must in all cases accompany the order. Single numbers, 7½d. each.

All communications to be addressed to Mr. J. GEORGE HODGINS, Education Office, Toronto.  
TORONTO: Printed by LOVELL & GIBSON, Corner of Yonge and Melinda Streets.