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.

- ☐ Coloured covers / Couverture de couleur
- ☐ Covers damaged / Couverture endommagée
- ☐ Covers restored and/or laminated / Couverture restaurée et/ou pelliculée
- ☐ Cover title missing / Le titre de couverture manque
- ☐ Coloured maps / Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations / Planches et/ou illustrations en couleur
- ☑ Bound with other material / Relié avec d'autres documents
- ☐ Only edition available / Seule édition disponible
- ☑ Tight binding may cause shadows or distortion along interior margin / La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure.

- ☐ Coloured pages / Pages de couleur
- ☐ Pages damaged / Pages endommagées
- ☐ Pages restored and/or laminated / Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached / Pages détachées
- ☑ Showthrough / Transparence
- ☑ Quality of print varies / Qualité inégale de l'impression
- ☐ Includes supplementary materials / Comprend du matériel supplémentaire
- ☐ Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.

☑ Additional comments / Commentaires supplémentaires: Continuous pagination.

JOURNAL OF EDUCATION,

Upper Canada.

VOL. V. TORONTO, UPPER CANADA, OCTOBER, 1852. N°. 10.

CONTENTS OF THIS NUMBER.

QUESTION OF RELIGIOUS INSTRUCTION, IN CONNECTION WITH THE SYSTEM OF PUBLIC INSTRUCTION IN UPPER CANADA.

(From the Annual Report of the Chief Superintendent for 1851.)

The question of religious instruction has been a topic of voluminous and earnest discussion among statesmen and educationists in both Europe and America—has agitated more than one country on the continent of Europe—has hitherto deprived England of a national system of education, permitting to it nothing but a series of petty expedients in varying forms of government grants to certain religious denominations, while the great mass of the laboring population is unreached by a ray of intellectual light, and is "perishing for lack of knowledge" amidst the din of sectarian war about "religious education," and under the very shadows of the cathedral and the chapel. If I have not made this question a prominent topic of remark in my annual reports, it is not because I have undervalued or overlooked its importance. In my first and preliminary report on a system of Public Elementary Instruction for Upper Canada, I devoted thirty pages to the discussion of this subject (pp. 22-52,) and adduced the experience and practice of most educating countries in Europe and America respecting it. In preparing the draft of the school law, I sought to place it where it had been placed by the authority of Government and by the consent of all parties in Ireland—as a matter of regulation by a National Board, regulations* have been prepared and duly sanctioned, and placed in and with the guards which all have considered essential. These

*These Regulations are as follows :—

CONSTITUTION AND GOVERNMENT OF SCHOOLS IN RESPECT TO RELIGIOUS AND MORAL INSTRUCTION

As Christianity is the basis of our whole system of elementary education, that principle should pervade it throughout. Where it cannot be carried out in mixed schools to the satisfaction of both Roman Catholics and Protestants, the law provides for the establishment of separate schools. And the Common School Act, fourteenth section, securing individual rights as well as recognizing Christianity, provides, "that in any model or common school established under this Act, no child shall be required to read or study in or from any religious book, or to join in any exercise of devotion or religion, which shall be objected to by his or her parents or guardians: Provided always, that within this limitation, pupils shall be allowed to receive such religious instruction as their parents or guardians shall desire, according to the general regulations which shall be provided according to law."

In the section of the Act thus quoted, the principle of religious instruction in the schools is recognized, the restriction within which it is to be given is stated, and the exclusive right of each parent and guardian on the subject is secured, without any interposition from trustees, superintendents, or the Government itself.

The common school being a day, and not a boarding school, rules arising from domestic relations and duties are not required; and as the pupils are under the care of their parents and guardians on Sabbaths, no regulations are called for in respect to their attendance at public worship.

In regard to the nature and extent of the daily religious exercises of the school, and the special religious instruction given to pupils, the Council of Public Instruction for Upper Canada makes the following regulations and recommendations :—

The public religious exercises of each School shall be a matter of mutual voluntary arrangement between the trustees and teacher; and it shall be a matter of mutual voluntary arrangement between the teacher and the parent or guardian of each pupil, as to whether he shall hear such pupil recite from the Scriptures, or Catechism, or other summary of religious doctrine and duty of the persuasion of such parent or guardian. Such recitations, however, are not to interfere with the regular exercises of the school.

2. But the principles of religion and morality should be inculcated upon all the pupils of the school. What the Commissioners of National Education in Ireland state as existing in schools under their charge, should characterize the instruction given in each school in Upper Canada. The Commissioners state that "in the National Schools the importance of religion is constantly impressed upon the minds of children, through the works calculated to promote good principles and fill the heart with love for religion, but which are so compiled as not to clash with the doctrines of any particular class of Christians." In each school the teacher should exert his best endeavours, both by example and precept, to impress upon the minds of all children and youth committed to his care and instruction, the principles of piety, justice and a sacred regard to truth, love to their country, humanity and universal benevolence, sobriety, industry frugality, chastity, moderation and temperance, and those other virtues which are the ornament of society and on which a free constitution of government is founded; and it is the duty of each teacher to endeavour to lead his pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above mentioned virtues, in order to preserve and perfect the blessings of law and liberty, as well as to promote their future happiness, and also to point out to them the evil tendency of the opposite vices.—*General Forms and Regulations, &c., Chapter IV., Section* 5. *See Annual School Report for* 1850, *pp.* 257, 258.

the hands of all school authorities; nor have I failed from time to time to press their importance upon all parties concerned. It is, however, worthy of remark that in no instances have those parties who have thought proper to assail the school system, and myself personally, on the question of religious instruction, quoted a line from what I have professedly written on the subject, or from the regulations, which I have recommended, while such parties have more than once pretended to give my views by quoting passages which were not at all written in reference to this question, and which contained no exposition of my views on it.

As some prominence has been given to this question during the year by individual writers, and some vague statements and notions put forth, I will offer a few remarks on it in concluding this report.

1. My first remark is, that the system of common school instruction should, like the legislature which has established, and the government that administers, it, be non-sectarian and national. It should be considered in a provincial, rather than in a denominational point of view—in reference to its bearing upon the condition and interests of the country at large, and not upon those of particular religious persuasions as distinct from public interests, or upon the interests of one religious persuasion more than those of another. And thus may be observed the difference between a mere sectarian and a patriot—between one who considers the institutions and legislation and government of his country in a sectarian spirit, and another who regards them in a patriotic spirit. The one places his sect above his country, and supports or opposes every public law or measure of government, just as it may or may not promote the interests of his own sect irrespective of the public interests and in rivalship with those of other sects, the other views the well being of his country as the great end to be proposed and pursued, and the sects as among the instrumentalities tributary to that end. Some indeed have gone to the extreme of viewing all religious persuasions as evils to be dreaded; and as far as possible proscribed, but an enlightened and patriotic spirit rather views them as holding and propagating in common and great principles of virtue and morality, which forms the basis of the safety and happiness of society; and therefore as distinct agencies more or less promotive of its interests —their very rivalships tending to stimulate greater activity, and therefore, as a whole, more beneficial than injurious. I think a national system of public instruction should be in harmony with this national spirit.

2. I remark again, that a system of public instruction should be in harmony with the views and feelings of the great body of the people, especially of the better educated classes. I believe the number of persons in Upper Canada who would theoretically or practically exclude Christianity in all its forms as an essential element in the education of the country, is exceedingly small, and that more than nine-tenths of the people regard religious instruction as an essential and vital part of the education of their offspring.—On this, as well as on higher grounds, I lay it down as a fundamental principle that religious instruction must form a part of the education of the youth of our country, and that that religious instruction must be given by the several religious persuasions to their youth respectively. There would be no Christianity among us were it not for the religious persuasions, since they, collectively, constitute the Christianity of the country, and, separately, the several agencies by which Christian doctrines and worship and morals are maintained and diffused throughout the length and breadth of the land. If in the much that certain writers have said about and against "sectarian teaching," and against "sectarian bias" in the education of youth, it is meant to proscribe or ignore the religious teaching of youth by sects or religious persuasions; then is it the theory, if not the design of such writers to preclude religious truth altogether from the minds of the youth of the land, and thus prepare the way for raising up a nation of infidels! But if on the other hand, it be insisted, as it has been by some, that as each religious persuason is the proper religious instructor of its own youth, therefore each religious persuasion should have its own elementary schools, and thus denominational common schools should supersede our present public common schools, and the school fund be appropriated to the denominations instead of to the municipalities; I remark that this theory is equally fallacious with the former, and is fraught with consequences no less fatal to the interests of universal education than is the former theory of the interests of all Christianity. The history of modern Europe is general, and of England in particular, teaches us that when the elementary schools were in the hands of the Church, and the State performed no other office in regard to schools than that of tax-assessor and tax-gatherer to the Church, the mass of the people were deplorably ignorant, and, therefore deplorably enslaved. In Upper Canada, the establishment and support of denominational schools to meet the circumstances of each religious persuasion would not only cost the people more than five-fold what they have now to pay for school purposes, but would leave the youth of minor religious persuasions, and a large portion of the poorer youth of the country, without any means of education upon terms within the pecuniary resources of their parents, unless as paupers, or at the expense of their religious faith.

3. But the establishment of denominational common schools for the purpose of denominational religious instruction itself is inexpedient. The common schools are not boarding, but day schools. The children attending them reside with their own parents, and are within the charge of their own pastors: and therefore the oversight and duties of the parents and pastors of children attending the common schools are not in the least suspended or interfered with. The children attending such schools can be with the teacher only from 9 o'clock in the morning until 4 o'clock in the afternoon of five or six days in the week, while during his morning and night of each week-day and the whole of Sunday, they are with their parents or pastors; and the mornings, and evenings, and Sabbath of each week, are the very portions of time which convenience and usage and ecclesiastical laws prescribe for religious studies and instruction—portions of time during which pupils are not and cannot be with the teacher, but are and must be under the oversight of their parents or pastors. And the constitution or order of discipline of each religious persuasion enjoins upon its pastors and members to teach the summary of religious faith and practice required to be taught to the children of the members of each such persuasion. I might here adduce what is enjoined on this subject by the Roman Catholic, and the several Protestant Churches; but as an example of what is required, in some form or other, by the laws or rules of every religious persuasion, I will quote the 59th canon of the Church of England,—which is as follows:—

"Every Parson, Vicar or Curate, upon every Sunday and Holy-day, before Evening Prayer, shall, for half an hour or more, examine and instruct the youth and ignorant persons in his parish, in the Ten Commandments, the Articles of the Belief, and the Lord's Prayer; and shall diligently hear, instruct, and teach them the Catechism set forth in the Book of Common Prayer, and all fathers, mothers, masters, and mistresses, shall cause their children, servants, and apprentices, which have not learned the catechism, to come to the church at the time appointed, obediently to hear, and to be ordered by the Minister, until they have learned the same. And if any Minister neglect his duty herein, let him be sharply reproved upon the first complaint, and true notice thereof given to the Bishop or Ordinary of the place. If, after submitting himself, he shall willingly offend therein again, let him be suspended; if so the third time, there being little hope that he will be therein reformed, then excommunicated, and so remain until he will be reformed. And, likewise, if any of the said fathers, mothers, masters, or mistresses, children, servants, or apprentices, shall neglect their duties, of the one sort of not causing them to come, and the other in refusing to learn, as aforesaid let them be suspended by their Ordinaries, (if they be not children) and if they so persist by the space of a month, then let them be excommunicated."

To require, therefore, the teacher in any common day school to teach the catechism of any religious persuasion, is not only a work of supererogation, but a direct interference with the disciplinary order of each religious persuasion; and instead of providing by law for the extension of religious instruction and the promotion of Christian morality, it is providing by law for the neglect of pastoral and parental duty, by transferring to the common school teacher the duties which their church enjoins upon them, and thus sanctioning immoralities in pastors and parents,—which must, in a high degreee, be injurious to the interests of public morals no less than to the interests of children and of the common schools. Instead of providing by law for denominational day schools for the teaching of denominational catechisms in school, it would seem more suitable to enforce by law the performance of the acknowledg-

ed disciplinary duties of pastors and members of religious persuasions by not permitting their children to enter the public schools until their parents and pastors had taught them the catechism of their own church. The theory, therefore of denominational day schools is as inexpedient on religious grounds as it is on the grounds of economy and educational extension. The demand to make the teacher do the canonical work of the clergyman is as impolitic as it is selfish. Economy as well as patriotism requires that the schools established for all should be open to all upon equal terms and upon principles common to all—leaving to each religious persuasion the performance of its own recognized and appropriate duties in teaching its own catechism to its own children. Surely it is not the province of government to usurp the functions of the religious persuasions of the country ; but it should recognize their existence, and therefore not provide for denominational teaching to the pupils in the day schools, any more than it should provide such pupils with daily food and raiment, or weekly preaching or places of worship. As the state recognizes the existence of parents and the performance of parental duties by not providing children with what should be provided by their parents—namely, clothing and food ;—so should it recognize the existence of the religious persuasions and the performance of their duties by not providing for the teaching in the schools of that which each religious persuasion declares should be taught by its own ministers and the parents of its children.

4. But, it may be asked, ought not religious instruction to be given in day schools, and ought not government to require this in every school ? I answer, what may or ought to be done in regard to religious instruction, and what the government ought to require, are two different things. Who doubts that public worship should be attended and family duties performed ? But does it therefore follow that government is to compel attendance upon the one, or the performance of the other ? If our government were a despotism, and if there were no law or no liberty, civil or religious, but the absolute will of the Sovereign, then government would, of course compel such religious and other instruction as it pleased,—as is the case under despotisms in Europe. But as our government is a constitutional and a popular government, it is to compel no farther in matters of religious instruction than it is itself the expression of the mind of the country, and than it is organized by law to do. Therefore, in the "General Regulations on the Constitution and Government of Schools respecting religious intruction," (quoted in a note on a preceding page) it is made the duty of every teacher to inculcate those principles and duties of piety and virtue which form the basis of morality and order in a state, while parents and school teachers and school managers are left free to provide for and give such further religious instruction as they shall desire and deem expedient. If with us, as in despotic countries, the people were nothing politically or civily but slaves and machines, commanded and moved by the will of one man, and all the local school authorities were appointed by him, then the schools might be the religious teachers of his will ; but with us the people in each municipality share as largely in the management of the schools as they do in making the school law itself. They erect the school-houses ; they employ the teachers ; they provide the greater part of the means for the support of the schools ; they are the parties immediately concerned—the parents and pastors of the children taught in the schools. Who then are to be the judges of the nature and extent of the religious instruction to be given to the pupils in the schools—these parents and pastors, or the Executive Government, counselled and administered by means of heads of departments, who are changed from time to time at the pleasure of the popular mind, and who are not understood to be invested with any religious authority over the children of their constituents ?

5. Then if the question be viewed as one of fact, instead of theory, what is the conclusion forced upon us ? Are those countries in Europe in which denominational day schools alone are established and permitted by government, the most enlightened, the most virtuous, the most free, the most prosperous, of all the countries of Europe or America ? Nay, the very reverse is the fact. And it were not difficult to show that those denominational schools in England which were endowed in former ages, have often been the seats of oppressions, vices, and practices, that would not be tolerated in the most imperfect of the common schools of Upper Canada. And when our common schools were formerly, in regard to government control, chiefly under the management of one denomination, were the teachers and schools more elevated in their religious and moral character, than at the present time ? Is not the reverse notoriously the case ? And if enquiry be made into the actual amount of religious instruction given in what are professedly denominational schools, whether male and female, (and I have made the enquiry,) it will be found to consist of prayers not more frequently than in the common schools, and of reciting a portion of catechism each week—a thing which is done in many of the common schools, although the ritual of each denomination requires catechetical instruction to be given elsewhere and by other parties. So obviously unnecessary on religious grounds are separate denominational schools, that two school-houses which were built under the auspices of the Church of England for parish schools of that church—the one at Cobourg, by the congregation of the Archdeacon of York, and the other in connection with Trinity Church, Toronto East—have, after fair trial, been converted for the time being into common school houses, under the direction of the Public Boards of School Trustees in Toronto and Cobourg.

6. I am persuaded that the religious interests of youth will be much more effectually cared for and advanced, by insisting that each religious persuasion shall fulfill its acknowledged rules and obligations for the religious instruction of its own youth, than by any attempt to convert for that purpose the common day schools into denominational ones, and thus legislate for the neglect of duty on the part of pastors and parents of the different persuasions. The common day school and its teacher ought not to be burdened with duties which belong to the pastor, the parent, and the church. The education of the youth of the country consists not merely of what is taught in the day school, but also of what is taught at home by the parents and in the church by the pastor. And if the religious part of the education of youth is, in any instances, neglected or defective, the blame rests with the pastors and parents concerned, who, by such neglect, have violated their own religious canons or rules, as well as the express commands of the Holy Scriptures. In all such cases, pastors and parents are the responsible, as well as guilty parties, and not the teacher of the common school, nor the common school system.

7. But in respect to colleges and other high seminaries of learning, the case is different. Such institutions cannot be established within an hour's walk of every man's door. Youth, in order to attend them, must as a general rule, leave their homes, and be taken from daily oversight and instructions of their parents and pastors. During this period of their education, the duties of parental and pastoral care and instruction must be suspended, or provision must be made for it in connection with such institutions. Youth attending colleges and collegiate seminaries are at an age when they are most exposed to temptation—must need the best counsels in religion and morals—are pursuing studies which most involve the principles of human action, and the duties and relations of common life. At such a period and under such circumstances, youth need the exercise of all that is tender and vigilent in parental affection, and all that is instructive and wise in pastoral oversight ; yet they are far removed from both their pastor and parent. Hence what is supplied by the parent and pastor at home, ought as far as possible, to be provided in connection with each college abroad. And, therefore, the same reason that condemns the establishment of public denominational day schools, justifies the establishment of denominational colleges, in connection with which the duties of the parent and pastor can be best discharged.

Public aid is given to denominational colleges, not for denomination-purposes, (which is the special object of denominational day schools,) but for the advancement of science and literature alone, because such colleges are the most economical, efficient and available agencies for teaching the higher branches of education in the country : the aid being given, not to theological seminaries, nor for the support of theological professors, but exclusively towards the support of teachers of science and literature. Nor is such aid given to a denominational college until after a large outlay has been made by its projectors in the procuring of premises, erecting or procuring and furnishing buildings, and the employment of professors and teachers—evincive of the intelligence, disposition and enterprise of a large section of the community to establish and sustain such an institution.

It is not, however, my intention to discuss the question of recognizing and aiding denominational colleges in a system of public

instruction. My object in the foregoing remarks is to show that the objections against the establishment of denominational day schools, do not form any objection to granting aid to denominational colleges as institutions of science and literature, and open to all classes of youth who may be desirous of attending them.

The more carefully the question of religious instruction in connection with our system of common schools is examined, the more clearly, I think, it will appear that it has been left where it properly belongs—with the local school municipalities, parents and managers of schools—the government protecting the right of each parent and child, but beyond this and beyond the principles and duties of morality common to all classes, neither compelling, nor prohibiting—recognizing the duties of pastors and parents, as well as of school trustees and teachers, and considering the united labours of all as constituting the system of education for the youth of the country.

SHORT MEMOIRS OF EMINENT MEN.

No. 3.

JOSEPH ADDISON.

Joseph Addison, the son of Launcelot Addison, D. D., was born on the 11th of May, 1672, at Milston, a village in Wiltshire. His father, then rector of that place, and afterwards prebendary of Sarum, dean of Litchfield, and archdeacon of Coventry, was a man of great natural abilities, and author of several works, which evince that his literary attainments were of no ordinary character. The subject of his memoir received the first rudiments of education at the place of his nativity, under the tuition of Mr. Naish, a clergyman, but was soon removed to Salisbury, and from thence to the Charter-house. At fifteen he was entered at Queen's College, Oxford, where he applied very closely to the study of classical learning, in which he made a surprising proficiency.

In the year 1687, Dr. Lancaster, dean of Magdalen College, having, by chance, seen a Latin poem, of Addison's, was so pleased with it that he immediately got him elected into that college, where he took the degrees of Bachelor and Master of Arts. His Latin pieces, in the course of a few years, were exceedingly admired in both the universities, nor were they less esteemed abroad, particularly by Boileau, the celebrated French author, who was first led to think highly of the English genius for poetry by their perusal. He published nothing in English before the twenty-second year of his age, when there appeared a copy of verses written by him to Dryden, which met with great approbation from the best judges.

At the Charter-house school he first formed that intimacy with Sir Richard Steele, which their joint literary labours afterwards so effectually recorded. Addison was strongly pressed, when at the university, to enter into holy orders, and had once resolved upon doing so; but his great modesty, his natural diffidence, and an uncommonly delicate sense of the importance of the sacred office, joined to the advice of his friend, Mr. Montague, the Chancellor of Exchequer, made him afterwards alter his resolution. Having expressed to one of his patrons, Sir John Somers, a great inclination to travel, that gentleman, by his interest, procured him a pension from government of three hundred pounds a-year to defray his expenses. He accordingly made a tour to Italy in the year 1699, and two years after wrote a poetical epistle from that country to the Earl of Halifax, In 1702 he was about to return to England, when he received an appointment to attend Prince Eugene, then in command of the Imperial troops in Italy; but the death of William the Third happening soon after, put an end to this affair, as well as to his pension, and he remained a considerable time unemployed. During this period, however, Addison was not idle, but sedulously applied himself to the cultivation of his mind, until at length an unexpected incident gave him an opportunity of displaying his talents to advantage. Lord Godolphin, happening to complain to Lord Halifax that the Duke of Marlborough's victory at Blenheim had never been celebrated in verse in the manner it deserved, asked that nobleman if he could name a person capable of doing justice to the subject. Lord Halifax replied that he did know of such a person, but refused to mention him, "Because," he added, "I have long seen, with indignation, men of no merit maintained in luxury at the public expense, while those of real worth and modesty are suffered to languish in want and obscurity."

To this the Lord Treasurer answered that he was sorry there should be occasion for such a remark; but that he would do his best to wipe off such reproaches for the future; and, on his pledging his honour that whoever his lordship named as adequate to the task should be suitably recompensed, Lord Halifax mentioned Addison.

The proposal was, by direction of the Treasurer, made to our author by Mr. Boyle, in so polite and flattering a manner, that he readily accepted it. Lord Godolphin having seen the first part of the work before the whole was finished, was so pleased with it, that he appointed him Commissioner of Appeals.

The ensuing year he accompanied Lord Halifax into Holland, and in 1706 was made private secretary to the Secretay of State, in which office he acquitted himself ably.

About this time, there being a great taste for Italian operas, he wrote the opera of "Rosamond," wishing to try the effect that a composition of this with English words would have upon the stage; but, probably owing to the badness of the music to which it was adapted, this undertaking did not succeed.

On the 1st of March, 1711, the first number of the "Spectator" made its appearance. Of the the extraordinary popularity of this celebrated periodical, the fact that more than twenty-thousand copies were often sold in one day, would alone bear sufficient testimony.

But, although his literary fame was raised very high by the publication of the "Tatler" and "Spectator," the former of which works is supposed to have been commenced by his friend Steele whilst he was in Ireland, without his knowledge; yet it was not until the appearance of "Cato" that his reputation reached its greatest height. The celebrated tragedy was planned by the author when he was very young, and principally written abroad. For a long time he had no intention of bringing it forward on the stage, but at length, yielding to the earnest and frequently repeated solicitations of his friends, it was exhibited at the theatre, with a prologue written by Pope. It met with uncommon success, being played thirty-five nights without interruption, and then discontinued only on account of the illness of one of the principal actors.—"Cato" was no less admired on the Continent, having been translated into French, Italian, and German. It was acted at Leghorn, and several other places, with immense applause: and the Jesuits of St. Omer made a Latin version of it, which was got up with great magnificence, and acted by the students of the college.

Before the arrival of George the First, Addison was made Secretary of the Regency, and was required by his office to send notice to that monarch of the death of Queen Anne, and the vacancy of the throne of England. He was so long in performing this, thinking that such a subject required so much consideration as to the best manner of expressing it, and was so perplexed with the choice of terms, that the lords, who could not be thus kept waiting, called a man of the name of Southwell, a clerk in the house, and desired him to depatch the message. Southwell readily wrote what was necessary, in the common-place style of business, and boasted that he had performed what was too difficult for Addison. A striking instance of absurd and overweening self-conceit is here afforded us; and it may also be remarked how much more frequently this defect is found in ignorant and inferior minds than those who are justly distinguished above the common herd for wisdom and learning.

In 1716 Addison married the widow of the Earl of Warwick, whom he had long courted. It seldom happens that unequal marriages are productive of happiness to either party; and this was exemplified in the case of Addison and his wife. He first became acquainted with her from being tutor to her son; and the lady always remembered her own rank, and treated her husband with very little consideration.

The year after this ill-sorted union Addison rose to his highest elevation, being made Secretary of State, but appears to have proved himself unequal to the duties of his situation. Having no powers of oratory, he could not speak in the House of Commons; and in the office he could not issue an order without losing his time, and causing inconvenient delay, by waiting to express it in fine and elaborate language. Finding, by experience, his utter inability for public business, he solicited his dismission, which was granted, with a pension of £1500 a year.

In this retirement, although suffering from declining health, he

applied himself with diligence to the completion of a work entitled "Evidences of the Christian Religion;" and intended to have made an English paraphrase of some of the Psalms. But his complaints, asthma and dropsy, increased, and he was forced, reluctantly, to abandon his designs. He died on the 17th of June, 1719, at Holland-house, in the forty-eight year of his age.

Pope relates, that, during his last illness, he sent for the poet Gray, who had not visited him for some time before. Addison told him that he had injured him, but that, if he recovered, he would make full amends. What the injury was he did not explain, nor did Gray himself ever know. It is supposed, however, that some piece of preferment intended for Gray was withheld in consequence of Addison's interference. Another death-bed interview, of a more solemn nature is also recorded. It should first be mentioned that his son-in-law, Lord Warwick, was a very wild young man, of libertine and irregular habits, and possessing no fixed principles. He, notwithstanding, entertained sentiments of considerable respect for Addison, who had used great exertions to reclaim him; but his good advice and kind admonitions had no effect upon the young man. Determined to try once more, Addison, when he found that he had but a short time longer to live, sent for Lord Warwick. who lost no time in hastening to his bed-side, and much affected, desired to hear his last wishes and injunctions.

"I have sent for you," said Addison, "that you may see how a Christian can die."

It would be interesting to know what effect this awful scene had upon the dissolute young earl; we may hope that it led him to serious thought and sincere repentance, but of this we have no account. It is certain that, if he proposed reformation and a change of conduct, no time was allowed him to put his good resolutions in practice, for very shortly after the death of his father-in-in law he himself died.

It has been observed by several of Addison's biographers, that he employed wit on the side of virtue and religion. His writings did much towards improving the depraved manners, and checking the vicious habits, prevalent in his day, and mingled instruction with amusement in a striking degree.

He had the distinguished merit of being the first author who sought to reform and improve the age in which he lived, by boldly censuring its vices, and exposing its follies, yet in so clever and agreeable a manner, as to render his writings eagerly perused by all classes.

Dr. Johnson says, in his Life of this great man, "Before the 'Tatler' and 'Spectator,' if the writers for the theatre are expected, England had no masters for common life. We had many books to teach us our more important duties, and to settle opinions in Philosophy or Politics, but an *Arbiter Elegantarium*, a judge of propriety, was yet wanting, who should survey the track of daily conversation, and free it from thorns and prickles, which tease the passer, though they do not wound him."

"For this purpose," he adds, "nothing is so proper as the frequent publication of short papers, which we read not as study but amusement. If the subject be slight, the treatise is short. The busy may find time, and the idle may find patience to read them."

One of his contemporaries relates an anecdote of him, which may amuse our readers. Addison was very intimate with Mr. Temple Stanyan, author of a history of Greece. In the familiar conversation which the two friends frequently had together, they were accustomed to dispute each other's opinions, without reserve. It once happened that Addison lent Mr. Stansan five hundred pounds. After this, Stanyan, instead of conversing with the same frankness, and canvassing his friend's opinions with the same freedom as formerly, became constrained, deferential, and timid in his manner. This change gave Addison great uneasiness. Matters had continued thus some time, when, one day, in discoursing together, a subject was introduced on which Stanyan had been used strenuously to oppose his friend's opinion; but now, even upon this point, he gave way to what Addison advanced, without attempting to dispute what he said, or interposing his own view of the case. This annoyed and hurt Addison so much, that he exclaimed, "Either contradict me, or pay me the money!"

There is much in the character of Addison that merits our admiration. Among his many good qualities may be mentioned a high sense of honour, and unimpeachable integrity, although tempting bribes were frequently offered him by those who wished to secure his assistance and with the Court.

The following letter affords so pleasing an illustration of his feeling upon one of these occasions, that we will conclude his short memoir by quoting it. It relates to the case of a Major Dunbar, whom he had sought to serve when in Ireland by his interest with Lord Sutherland, and from whom he had previously refused to accept, first, a three hundred pound bank note, and a diamond ring of the same value.

"Sir,—I find there is a very strong opposition formed against you, but I shall wait on my lord-lieutenant this morning, and lay your case before him as advantageously as I can, if he is not engaged with other company. I am afraid what you say of his Grace does not portend you any good. And now, sir, believe me, when I assure you, that I never did, nor ever will, on any pretence whatsoever, take more than the stated and customary fees of my office. I might keep the contrary practice concealed from the world, were I capable of it, but I could not from myself; and I hope I shall always feel the reproaches of my own heart more than those of all mankind. In the mean time, if I can serve a gentleman of merit, and such a character as you bear in the world, the satisfaction I meet with on such an occasion is always a sufficient, and the only, reward to,

"Sir, your most obedient humble servant,

"J. Addison."

Miscellaneous.

THE NEW SCHOOL-HOUSE.—DEDICATION ODE

Father of Wisdom, bless the dome
That liberal hands have made
So beautiful, for those who seek
Instruction's fostering aid;
And grant them here such wealth to gain,
From learning's priceless lore,
As fits the mind, e'en here below,
On angel wings to soar.

In groups they come; the earnest boy,
Fast by his sister's side;
And tottering on, with wondering joy,
The nursery's youngest pride:
From hall and cot they freely come,
A glad and studious band,
The hope of many a parent's heart
The jewels of our land.

Father of Mercies, bless the band
That here, in youthful bloom,
Shall lamb-like by their teachers stand,
When we are in our tomb;
And may they, through their spirit's aid,
That holy knowledge prize
Which wins the soul a glorious home
When this frail body dies.

American Messenger.

BROCK'S MONUMENT.

The Brock Monument Committee having advertised for a series of designs for a new Monument to the "Hero of Upper Canada" and his brave companions, Mr. Wm. Thomas, of this city, proved to be the successful competitor. The column is to be of the Roman composite order of architecture, wth its pedestal rising on a sub-basement; with a Cippus and statue of the Hero, to the height of 185 feet. The column is fluted; 95 feet high and 10 feet diameter. It rests on a square pedestal, the die of which is 16 feet square; to be enriched with bas reliefs of the principal events in the campaign of the General. The blocking course will be ornamented by lion's heads, linked together by festoons, with wreathed openings to give light to the interior. This again will rest upon a square sub-basement, 36 feet 9 inches square and 27 feet above the level of the earth's surface, enclosing a gallery round the inner pedestal 120 feet in extent; under the floor of which, in suitable vaults, are to be deposited the remains of the gallant Brock, and those of his brave *Aide-de-Camp*, Col. Macdonell. The gallery or corridor is to be lighted by wreathed openings, and will form an agreeable promenade for visitors. On the angle of the sub-basement are placed lions rampant, supporting shields, with the armorial bearings of the Brock family. The base of the column is enriched with Laurel leaves and surmounted with Palm leaves. The capital of the column, 12 feet high, has a winged figure of Victory on each face, 10 feet 6 inches high, with extended arms, sustaining military

shields as volutes, having on their outward angles, helmets with lion's heads; the capital being somewhat after the example of the column at Albano, near Rome. It is proposed to form spaces in the angles of the abacus, to allow of persons going out to view the scenery; so as not to disfigure the beauty of the capital by iron railings. From the top of the capital, a round cippus, 6 feet 6 inches in diameter and 9 feet in height, made of cast iron galvanized, with wreathed openings forming a chamber 6 feet in diameter, seats round, and four circular openings, to view the magnificent scenery which surround the Heights of Queenston. The cippus is to support a statue of the hero himself, 16 feet in height. From the base to the openings of the capital, runs all the way a staircase of stone, of 250 steps, which will be lighted by loop holes in the centre of the flutings.

The whole of the works are to be erected in Queenston stone; but it may probably be found necessary to adopt other stone for the bas reliefs. The door at the south side of the square sub-basement, is to be 7 feet high by 3 feet 6 inches wide, and will give immediate access to the staircase, through the gallery or waiting room. The enclosure will form an area of 77 feet square, having at the angles military trophies, in carved stone, 20 feet high. A fosse will be formed round the inside of the wall of enclosure, as a fence or protection We shall close our observations by giving a comparative statement of the height of some of the principal monuments of the kind.

NAME.	ENTIRE HEIGHT. ft.	in.
Pompey's Pillar	90	0
Trojan's Pillar	115	0
Antonine Column	123	0
Napoleon's Column, at Paris	132	0
Nelson's Column, at Dublin	134	0
York Column, at London	137	9
Nelson Column, at Yarmouth	140	0
Melville Column, at Edinburgh	152	7
Napoleon Column, at Paris, (July)	156	10
Alexander's Column, at St. Petersburgh	175	9
Proposed Brock's Monument	185	0
Nelson's Monument, at London	193	0
London Monument	202	0

It will thus be seen that there will be but two Columns of the like kind, in ancient or modern architecture, that will exceed in height, the proposed monument, to be erected on Queenston Heights, to the "glorious and immortal memory" of the gallant Brock.—*Patriot.*

THE DUKE OF WELLINGTON.

The illustrious man, whose death has been this week recorded, has so long been identified with the the history, not of England only, but of the world, that few fail to feel a near interest in one whose influence was universally pervasive. While the public journals are filled with the records of his military and political life, we confine ourselves to a brief notice of his literary distinction, which is apt to be thrown into the shade by the brilliancy of his active services in the field or the senate. Some great soldiers have been also able writers, but few have professedly narrated their own exploits. Cæsar did this, nor could any one in all the ages since have succeeded so well in a personal narrative as Wellington. Whether he has left any memoir of parts of his own life, in the papers committed to Lord Mahon, as literary executor, we are not aware; but the clear, terse, vigorous style of the 'Despatches' satisfy us that he might have written a history equal in literary excellence to 'Cæsar's Commentaries.' Even in the haste of his epistolary writing, there is a forcible brevity and point, which would have doubly told in a formal and carefully prepared history. As it is, the literary merit of the 'Wellington Despatches' is high. The very first of his letters given by Colonel Gurwood has often been cited as characteristic of the man, as it is also of his style. But open the volumes at any page, and passages as striking will be found. There is never any difficulty in knowing what Wellington means. He says in the plainest and fewest words possible what he thinks, or feels, or desires at the time. Never carried away by enthusiasm, never striving after effect, his language is always an expression of his clear intellect and strong will. Sometimes there are marks of deep feeling, and at others of playful humour, but the staple of his written works denotes clear, sensible, and vigorous thought. The same straightforward utterance appears in his speeches, although the difficulty of his delivery oftener led him into confusion, error, and repetition, than when sitting pen in hand. But how characteristic of the whole spirit and way of the man is this one sentence concerning popular clamour, spoken in the House of Peers in May, 1843:—"For myself, I can only say that I have been for a great number of years in the habit of treating such criticisms and such assaults with the smallest possible attention; and I shall continue to do my duty to my sovereign, or elsewhere, and continue to treat the language referred to with as little attention as heretofore."

To any part of the long and eventful life of Wellington we need not refer, as everything recorded concerning him is being published so widely by the daily press, but the manner of his removal we cannot help alluding to, for an historical contrast which it suggests. When Samuel Johnson was selecting instances of "The Vanity of Human Wishes," the end of the great captain of a former age occurred to him, and he coupled with it that of one not less famous in the public annals of the time,—

> "From Marlborough's eyes the tears of dotage flow,
> And Swift expires a driveller and a show."

Wellington knew no dotage. Bright and clear in intellect, though growing feeble in bodily power, he was to the last, if we reckon ripeness of wisdom along with honesty of purpose and vigour of action, what Talleyrand called him long ago, "the most capable man in England." The other great "man of the time," Sir Robert Peel, also was removed before age had dimmed his faculties or destroyed his usefulness. Future historians, in speaking of the death of Wellington and of Peel, will note the contrast between the fulness of their earthly honour and the vanity of human wishes in the end of Marlborough and of Swift.

We have been watching in what way the press of France would refer to the death of Wellington. One sentence from the 'Siècle' will suffice to indicate the general tone of reserve with which the event is spoken of:—"Le nom de Lord Wellington se rattache aux plus douloureux souvenirs de notre histoire contemporains; général ou négociateur, cet homme célèbre fut l'ennemi le plus acharné de notre patrie. Ce fait affirait à lui seul pour nous imposer la plus grande réserve." We must remember that the most generous and honourable of the literary men of France are now in exile, and that the press is under the censorship of the flatterers of Louis Napoleon.—[*London Literary Gazette, Sept.* 18]. There is, however, one honorable exception which we give below.

GUIZOT ON WELLINGTON AND NAPOLEON.

The following article from the *Assemblie Nationale* has been generally attributed, says the Albion to the pen of M. Guizot:—

Great men disappear, and every day witness the fall of the last illustrious personages who have been on the stage since the commencement of the present century. By the death of the Duke of Wellington, M. de Metternich is the sole survivor of the political celebrities who remodelled the map of Europe at the Congress of Vienna. We have already spoken of the Duke of Wellington, and have retraced the principal circumstances of his glorious career. If we now return to this subject, it is to protest against the bad taste of some journals, which, in order to flatter the cause which now triumphs, draw comparisons between the Duke of Wellington and Napoleon Bonaparte. We know nothing more odious than the judgments passed on illustrious contemporaries from the point of view of a narrow and unjust patriotism. This low rhetoric is of a nature to degrade us in the eyes of foreigners who read our journals, and who take them for the expression of public opinion. Every great nation, we know is animated with a national spirit, which has its inevitable prejudices.

France and England will never agree on the manner of judging Napoleon and the Duke of Wellington. Is it, therefore, impossible, by rising above those passions of circumstance, to arrive at the truth with regard to these two illustrious rivals? The year 1769 witnessed several glorious births, but certainly there was nothing more remarkable in that year than the simultaneous appearance on the stage of the world of the two men who were to meet at Waterloo. It appears that Providence proposed to balance one by the other; to oppose to a great genius one of a quite contrary character, and to bring in contact qualities and gifts of the most dissimilar kind. The principal characteristics of the genius of Napoleon, were a prodigious and insatiable imagination, aspiring to the impossible, the most vast and inflexible faculties, but also a singular nobility of ideas and impressions. A solid judgment, a

cool reason, a wonderful justness of perception both on the field of battle and in the cabinet, the most penetrating good sense, amounting to a power which became genius, perseverance which nothing could tire or turn aside, and the most unshakeable firmness in great dangers—such are some of the points which give the Duke of Wellington such a prominent figure in the history of the 19th century.

It was at a giant's pace that Napoleon ran through a career which was to lead him for a moment to the head of human things. By the rapidity of his assent he dazzled the world, and every thing with him took the character of a magic improvisation. His rival on the contrary, rose with patient and modest slowness by courageous reflection. He never drew back, however; he always went forward, and his glory followed a progression which escaped all reverses. To speak warmly of the imagination of men, to fascinate them, to excite their enthusiasm, and to labour by every means to inspire them with an admiration, mingled with a little terror, was the constant study of Napoleon, who was far from disdaining artifice to effect his purpose. The Duke of Wellington never thought but of speaking to the reason; he was never seen to do any thing in a theatrical manner. Duty was the only rule which he admitted, and which he imposed on others. He had a horror of charlatanism and falsehood. He never sought to excite his soldiers, but sometimes he reminded them that they had to shed their blood because it was their duty.

No astonishment will therefore be felt at the difference in the eloquence and the style of the two generals. In the proclamations of Napoleon, particularly in those of the campaigns of Italy, is to be found a powerful orator, who, in the manner of the ancients, engraved great images in the minds of those to whom he addressed himself. The orders of the day, the dispatches, and the reports of the Duke of Wellington were written with a cold and austere simplicity. No scope is given to effect—every thing is positive and true.

The Emperor Napoleon and the Duke of Wellington were not only great captains, they have also been called on to play great political parts. History will perhaps decide that in Bonaparte the organizer was equal to the conqueror. It must not, however, be forgotten that the possession and the use of sovereign power smoothed down many obstacles. With despotism great things are often easy.

It was in a free country that during 37 years, from 1815 to 1852, the Duke of Wellington enjoyed an unequalled influence and authority. Placed by his birth, and more particularly by his glory, at the head of the English aristocracy, he belonged, truly speaking, to no party. It may be said that, in the bosom of the constitutional liberty of his country, the Duke of Wellington exercised a kind of moral dictatorship. The assistance which he was able to give or to withhold from the Government was immense. Although naturally conservative by his principles and the nature of his genius, the Duke of Wellington did not, however, hesitate to propose to the Crown and to Parliament the emancipation of the Catholics. In his eyes that reform was politic, just and necessary. But his opinion was very different with regard to Parliamentary reform, which appeared to him to change the political constitution of Old England, and to threaten her with serious dangers. Was he mistaken? The future alone can decide. We only now witness the first consequences of Parliamentary reform, and 20 years have scarcely passed since the Duke of Wellington opposed it in the House of Lords. We must wait for a longer trial, remarking, however, that the simptoms already seen are far from impeaching the foresight of that illustrious statesman.

If at any future period England should find herself exposed to any great danger, either at home or abroad, her ideas would certainly revert to the man who for sixty years served and defended her. She will appreciate still more that wise, firm and sober genius, who never allowed himself to be intimidated or to be excited, and whose moderation was rewarded by such a splendid destiny. The end and fall of the Emperor Napoleon are the last point of contrast which we pointed out at the outset. The Emperor fell, the scaffolding crumbled away, and he who raised it with heroic temerity, only survived his irreparable shipwreck for a few years in exile. His fortunate rival, after a day by which the face of Europe was changed, saw open before him another career, which procured for him a new glory between peace and liberty, and which has only just finished in the midst of the unanimous regret and the gratitude of a great country. Is not such a lesson a striking proof of the final ascendancy of reason and of good sense over all the boldness and the flights of imagination and of genius? The contrast of these two destinies, and these two great historical figures, has appeared to us too instructive not to be rapidly sketched, and, in drawing the comparison, we have set passion aside and have only sought for truth.

THE PERIOD OF A CHILD'S EDUCATION.

Various opinions prevail as to the most proper time to commence the education of children—some claiming that it should be begun much earlier than is usual, while others maintain that it is already entered upon at two early an age. Experience, in discussing this subject, is met by experience, and observation by observation, and the question—When shall the education of the child commence?—remains unsettled, in the minds of many earnest inquirers.

It is generally admitted, that the earliest impressions are the most enduring—this being so, then it would seem to be a fair deduction—that as soon as the child is susceptible of comprehending impressions made upon the mind by words and by observation, should his systematic training and education be begun. The capacity of children like that of adults, differs, and so of necessity will the most suitable time to begin educating, be earlier or later, according to the ability to understand and know.

The arts of reading, and spelling are not generally, easily acquired. Yet there are examples where boys and girls read and spell well at the age of four and five years; and it has been remarked by a teacher of great observation, that if a child who has attained the age of six years, cannot read easy lessons fluently, the difficulty of doing so increases with increasing years. It is very disheartening to a child who has attained the age of seven or eight, to be still unable to read easy lessons with fluency. He feels keenly the odium that seems quietly to distil upon him who is denominated a bad reader—it is worse than being a bad speller. Early inferiority when one is fully conscious of it, is almost sure to prevent future progress—because it begets a hatred for books and literary society.

Education then, as we have often urged, *should be commenced in the home circle*, and the mother should be the first teacher—for education of some sort is sure to be given and received by the child while at home, whether it be systematic or accidental—such as surrounding circumstances are calculated to impart. Every child should be taught to read the letters of alphabet at home. This should not be required of a public teacher except under the most extraordinary circumstances. No one is so well adapted to do this as the mother, in our favoured country—and not only should she teach the child its letters, but she should also teach it how to put them together so as to form words, and after that to put the words together so as to form sentences, which constitutes the first steps in learning the art of reading. An old English teacher remarked many years since, that he always found those boys to be the best readers that had been taught by their mothers. Further, he remarked that boys thus instructed seldom had vulgar tones—but generally have read with unusual ease and elegance. This teacher says:

"Let then, the child be taught to read as soon as the infant faculties begin to exhibit symptoms of improvable expansion; his attention active in the extreme, must fix on a variety of objects, though by no means the only one. Let no long confinement, and no severity of reprimand or correction attend the lesson. A little will be learned at the earliest age, and with the easiest discipline. That little will infallibly lead to further improvement; and the boy will soon, and with little pains to himself, or others, learn to read; an acquisition considered in his difficulty and in its consequences, truly great.

He, on the other hand, who is retarded, by the theoretical wisdom of his friends, till he is seven or eight years of age, has this burdensome task to begin, when habits of idleness have been contracted, and when he ought to be laying the foundation of classical knowledge.

Let mothers consider whether they can really employ themselves better than in the work of early teaching and training their little ones—a delightful employment indeed.—*Rural New Yorker.*

THE CLAIMS OF UNIVERSAL EDUCATION.

It is not uncommon for those who have never reflected upon the subject to consider it unjust, under any circumstances, to tax the property of one man to educate the children of another. Such are ever ready to inquire, Of what interest is it to me whether the children of others are educated or not? True, the whole subject has been thoroughly discussed, and its bearings clearly shown again and again; yet there are still found, in almost every community, some whose minds remain unenlightened. To such it is therefore necessary to present anew the considerations which have led thousands of others (who once thought as they now do,) to believe that a liberal provision for free education is the cheapest and best insurance which can be effected upon property and the surest guarantee for the safety of property, reputation and life. Among these are the following:

The statistics of *crime* informs us that nine-tenths of all the criminals confined in jails and penitentiaries are deplorably ignorant, as well in regard to science and knowledge in general, as in respect to morals and religion. Had they been properly educated in childhood and youth, instead of preying upon its best interests, they might have contributed to the improvement of society, or honoured its highest stations.

If proper inquiry be made, a large proportion of the *paupers* sustained at public expense, will be found to belong to the ignorant class, and to have been brought to their present condition by their want of the intelligence necessary to enable any one to manage business for himself. A good common school education would have saved them from becoming burdens upon society, and enabled them, beside maintaing themselves respectably, to bear their share of those burdens which are unavoidable by human foresight or sagacity.

Could the statistics of *intemperance* be fully ascertained, it would be found that the great majority of those who have ruined themselves and beggared their families by intemperate drinking, have, by the neglect of the culture of their minds, been rendered unable to enjoy any other than sensual pleasures. Does not every observing person know that those who frequent the grog-shop are not generally the intelligent.

It can be shown that more than one half the *sickness* in our country is the result of ignorance, of a want of that acquaintance with the laws of health which might easily be obtained, and that, consequently more than one half of the expense occasioned by illness, and the loss of time, labour, etc., attendant upon it, might be saved if the whole community were properly educated.

It is well known that a large proportion of the *litigation* in this country arises from the inability (or the indisposition occasioned by a want of facility in doing it properly) to keep a proper record of business transactions. Let every young person be made familiar with arithmetic and the elements of book-keeping, and taught to keep an accurate account of his dealings with others, and one-half or two-thirds of all the petty law-suits which are constantly disturbing the peace of neighborhoods would never occur.

It can be demonstrated that those who are respectably educated can *earn* for themselves, or others, from twenty-five to fifty or one hundred per cent. more than those without education; and that, too, in employments were physical labor and manual skill are mainly concerned; to say nothing of other occupations, where mental culture and a profound acquaintance with science are required. Every thinking man knows that it is far cheaper to hire a man who is intelligent, than to employ an ignorant, stupid one, who needs an overseer to prevent him from slighting his work or destroying the material on which he operates. It costs no more to board a good workman than a bad one.

It can be proved by the best of testimony that without that intelligence and virtue which is the aim of the friends of universal education to secure, so far as human agency is concerned, to every youth in the land, *a Constitutional government* and our free institutions can not be perpetuated.

It can be shown with equal clearness, that without general intelligence, *piety* can not be expected to prevail; since, without it, religion is ever in danger of degenerating into superstition or fanaticism.

The facts establishing these conclusions may not be familiar to all, but they have been frequently presented in the reports of school officers and those in charge of alms houses, prisons, and other public institutions; and both the truths and the facts which sustain them are familiar, to all who have sought for such information, as household words.—*Ohio Journal of Education.*

THE ECONOMY OF PUBLIC SCHOOLS IN CANADA.

From two interesting addresses recently delivered by Dr. Hope, of Belleville, on the occasion of certain school examinations, (reported in another part of this number,) we select the following valuable statistics, compiled with great care and labour, illustrative of the great comparative cheapness of a symmetrical and efficient system of free public schools, primary and high schools, over private or other schools;—also the vast superiority of an educational to a military or civil system of police for cities and towns:—Dr. Hope remarked that in Belleville, "the number of pupils in attendance since the commencement of the year was 1017, and the average daily attendance very encouraging indeed; one-fourth of the pupils attending the schools were studying the following branches of education: Natural Philosophy, Mathematics, Animal and Vegetable Physiology, Book-keeping, &c., which would cost at a private school 15s per quarter; say 200 at 15s. would be £150; 600 studying the usual branches at a common school at 10s. per Qr. would be £1200,—total, £1350. He said to educate the same number in the same branches of education, in our comfortable school houses, costs the town £486 18s. exclusive of the Legislative school grant of £90 12s. which could not be obtained by private schools. He said, although the above was an exact estimate of the amount which the town had to pay towards the support of education, that in consequence of the rapid increase of pupils since the opening of the new school houses, it would be necessary to engage an assistant teacher in each school, which would probably make the amount above stated £586 18s.—showing a difference in favour of free schools of £763 2s., or we might say as 33s. 9d. is to 12s. 2d. He considered that these facts went far to show the advantage in every point of view of the free system over the old. Dr. Hope also gave a very interesting sketch of the working of our common schools, as well as the different amounts of money which had been granted by the government for the support of education, which was listened to with great attention. He stated that many persons complained of being taxed for the support of education, but he would remind those who thus complained, that if they did not pay for the support of education they would soon have to be taxed in another way less agreeable to their feelings; for he contended and was prepared to prove his statements, that where the people refused to support education, they would have to pay more for the support of criminal justice, for it was universally admitted that where ignorance abounds, there crime as a necessary consequence will prevail to an alarming extent, and as an illustration of the power of education as a preventive against crime, he gave the following interesting statistics, which are taken from the Journal of the Statistical Society published in London, and though they are somewhat startling, their accuracy may be relied upon. He said, taking all the counties of England and Wales from 1836 to 1847, a period of 11 years, more than half of those counties fail to furnish a single accusation against any person whose education went beyond reading and writing.

The annual average accusation in all the counties was.....	25,412
Do. of persons convicted educated beyond reading and writing.	106
Proportion of accusation to the male population, total 1 in....	370
Do. do. of males educated beyond reading and writing, 1 in....	77,227
Proportion of accusation to the female population, 1 in.....	1,680
Do. do. of females educated beyond reading and writing, 1 in..	2,034,718
22 Counties comprising a population of 11,183,718 which furnished of convicts educated beyond reading and writing ...	45
30 counties comprising a population of 7,628,039 furnished of convicts educated beyond reading and writing.....	0

To the honour of the female sex, the number accused of crime is very small indeed, especially of the educated, only 1 in 2,034,733.

He thought these facts were most conclusive, as to the benefits that education confer on the community at large in a civil point of view, and if there was no other argument than this, that education is a powerful preventive against crime, it should therefore, be well supported. It is a duty we owe to our children, as well as to the state, to see that the rising generation receive a good education, when we are aware that it confers so many blessings on our children. Some present must have often felt the disadvantages they

experience in conducting their business, from the want of education; this being the case, it is their duty to see that these disadvantages were not entailed on their children. There are two kinds of education, the one generally implies a knowledge of our own language, as well as an acquaintance with the higher branches of education, the other is acquired by experience ; while he admitted the advantage of experience, yet he thought that this experience was rendered much more useful when engrafted on a good education. He fully concurred with an eminent educationist in the United States, that money spent in the support of education, was like the vapour which rises from the earth, which soon returns to enrich it.

CANADIAN RESOURCES AND PROGRESS.

Extract from the Annual Address of the President of the Agricultural Association of Upper Canada, (T. STREET, ESQ. M.P.P.) *delivered at the recent Provincial Exhibition at Toronto.*

We have many blessings for which to be thankful to the Gracious Giver of all good. Our lot has been cast in a land inferior to none, in all natural advantages—its soil is fertile—its waters are abundant and pure—its climate is favourable to the health of man —to the sustenance of all the lesser animals—and to the growth and ripening of all the various vegetable productions, which the necessities of man and beast demand. It has been frequently remarked, and I believe it is now freely admitted, by those best qualified to judge, that the splendid peninsula which lies between the Lakes Huron, Erie, and Ontario—as regards its forests—soil—climate and water—is not surpassed on the continent of America—and it rests chiefly with ourselves, by a unity of purpose and action—by well timed efforts and proper exertions, rightly directed, to place it in a situation to rank as one of the finest agricultural portions of the world.

The land in which it is our good fortune to live, abounds in the richest mines of iron, copper, and lead, and although we have not, to any extent as yet discovered the gold of California and Australia, or the silver of Mexico and Peru, deeply imbedded in the bowels of the earth—it ought to be a source of the highest congratulation, that many of our industrious farmers have found abundance of these precious metals, in the laudable and profitable pursuit of stirring the fruitful soil of their own farms.

We have an inexhaustible supply of lime sandstone—of free stone and granite—of gypsum and water lime or hydraulic cement —we have peat and marl in various parts of the Province, and even lithographic stone, a very rare production, is to be found of fine quality in some of the Counties.

We have a climate and soil which will grow oats and peas, Indian corn, turnips, carrots, flax and hemp, as well as they are produced any where else,—and as respects wheat, the great staple of the county, it was with true Canadian pride, that I lately noticed in an article taken from the "American Miller,"—a standard authority, that the wheat raised in Upper Canada makes better flour than any wheat the American union produces—not even excepting the wheat grown in the far famed and justly celebrated "Genesee Valley." We have running along the whole front of our country, the noble River St. Lawrence, which furnishes us a high-way to the Ocean. We can boast of a chain of water communication through that River, our Lakes and our Canals, the like of which is no where to be seen. Macadamized, gravelled and plank roads, are being rapidly made in all the older parts of the country—nay, even in some, but recently settled. Railroads—the sure indication of increasing prosperity—are either in the course of construction, or are seriously contemplated, in all eligible directions. Improvements are to be seen on all sides. The people are industrious, prudent and moral, and are more intelligent and enterprising.

Agricultural Societies have introduced and encouraged the best breeds of horses, cattle, sheep and swine—the best kinds of wheat and other grains, as well as improved agricultural implements, of various forms and descriptions. Through their exertions, and the introduction of plouging matches, and other useful incentives to rivalry, a valuable change has been effected in the art of husbandry; straight furrows, clean fields, and a judicious rotation of crops, have been obtained. These improvements, aided by a praiseworthy competition amongst the farmers themselves, have secured such returns for their labor, that despite the low price of wheat hitherto, the agriculturalists are, as a class—I may venture to say, in a prosperous condition, if we may judge from the flourishing appearance of their farms, from their handsome and well built dwelling houses, their large and commodious outhouses and barns, and the highly improved character of their stock. These things, added to the creditable show which they make, on suitable occasions, with their excellent carriages and horses, and the comfortable and independent manner in which they live, betoken an advanced state of improvement amongst us, that cannot fail to bring with it a large share of happiness and contentment.

In our villages, towns and cities, the same progress is visible. The wilderness has become the thriving village—the lately insignificant village has become the busy and populous town—and the town of a few years existence has grown into a city, with gas; filled with throngs of busy people, and lined with shops, which, whether we look at their magnificent plate glass windows, massive doors or well filled shelves, would not disgrace Regent street or Oxford street, London.

Correct styles of Architecture have of late years been introduced, and generally adopted, not alone in the chaste designs of our many public buildings, but by our enterprising citizens, in the erection of their splendid private dwellings. And landscape gardeners, find ample employment in beautifying the grounds, and improving the outskirts of our large towns and cities.

On our Lakes, Rivers and Canals, are transported every year, an increasing amount of the surplus productions of our Farms to other markets, and manufacturing goods are brought back in their stead. These same Rivers and Lakes are now navigated by fleets of noble steamers, which for safety, speed, and convenience and elegance, can scarcely be equalled—and our sailing craft, occasionally take in their loading on the shores of Lake Huron, and unship in the spacious Harbor of Halifax.

GREAT RESULTS FROM SMALL BEGINNINGS.

Berthold Shwartz, according to a common report, having, in some of his experiments in alchemy, put into a common mortar a mixture of saltpetre and other combustible materials accidentally dropped in a spark, when he was astonished to see the pestle fly off into the air. This incident furnished two ideas—that of the increased power of gunpowder when confined, and that of its applicability to the propulsion of heavy bodies. These two simple ideas, carried out into practice, produced guns, large and small, and revolutionized the entire sytem of war.

The vibrations of the lid of an iron tea-kettle gave the first hint of the expansive power of steam. This hint, followed out through innumerable experiments, finally ended in the modern steam engine, which is fast revolutionising the mode of both land and water carriage.

The first idea of our modern railways—and it is a very simple idea—came from a mine near Newcastle, England. The plan occurred to some one of "laying rails of timber exactly straight and parallel; and bulky carts were made with four rollers fitting those rails, whereby the carriage was made so easy that one horse would draw four or five chaldrons of coals.

Thus coal was conveyed from the mines to the bank of the river Tyne. This mode was in practice in 1676; how much earlier, is not known to us, probably to no one; for, though a great idea, it was like most other great ideas, thought of little account at the time of its origin. Like Columbus's method of making an egg stand on the big end by jarring it so as to break the yolk, it was thought to be too simple to deserve any praise. Nevertheless, out of this simple idea sprang one hundred and fifty years afterward the modern railway.

It had been noticed by chemists, that flame cannot be made to pass through a tube of small diameter. In the hands of Sir Humphrey Davy, this fact grew into the miner's safety lamp, which has saved the lives of thousands.

The magnet had been for centuries a plaything in Europe. At last its property, when freely suspended, of taking a north and south position was noticed, and applied to navigation. This resulted in the discovery of America.

The power of the sun's rays to discolour certain substances, had long been known. In the hands of Daguerre, this great fact grew into a most beautiful and perfect method of taking miniatures.

From Volta's simple pile, to Morse's magnetic telegraph, what a stride! yet this stride is only the carrying out into practice of certain very simple properties of galvanism and Magnetism.—*Ohio Observer.*

DESCRIPTIVE CATALOGUE

OF THE

MAPS, SCHOOL BOOKS, CHARTS, &c., &c.,

FOR SALE AT THE DEPOSITORY,

IN CONNECTION WITH THE EDUCATION OFFICE, TORONTO.

(Concluded from the September Number, page 139.)

XVIII. TABLET READING LESSONS.

THREE Graduated Reading Lessons, by Charles Baker: A circle of knowledge. Each Gradation consisting of 200 Lessons. Two chief objects have been kept in view in these Lessons:—1st. To provide a series of school books suitable for elementary classes, and for home instruction at a moderate price, which should comprise information on a range of subjects more connected, extended, and systematic than has ever been introduced into English lesson books. 2ndly. To adapt this information by a graduated series of lessons for children of different ages and degrees of advancement; not graduated by commencing with short words, among which are nearly all the particles—the most difficult words in a language—but by simplicity of ideas, expressed in short, easy and natural sentences. The Sections into which the Series are divided, are as under:—

I. Introductory.
II. The Body and its Parts.
III. Food.
IV. Clothing.
V. Dwellings.
VI. Education.
VII. Mammalia.
VIII. Birds.
IX. Reptiles and Fishes.
X. Insects and Worms.
XI. Plants.
XII. The Earth.
XIII. Substances.
XIV. The Air and the Heavens.
XV. Divisions of Time.
XVI. Climates.
XVII. Social Life.
XVIII. Government.
XIX. Other Nations.
XX. Trade and Commerce.
XXI. Matter.
XXII. The Senses.
XXIII. The Mind.
XXIV. Attributes of God.

Gradation I.—Demy quarto; the set of 200 Lessons, on 100 sheets,	£0 8 9
Gradation II.—Royal folio; the set of 500 Lessons on 100 sheets,	0 16 0
Gradation III.—Imperial folio; the set of 200 Lessons on 107 sheets,	1 0 0
Books—1st grade, ¼d.; 2nd grade, 7½d.; 3rd grade,	0 1 3
Baker's Manual for the above, No. I,	0 0 1½
Tin Frames are provided for the Tablet Lessons, which open at the front; the Frame for 1st Gradation, 3s. 9d.; for 2nd Gradation, 5s.; 3rd Gradation	0 6 3
Reading without Spelling,	0 0 6
Progressive Tablet Reading Lessons, (large) per set of 12,	0 1 6
Ditto ditto ditto ditto 24,	0 3 0
Whyte's Tablet Reading Lessons, (large) per set of 15,	0 2 6
National Tablet Reading Lessons, per set of 33,	0 1 3
National Tablet Arithmetic Lessons, per set of 60,	0 2 0
BUMSTEAD'S Table for Training the organs of Speech in Articulation.. 3 feet 9 inches wide, by 4 feet 9 inches long, printed in colours,	0 3 0
Ditto ditto stretched on canvas, and mounted,	0 10 0
Reading Table. 2 feet 6 inches wide, by 3 feet 8 inches long,	0 1 6
Ditto ditto stretched on canvas and mounted,	0 6 3
Numeral Table. 3 feet 7 inches wide, by 2 feet 6 inches long,	0 1 6
Ditto ditto stretched on canvas and mounted,	0 6 3
Punctuation Table. 3 feet 7 inches wide, by 2 feet 6 inches long,	0 1 6
Ditto ditto stretched on canvas and mounted,	0 6 3
The entire set of Tables, in sheets,	0 6 3
Ditto ditto Mounted,	1 5 0

VARTY'S Series of Lesson Sheets.—These Lessons are confidently recommended as furnishing a complete and progressing course of Elementary Instruction. They are printed with a clear, bold type, the subject judiciously selected and simply arranged; and whether in families, Public or Private, Schools, will be found instrumental in forwarding Religious and Secular Knowledge.

ALPHABETS.—*The sizes of the type are given in inches.*

Largest Roman Capitals & Small, 2⅝ths, 2 sheets, double foolscap broadside,	£0 0 8
Demy Broadside, Roman, C. & S., 1⅜th, 2 sheets,	0 0 6
Ditto ditto Red and Black,	0 1 0
Foolscap Broadside, Roman, C. & S., 1⅛th, 2 sheets,	0 0 4
Ditto ditto C. & S., Red and Black, 2 sheets,	0 0 8
Arranged, Roman Small, Red and Black, 1⅛th, 1 sheet,	0 0 4
Vowels, Consonants and Stops, coloured type, 1 sheet,	0 0 4

SPELLING AND READING LESSONS.

Reading Disentangled. A series of classified Lessons in Spelling and Reading. The Lessons embrace Reading and Spelling, with numerous Engravings, to assist in explaining the power as well as the names and forms of the letters. Each sheet contains one Lesson, which is conveyed in simple language, with occasional Directions to the Teacher. Price in sheets, per set of 37 Lessons, plain,	0 6 3
Ditto ditto ditto coloured,	0 9 4½
Progressive Spelling, combined with reading exercises—Part I—14 sheets,	0 2 6
Progressive Spelling, Part 2, containing two and more syllables, systematically arranged, 10s. Sheets,	0 2 6
Steps to Reading, 14 sheets,	0 2 6
The Infant's Help to Reading—in 18 Lessons, *each page contains* ONE *complete Lesson*,	0 3 0
History of Joseph and his Brethren, in easy language for Children, 16 sheets,	0 2 6
One Hundred Easy Tablet Lessons, from the New Testament, Chronologically arranged in harmonized narrative from the Four Gospels, with the places stated at which the events occurred, with Text Book,	0 6 3
Ditto ditto on very large sheets, and in large type, with Text Book,	0 18 9
GEOGRAPHY. Early Lessons in Geography, 14 Lessons,	0 2 6
PRAYERS, &c. Morning and Evening Prayer for Schools, on two sheets,	0 0 6
The Lord's Prayer, and Apostles' Creed, 2 sheets,	0 0 4
Ditto in one sheet (per dozen 2s. 6d.), singly,	0 0 3
Ten Commandments, in form of Tables, 1 sheet,	0 0 3
Ditto per dozen,	0 2 6
The Lord's Prayer, or Ten Commandments, on a sheet in gold or copper bronze,	0 0 7½
RULES for General Behaviour at School and at Home, per doz, 1s. 10½d.; each,	0 0 2
THE General Rules for Schools, the Ten Commandments, and Lord's Prayer, on 3 sheets,	0 0 7½
CATECHISM.—The Church of England Catechism, on a large sheet,	0 0 6
TEXTS OF SCRIPTURE FOR THE WALLS of Churches, Schools, Workshops, Factories, Kitchens, &c., arranged suggestively, Large Type, per set of 24	0 5 0
Ditto ditto published by the Christian Knowledge Society, per set of 66	0 6 3
Select Proverbs, published in a pamphlet, by the same Society, pp. 24,	0 0 1½
Maxims and Useful Sayings, one sheet,	0 0 3
Sunday School Lessons, on six sheets, per set,	0 0 2
ARITHMETIC.—Progressive Lessons, in Numbers, forming a complete Introduction to the Knowledge of Figures, and the Signs of Arithmetic, 4 sheets,	£0 0 8
National Arithmetic, 60 sheets,	0 2 0
Progressive Figures, 2 sheets,	0 0 4
The Five Tables—Notation, Addition, Subtraction, Multiplication, and Division, with an enlarged Multiplication Table, from 1 to 400, 6 sheets,	0 1 6
Multiplication Table, extended to 400, 1 sheet,	0 0 3
Tables of Money, 2 sheets,	0 0 4
GRAMMAR, explained in Verse, red and black, 1s 4d. 4 sheets black,	0 0 8
DARTON'S Reading and Spelling Lessons, on Sheets, as follows:—	
1. Infant School Texts for the Walls, 3s. and	0 2 0
2. Words with Scripture References, on a sheet,	0 0 2
3. Good Dispositions to be Cultivated, and Evil Dispositions to be Avoided, on a sheet,	0 0 2
4. The Intellectual Sciences, on a sheet,	0 0 2
5. The different Kinds of Food, on a sheet,	0 0 2
6. The Mineral Kingdom, and Produce of Different Countries, on a sheet,	0 0 2
7. Spelling Lessons in large type,—a set of six sheets, per set,	0 1 0

REYNOLD'S DIAGRAMS AND CHARTS.

(Connected with page 31 of this Catalogue.)

REYNOLD'S First Series of Six Astronomical Diagrams, each 25 by 20 inches, printed on stout drawing paper, and full coloured. The whole at one view, mounted on canvas and rollers. 0 18 9
Ditto. Price in sheets, 0 10 0

The Diagrams are executed in a bold, clear style, adapted to convey at once to the mind a correct knowledge of this important Science. The series comprises illustrations of all the principal phenomena, as follows:—

1. The Planetary System.
2. The Earth and its Atmosphere.
3. The Seasons.
4. The Phases of the Moon.
5. The Theory of the Tides.
6. The Eclipses.

REYNOLD'S Second Series of Twelve Astronomical Diagrams. Beautifully executed on large quarto drawing boards, full coloured, and including several Transparencies, with descriptions. Price, each, 0 1 3
Ditto per set, in a portfolio, 0 13 9

The Series comprises:—

1. The Solar System.
2. The Seasons.
3. Eclipses and Tides.
4. View of the Moon.
5. Phases of the Moon.
6. The Earth and its Atmosphere.
7. The Sun and Solar Phenomena.
8. The Central Sun.
9. Chart of the Heavens.
10. Comparative Magnitude of the Planets.
11. Comets and Aerolites.
12. Diagram of Meterology.

REYNOLD'S Series of Twelve Diagrams of Geology, History and Physical Geography. *Uniform with the foregoing.* Price, each, 0 1 3
Ditto per set in a portfolio, 0 13 9

The Series comprises:—

1. Popular Geology.
2. The Antediluvian World.
3. Geological Map of England.
4. Physical Map of the World.
5. Mountains and Volcanoes.
6. Rivers and Lakes.
7. Waterfall.
8. Plano-Globe, movable.
9. Principal Buildings in the World.
10. The First Stream of History.
11. The Second Stream of History.
12. The Varieties of Mankind.

REYNOLD'S Two Diagrams of the Steam Engine. Each 3 feet by 2 feet, full coloured. Price each, 0 4 4½
Ditto At one view, mounted on canvas and roller, 0 13 9

The Diagrams are correctly drawn, and engraved on steel, in a bold style, and on a large scale, displaying clearly all the working parts of the Engine. They comprise:—

1. The Condensing Engine.
2. The Locomotive Engine.

These Diagrams are designed to convey to the mind, in the clearest manner, a correct knowledge of the principle and mode of action of the Steam Engine.

REYNOLD'S Chronological Chart of British History, from the Norman Conquest to the present time. Shewing the principal National Occurrences, the Progress of the Arts and Sciences, the Foundations of Institutions, Erection of Public Buildings, Important Events in General History, Discoveries, Inventions, &c., &c., on a large sheet, 4 ft. long, 0 1 3

REYNOLD'S Stream of History, displaying at one view the Rise, Progress, and Fall of Nations and States; the Periods of Great Philosophers and Conquerors; Dates of Important Events, &c., &c., on a sheet full coloured, 0 1 10½

XIX. VOCAL MUSIC.

Wilhelm's Method of Teaching Singing, adapted to English use, by John Hullah.

HULLAH'S Manual of Vocal Music. Parts I and II, bound together,	£0 5 0
Exercises and figures contained in the Manual, Parts I. and II. each,	0 0 10
Large Sheets, containing the figures in Part I. of the Manual, Nos. 1 and 8, in one parcel,	0 7 6
Ditto ditto stretched on frames and varnished,	1 18 9
Large Sheets containing the figures in Part of the Manual, Nos. 9 to 40, in parcels of 8 sheets, per parcel,	0 7 6
Ditto ditto stretched on frames and varnished,	1 18 9
Large Sheets containing the figures in Part II. of the Manual, Nos. 41 to 52, in one parcel,	0 11 3
Ditto ditto stretched on frames and varnished,	1 18 9
Portfolios for Hullah's large sheets,	1 15 0
HULLAH'S Grammar of Vocal Music,	0 10 0
ILLUSTRATIONS to Hullah's Vocal Grammar, per set of 30 sheets,	2 12 6
MUSIC Copy Books,	0 1 3
MUSIC Paper, same size as Hullah's large sheets, 12 staves, per parcel of sheets,	0 5 0
Ditto ditto ditto ditto 8 staves per parcel of ditto	0 5 0
STANDARD Tuning Forks, adjusted to 512 vibrations per second,	0 3 1½
GOD save the Queen, arranged by Hullah, in three four and five parts, on both sides of a Card, 1½d. each, or, per dozen,	0 1 3
SCHOOL Songs for two and three voices. Composed by Hullah. In two Books, pp. 16, each,	0 0 7½

Contents of Book the First.

1. Buttercups and Daisies.
2. The Months.
3. The Savoyard's Song.
4. Lady Bird.
5. The Week.
6. A Pleasant Day.
7. The Cricket.
8. The Spring Journey.
9. The Little Lark.
10. Birds.
11. The Milk Pail.
12. The Seasons.

Contents of Book the Second.

13. The Sunbeam.
14. Harvest Field and Flowers.
15. Poor Robin.
16. The Little Sister.
17. Sing for the Oak Tree.
18. The Poor Labourer.
19. The First Swallow.
20. The Father's Return.
21. The Plough Boy.
22. The Farm Yard.
23. The Apple Tree.
24. The Shepherd Boy's Song.

XX. WRITING.

MULHAUSER'S Manual of Writing, with 40 model Plates, ... £0 2 6

WRITING Model, First or Elementary set, 40 Plates, mounted on card board, ... 0 2 6
Ditto Second set; Medium, or half text hand, and the Ciphers, ... 0 1 0
Ditto Third set; fine, or small hand, and for Punctuation, Proverbs, and Moral Sentences, ... 0 1 0
Ditto Fourth set; fine or small hand, and the ciphers. List of the Sovereigns of England since the Conquest, ... 0 1 0

WRITING Books, ruled for Mulhauser's System, Nos. I. II. and III. No. I. ruled with diagonal lines throughout; No. II., the same ruling, alternated with leaves of cross lines only; No. III. ruled for half text, 2s. 6d. per doz.; each, ... 0 0 3

SLATES ruled for the Method, ... 0 0 10

NATIONAL Copy Lines, per set of six assorted sheets, ... 0 1 10½

MEMORIAL Scripture Copies. By Archdeacon Burrow. Engraved in a neat round hand, and mounted on millboard, the set, ... 0 1 9
The six cards present a series of names and words relating to the most remarkable persons, places, and events of Sacred History; as well as to the divisions of the Bible, and some of the doctrines of Christianity. These "Memorial" words are, with few exceptions, arranged according to the order of the Old and New Testaments; and will thus impress the succession of the Books and of their contents on the memory; but the main object proposed is, that they should afford distinct subjects for thought to the pupil, and for examination to the master.

QUESTIONS on the Memorial Copies. 12mo. Price bound, ... £0 1 9
The "Questions" on the Copies have been framed with a view to enable the Master or Mistress of a School, or the Teacher, to find out whether the children understand what they write, and whether they are making any progress in the knowledge of their Bible."

FULTON & EASTMAN'S Principles of Penmanship, illustrated and expeditiously taught by the use of a set of School Writing Books, appropriately ruled, and a Key:—

I.—Fulton's Chirographic Charts. In two numbers. 3 feet 6 inches wide, by 4 feet 4 inches long, each, per pair, mounted on canvas and rollers, and varnished, ... 0 17 6
CHART No. 1.—Embraces Primary Exercises, and Elementary Principles in Writing, with illustrations of the correct and incorrect positions of the Scholar, &c. &c.
CHART 2.—Embraces Elementary Principles for Capitals Combined, and Elementary Principles for Small Letters Combined.

II.—Key to Fulton & Eastman's Chirographic Charts. Containing directions for the Position at the Desk, and manner of holding the Pen.—Also, for the exact forms and proportions of letters, with rules for their execution. 16mo. pp. 62, with a Steel Plate of the Charts in Miniature, ... 0 1 3

III.—Fulton's School Writing Books. Per set of four numbers, ... 0 2 6
Ditto Per dozen, ... 0 6 3
Ditto Singly, ... 0 0 10
No. 1. Designed for Young Beginners. No. 2. Designed to be used after No 1. No. 3. Designed for Advanced Pupils. No. 4. Contains only the Parallel Lines.

BADLAM'S Writing Books. The Common School Writing Book. In five numbers. Per set, ... 0 3 1½
Ditto ditto Per dozen, ... 0 6 3
Ditto ditto Singly, ... 0 0 10
The peculiarities of this system consist in light lined letters for tracing, which require more observation than perfect or outline letters to be traced or filled; in clearly illustrating by elements, &c., the manner of making and joining all letters without lifting the pen; in the use of oblique lines, which aid in sloping letters and attaining a movement of the *whole* hand, *without the restraint, incident to their use as heretofore practised*; in the distinct proportions of letters secured by horizontal and oblique lines and dots; in the practical exhibition of the most common errors of learners, &c. &c.

GOULD'S Progressive in Penmanship, Practical and Ornamental, for the use of Schools, in Five Writing Books, per set, ... 0 3 1½
Ditto ditto Per dozen, ... 0 6 3
Ditto ditto Singly, ... 0 0 10
The peculiarity in Gould's Writing Book is in the placing of the copy lines inside the cover folded down. In writing, the lines can be exposed, so as to use them on any or every one of pages of the copy book—an admirable plan.

CHAMBER'S Writing—Plain, Current-hand, and Ornamental—In Fifteen prepared Copy Books. In those systems of writing which have come under the notice of the Editors, numerous formations are introduced which cannot be imitated by the pen without retouching; while, at the same time, the most difficult junctions and combinations are too frequently associated with the earlier and more simple exercises. In the present system, which aspires to some degree of originality, care has been taken to avoid every refinement of engraving inconsistent with practical penmanship; a simple yet graceful style of writing has been aimed at; and the series rendered *strictly progressive*. Post size. Price, each, ... 0 0 6

WRITING—Plain, and Current Hand. In ten prepared Copy Books. Foolscap size. Price, each, ... 0 0 3½

SMITH'S Copy Slips (oblong 12 mo.), contains:—

1. First Writing Lessons.
2. Large Text.
3. Small Text.
4. Round Hand.
5. Small Hand.
6. Large Text. Round style of Writing.
7. Small Text. do. do.
8. Round Hand. do. do.
9. Geographical Running Hand.
10. Commercial Running Hand.
11. Receipts, Bills of Exchange, &c.
12. Select Sentences.
13. Ladies' Geographical.
14. Ladies' Running Hand. Part 1.
15. Ditto " 2.
16. Ditto " 3.
17. Scripture Round Hand.
18. Ditto ditto
19. Old English.
20. German Text.
22. Engrossing.
23. Latin Copies.
23. School Ornamental Alphabets.

The foregoing, per dozen, ... £0 5 7½
Singly, ... 0 0 6
21. A set of Plain and Ornamental Alphabets, containing 11 various ands, 0 1 6
25. The Ladies' Writing Exemplar, (Edited by D. H. Edwin,) with art 3, Ladies' Running Hand Copies, ... 0 1 3
26. Astronomical Copies, (Edited by R. Mitchell,) Engraved by W. Smith, .. 0 0 6
Nos. 1 to 23 and 26, assorted.—Per dozen, ... 0 5 7
No. 24, per dozen, ... 0 13 9
No. 25, ditto 0 10 0
Steel School Pens, per box, ... 0 1 8
Pen-Holders, per dozen, ... 0 3 9
Lead Pencils, per dozen, 10d, and 0 1 0

XXI. DRAWING BOOKS, &c.

"Any one who can learn to write can learn to draw."

CHAPMAN'S American Drawing Book, especially adapted to the use of Schools, Academies, and Home Instruction. The Wood Engravings in these works are most exquisitely finished. They embrace every variety of example, from the simple to the highly finished specimens of drawing of the Human Figure, antique and modern, Natural Scenery, &c. &c.
The following Branches of the Art are treated separately, viz.:—
1. Primary Instruction and Rudiments of Drawing.
2. Drawing from Nature—material and method.
3. Perspective—Composition—Landscape—Figures, &c.
4. Drawing, as applicable to the Mechanic Arts.
5. Painting in Oil and Water Colours.
6. The Principles of Light and Shade.
7. External Anatomy of the Human Form, and Comparative Anatomy.
8. The various methods of Etching, Engraving, Modelling, &c.

Drawing Book No. I, Elementary. Quarto. Atlas form. pp. 56, ... £0 2 6
Ditto No. II, Elementary. ditto ditto pp. 56, ... 0 2 6
Ditto No. III, Perspective. ditto ditto pp. 56, ... 0 2 6
Drawing Copy Book, No. I, Primary and Elementary. Small quarto, pp., 20 singly, ... 0 0 7½
Ditto per dozen, ... 0 6 3
Ditto No. II, Primary and Elementary, ditto pp. 20, singly, ... 0 0 7½
Ditto per dozen, ... 0 6 3

DRAWING for Young Children; containing 150 Drawing Copies, and numerous Exercises, accompanied with ample directions for both Teacher and Pupil. Published under the superintendence of the Society for the Diffusion of Useful Knowledge. London, 12mo., bound in cloth, ... 0 2 6

CANTON'S Elementary Drawing Books. Complete in 6 numbers. Oblong 12mo. each, ... 0 0 6
In these Books, the Drawing copies are lithographed.

WILLIAMS' Instructions in Drawing, for the use of Elementary Schools, with numerous illustrative Wood Cuts, and Outline Figures of Models. sanctioned by Privy Coun. Com. on Education. 8vo., pp. 116, ... 0 3 0

NUTTING'S Initiatory Drawing Cards, in four parts, eighteen lithographed Cards in each; presenting carefully drawn examples, and accompanied by directions, illustrating the first principles of Drawing. For the use of Schools and Families. Per Pack, ... 0 1 3

NUTTING'S Progressive Drawing Cards, in four parts, nine large sized and elegant Cards in a pack, lithographed. Intended for more advanced Pupils, and designed to follow the Initiatory Series. Per Pack, ... 0 1 10½

FIRST Steps in Art; or Practical and Easy Graduations in Landscape Drawing, divided into Three Series.
FIRST SERIES.—Expressive Outline. By J. V. Richardson, Professor of Drawing, Oxford. 24 Plates. price, ... £0 3 0
SECOND SERIES.—Expressive Outline, slightly shaded, 24 Plates, ... 0 3 0
THIRD SERIES.—Select Studies, with progressive effect, 24 Plates, ... 0 3 0

COLOURED Drawing Paper, the best, per doz., ... 0 1 0
Ditto ditto second quality, ditto, ... 0 0 9

BOX of Drawing Materials, containing Chalk-holder, Leather and Paper Stumps, Prepared Charcoal, Chamois Leather, and 12 Crayons, ... 0 3 0

(See "RAFFAELLE'S OUTLINES," Section XV. of this Catalogue.)

XXII. SCHOOL APPARATUS.

BRASS Mounted Orrery, (3 feet in diameter). See 27th page of this Catalogue Brass mounted Tellurian, (for explaining change of Season, Tides, Eclipses, &c. £2 10 0
Terrestrial Globe and Stand, 5 inches in diameter (singly, 6s. 3d). 0 5 0

TWENTY Geometrical Forms and Solids. 0 6 3

NAMELY:

1. Cube No. 1.
2. Cube No. 2.
3. Cube No. 3.
4. Parallelopiped No. 4.
5. Parallelopiped No. 5.
6. Parallelopiped No. 6.
7. Parallelopiped No. 7.
8. Parallelopiped No. 8.
9. Parallelopiped No. 9.
10. Parallelopiped No. 10.
11. Sphere.
12. Hemisphere.
13. Oblate Spheroid.
14. Prolate Spheroid.
15. Cylinder.
16. Prism.
17. Six-sided Prism.
18. Cone and Frustrum.
19. Pyramid and Frustrum.
20. Cube Root Block, for illustrating very simply and beautifully the extraction of the Cube Root—Walnut.

VARTY'S Collections of Geometrical Planes and Solids, in Boxes:—
The Series of 29 Planes and Solids, ... 0 7 6
Second ditto 38, including Sections of the Cone, Sphere, and Cylinder, .. 0 11 3

VARTY'S Dissected Solids, in Mahogany Boxes:—
Dissected Cube, with Octahedron for its primitive Nucleus, ... 0 3 9
Dissected Cube, with Tetrahedron ditto 0 3 9
Dissected Cube, with Rhombic Dodecahedron, ... 0 5 0
Dissected Cube, with Pentagonal Dodecahedron, ... 0 5 0
Cones, with Sections, in boxwood, pinned 3s. 9d. Larger size, ... 0 6 3
These models are all admirably suited to facilitate the study of Geometrical forms, to lead the pupil to reflect and demonstrate, and gradually to cultivate in the mind a taste for Mathematical knowledge.
[See Illustrations of Geometrical Figures, Section XVI, No. 4.]

Numeral Frame, for teaching Arithmetic with ease. [See Engraving], ... £0 5 0
Lunarian, (for illustrating the Phases of the Moon and centre of gravity), ... 0 5 0
Two and a half inch Hemisphere Globe, hinged (singly, 6s. 3d.), ... 0 5 0
Explanatory Text Book, ... 0 1 3
Box, varnished, with Lock and Key, to contain the above, ... 0 5 0
Charge for entire set, as above, including Box, &c., &c., ... 5 2 6

BOX of Geological Specimens, appropriately labelled, ... 0 10 0

CONTAINING:

1. Calcareous Spar.
2. Pearl Spar.
3. Dog Tooth Spar.
4. Encrinite.
5. Pumice.
6. Petrified Moss.
7. Magnetic Iron.
8. Calcedony.
9. Anthophyllite.
10. Copper Ore.
11. Lead Ore.
12. Bog Iron Ore.
13. Compact Lime.
14. Chrystalized do.
15. Gypsum.
16. Bituminous Coal.
17. Anthracite Coal.
18. Cannel Coal.
19. Gneiss.
20. Sienite.
21. Serpentine.
22. Pudding Stone.
23. Sandstone.
24. Soapstone.
25. Quartz.
26. Felspar.
27. Mica.
28. Hornblend.
29. Coarse Granite.
30. Fine Granite.

This box of Geological Specimens is specially adapted to illustrate the Lessons on Geology and Minerals in the Fifth Book of the National Series.

NATURAL History of the Silk Worm. In a mahogany case, with glass cover, containing beautifully preserved Specimens of the Egg, Silkworm, Cocoon, Chrysalis, Moths, and Silk, ... £0 7 6

XXIII. AGRICULTURAL TEXT BOOKS.

ELEMENTS of Scientific Agriculture, or the Connexion between the Science and Art of Practical Farming. A Prize Essay of the New York State Agricultural Society. By John P. Norton, A. M., late Professor of Scientific Agriculture in Yale College. 12 mo., pp. 208, bound in cloth and gold lettered, ... £0 2 6

ELEMENTS of Agricultural Chemistry and Geology. By Professor James F. W. Johnston, A.M., (English Edition). 12 mo. pp. 337, ... 0 5 0
Ditto ditto (American Edition, Abridged). 12mo. pp. 249, 0 2 4

CATECHISM of Agricultural Chemistry and Geology. By Professor James F. W. Johnston, A.M.; with an Introduction, by John P. Norton, A.M., and an Appendix, compiled by James W. Dawson, Esq., Superintendent of Education, Nova Scotia, 24 mo., pp. 78, boards, ... 0 1 0
Ditto ditto (English Edition.) 8vo. pp. 63, cloth, stitched,.. 0 1 0

AGRICULTURAL Chemistry; or Chemistry applied to explain the practice, and to promote, upon rational principles, the improvement of Agriculture. With a large coloured Diagram, showing a Geological Section of England—a table of British Strata, Glossary, &c., &c. Published by the Christian Knowledge Society. 12 mo., pp. 284, cloth, gold lettered, £0 3 9

AGRICULTURAL Class Book; or how best to Cultivate a small Farm and Garden, together with Hints on Domestic Economy (one of the National Series of School Books). 12 mo. pp. 317, ... 0 1 6

LECTURES on Agricultural Chemistry, or Elements of the Science of Agriculture, by H. Y. Hind, 12 mo., paper, pp. 167, ... 0 2 0

XXIV. MISCELLANEOUS.

TEACHER'S Common School Register, 5 sheets, per copy, ... £0 1 3
Ditto ditto ditto in per dozen, ... 0 12 6
Ditto ditto ditto in 10 sheets, per copy, ... 0 2 6
Ditto ditto per dozen, ... 1 5 0

The Registers, containing *five* sheets, are designed to last for two years in a School, with less than 50 pupils, and for one year in a school of less than 100 pupils. Those with *ten* sheets answer for the larger Schools, &c. As the Act contemplates the division of the School Fund among the different School Sections, according to the average attendance of pupils at each School, it is important that Trustees should provide themselves with a copy.

PHYSICAL Training in Schools, in a Series of Gymnastic Exercises. Illustrated by upwards of 100 Engravings of the different positions of the Gymnast as above; with an introductory sketch of the Athletic Games of Antiquity. pp. 32. Price, ... 0 0 7½

PAGE'S Theory and Practice of Teaching, 8vo. pp. 349, ... 0 4 0

MANUALS for Collective Teaching: No. 1. Objects. No. 2. The Body, and its Parts. Price: each, ... 0 0 6

QUESTIONS for Home Study, or several Branches of School Study. Price 0 0 6

CLASS Papers for Home Study, or Examination Questions for Bible Scholars and Catechumens, &c., in four Parts. Price each Part, ... 0 0 4

BARNARD'S School Architecture, ... 0 7 6

DAVIES' Grammar of Arithmetic, ... 0 1 0

COMMON School Act, with Forms, Circulars, &c., &c. 12mo. pp. 103, 0 1 3

JOURNAL OF EDUCATION, for Upper Canada, back Vols. stitched, each, ... 0 5 0
Ditto yearly, ... 0 5 0

ANNUAL School Reports for Upper Canada, or other official Reports not enumerated, so far as they can be supplied. Single copy, ... 0 3 9

REPORT on a System of Public Elementary Instruction for Upper Canada. 0 2 6

CEREMONY of Laying the Corner Stone of the Normal School and Education Offices, Toronto, with an Introductory Sketch of the System of Public Elementary Instruction in Upper Canada. Superior Paper and Engravings, 8vo. pp. 29. ..... 0 1 3

THE Growth and Prospects of Canada. Two Lectures. By the Rev. Adam Lillie, ... 0 0 7½

PLAN of the Educational Department for Upper Canada: on a sheet, exhibiting the Front and Rear perspective views of the Normal and Model Schools and Education Offices, with Plans of the First and Second Stories of the Buildings. Four Engravings, with descriptive letter press. Single sheet, ... 0 0 5
Front or Rear perspective view of the Buildings, on superior paper, ... 0 0 3

CAUSE AND EFFECT.—Infinite are the consequences which follow from a single, and often apparently a very insignificant circumstance. Paley, himself narrowly escaped being a baker; here was a decision upon which hung in one scale, perhaps, the immortal interests of thousands, and, in the other, the gratification of the taste of the good people of Giggleswick for hot rolls. Cromwell was near being strangled in his cradle by a monkey; here was this wretched ape wielding in his paws the destinies of nations.—Then, again, how different in their kind, as well as in their magnitude, are these consequences from anything that might have been *a priori* expected. Henry VIII. is smitten with the beauty of a girl of eighteen; and, ere long "the Reformation beams from Bullen's eyes." Charles Wesley refuses to go with his wealthy namesake to Ireland, and the inheritance, which would have been his, goes to build up the fortunes of a Wellesley instead of a Wesley; and to this decision of a schoolboy (as Mr. Southey observes,) Methodism may owe its existence, and England its Military—and we trust we may now add, its civil and political.—glory.—*Quarterly Review.*

Educational Intelligence.

CANADA.

MONTHLY SUMMARY.

The third quarterly meeting of the "Teacher's Institute, for the County of Oxford," took place at Embro on the 15th and 16th instant, the Rev. W. H. Landon in the chair. Lectures were delivered by some of the teachers present, explanatory of the methods of teaching various branches of knowledge. Those explanatory of the rules of arithmetic, algebra, and geometry were particularly interesting. At the close of the meeting a number of resolutions were passed on the importance of the office of Local Superintendent, and the description of persons who should invariably be selected to fill it. The following resolutions were also proposed and passed, unanimously:—"That, in the opinion of this meeting, it is highly desirable that the superintendency of all the schools in the County be placed in the hands of one man, who, being supported by a liberal salary, might devote his entire time and energies to the duties of his office, so obviating the numerous inconveniences and inefficiencies of the Township system." Notice was also given that the following resolution would be proposed at the next annual meeting. We need hardly say that the system advocated in the resolution has ever been the rule in the Model School, Toronto:—"That it is the opinion of this meeting that the time is not far distant when Teachers will be able to govern the children committed to their charge without resorting to corporeal punishment, as this system must be admitted to produce deleterious effects upon the present and future habits of children."

.....A bill has been introduced into the Legislative Assembly to reconstruct the University of Toronto on the model of the London University.

.....A series of articles on the "Principles of Education" are in course of publication in the *Long Point Advocate*.....At the recent entrance Examinations of the University of Toronto, twenty Students matriculated: the number admitted to Trinity College was 16—The recent examination of Union School No. 1, Moulton, is highly spoken of by the local papers. At its conclusion Mr. Moore, one of the Trustees, remarked, that he was glad to see the progress, which the school had made, and this he attributed not solely to the ability and exertions of the teacher, but also to the good mental capacities of the scholars, and the zeal of their parents in sending them regularly to school.

The Educational Institutions of Toronto.—By a correspondent of the *New York Herald.* Amongst the buildings now in course of erection are six new school-houses, and a normal school. The normal school, which is in an advanced state, is situated between Church and Gerrard streets—its distance from the bay is about three-quarters of a mile. The situation is a very beautiful one, being considerably elevated above the business part of the city, and commanding a fine view of the bay, peninsula, and lake. The square on which it is built contains seven acres and a half of ground, and was purchased by the Council of Public Instruction, for about $18,000. The estimated value of the property is nearly $5,000 per acre. The Legislature granted $60,000 for the purchase of the site and the erection of the building, which is very imposing, though designed with a view rather to utility than effect; yet care has been taken to maintain that fitness of decoration by which the purpose and importance of the institution may be characterized and upheld. It has a frontage of one hundred and eighty-four feet, four inches, by a depth on the flanks, east and west, of eighty-five feet, four inches. The front is in the Roman doric order of Palladian character, having for its centre four pilasters of the full height of the building, with pediment, surrounded by an open doric cupola of the extreme height of ninety-five feet. The entrances for the male and female students will be on the east and west sides. In the centre of the building is a large hall, open to the roof, with a gallery around it at the level of the upper floor, approached on each floor by three corridors, and opening on the north to the theatre or examination hall. The theatre, including the galleries, is designed to accommodate 620 persons. Students will be instructed in agricultural chemistry, and taught practically on the grounds attached to the building. The principles upon which it is proposed to conduct this establishment will embody the best features of the United States and European institutions. I see by the last annual report of Doctor Ryerson, the Chief Superintendent of Schools, by whose ability and sagacity, vast improvements have been suggested in the system of education, that the number of children between the ages of five and sixteen, attending the public schools in Upper Canada, the previous year, was 259,253, being an increase on the preceding year of nearly 6,000. These do not include the numbers attending colleges or private grammar schools. There were 3,476 teachers employed during the year, of whom 2,697 were males and 779 females. Trinity College, a very large and beautiful structure, is nearly completed, so that Toronto is on the high road to becoming a town of great educational importance.

Schools in Brantford.—By a correspondent of the *Huron Signal.* We visited the principal school erected in 1850, by the town, at an expense of £1,000. The building is of brick, two stories in height above the basement, and contains three large school rooms, beside rooms for recitation, for the reception of outer clothing, &c. The seats are so planned that but two children sit together, and all the arrangements are well calculated to promote the comfort, health, and advancement of the children. The play grounds for the girls, as well as their school rooms, are entirely separate from those of the boys. The whole of the rooms are furnished with tablet lessons, maps, blackboards, astronomical apparatus, &c. The play grounds and more particularly the public entrance are tastefully planted with trees, and the whole affair is an example to the province. The average number of pupils is over 300, taught by five teachers. We have space to refer to but one more of the educational establishments of Brantford.—A benevolent lady has erected a large brick house for a boarding school, in which she provides for the education of about 40 children. Those who are able, pay a trifle for their board and education, others receive board and education free, and some receive even their clothing in addition.

Huntingdon School Examination.—On the 22nd ult., the quarterly examination of the pupils attending Miss Vantassell's school at Huntingdon took place. The School numbers over 50 pupils. A large number of the parents and friends of the children were present, as well as several gentlemen from the town who take a lively interest in the cause of education. The school room was tastefully decorated for the occasion, by the scholars, with festoons, evergreens, flags bearing appropriate devices, which gave it a very fine appearance. During the afternoon the children sung several appropriate hymns, and no one could have listened to their sweet voices, and scanned their happy faces as they chaunted their rhymes, without feeling delighted. The pupils were examined in Grammar, Arithmetic, Natural Philosophy, Animal and Vegetable Physiology, &c., and in each of these departments the pupils displayed high attainments. Dr. Hope being requested to examine on Animal and Vegetable Physiology, asked a few questions on this subject, and the answers given to them would have done credit to pupils attending Schools of much higher pretensions. After the examination was concluded, the Local Superintendent was called to the chair. The chairman gave a short address, in which he expressed himself highly satisfied with the proficiency which the scholars had made since the last examination. Dr. Hope being called upon to address the audience, said,—He had great pleasure in being present at this examination. He felt agreeably disappointed, at the proficiency of the scholars, as well as at the superior system pursued by the teacher in imparting instruction; but he had no idea that the children attending this school were so far advanced in the different branches of education; it was astonishing, the knowledge displayed here to-day in reference to the subject of Animal and Vegetable Physiology, a study which was heretofore principally confined to physicians, and those who acquired a knowledge of the higher branches of education, but he was happy to see that these useful studies were engaging the attention of our Common Schools; and it afforded him great pleasure to state, that the Common Schools of Canada, would now compare with any of the same class, in the United States, in regard to the instruction, as well as the system adopted for imparting that instruction. [For the remainder of Dr. Hope's remarks, See page 152.] James Ketcheson, Esq., then addressed the audience:—He expressed the pleasure he felt in witnessing the proceedings to-day. He could not let this opportunity pass (as many of the parents of the children were present) without impressing on their attention, the necessity of engrafting religious principles combined with sound morality on the knowledge the children obtain at school. He was willing to admit that the teacher could do much in this respect, yet their instructions could never supersede that duty which is incumbent upon parents, for the influence of a parent was quite different from that of a public teacher; right-hearted parents have an access to the hearts of children, which it is not possible for any other person to possess; there are invisible avenues by which alone they can enter, and which it is hopeless for any other to attempt. Mr. Henry Ostrom made a few very appropriate remarks in reference to education, in which he contrasted the advantages now enjoyed for obtaining education, with the disadvantages they laboured under a few years back, and concluded by expressing himself highly gratified with the examination. After the proceedings were concluded, the Ladies furnished refreshments, and we need hardly say that full justice was done by all present, to the good things so abundantly provided.—*Hastings Chronicle.*

Belleville School Examination.—On the 8th inst., the examination of the pupils attending Mr. Newbery's School took place. This School numbers about 219, the average attendance being about 184. A large number of the friends and parents of the children, as well as several gentlemen who take an interest in education, were present. The children were examined in Natural Philosophy, Grammar, Arithmetic, Animal and Vegetable Phisiology, &c., and in each of these departments of study the pupils displayed very high attainments for a common school, and considering the large number that receive instruction, the whole examination was highly creditable. After the examination was closed, John Turnbull, Esq., being called upon to address the audience, said he had great pleasure in witnessing the proceedings of to-day. The orderly manner in which the children conducted themselves, as well as their respectable appearance, was a very pleasant feature in the day's proceedings. He expressed himself highly satisfied with the attainments manifested by the children, which could not be otherwise than pleasing to the parents and all interested in the cause of education, as well as creditable to the children; he hoped that they would aim at making higher attainments. After Mr. Turnbull had taken his seat, Rev. Mr. Hudson rose, and said, that as he had always taken a deep interest in the cause of education, it was particularly gratifying to him to be present at this examination. Mr. Burdon made a few very happy remarks, in which he expressed himself highly pleased with the attainments of the pupils. Mr. Davy on being called upon made a few appropriate remarks, more especially directed to the children; he said he hoped they would improve the peculiar advantages they now possess of obtaining a good education, superior to their fathers, and that they would make good use of their time, as youth was the season for improvement. Dr. Hope being called upon to express his opinion in regard to the examination, said he was highly satisfied with what he had witnessed to-day. He dwelt at some length on the advantages of the present common school system as compared with the old rate bill. [For Dr. Hope's further remarks, See page 152.] After this the Rev. W. Gregg addressed the children on the advantages of education, as well as the importance of engrafting religious instruction on the lessons learned at this school He showed them the necessity of obtaining a knowledge of God's word, as alone calculated to make wise unto salvation, which should be made the chief concern of all present. We are happy to be able to state that the Examinations at each of the Common Schools have given great satisfaction.—*Ibid*

BRITISH AND FOREIGN

MONTHLY SUMMARY.

The Committee of Privy Council for Education have recently issued circulars to the inspectors of schools directing them to aid, by every means in their power, the system proposed by the department of practical art for causing elementary drawing to become a part of national education. It is intended to teach the very simplest elements of drawing in all schools willing to bear a small proportion of the necessary expenses, and then to admit the qualified scholars to study in a central drawing school in every town..... The Criminal statistics for all England, for the year 1851, are now before the public. Ten years ago the tables returned 30,000 offenders: the report for 1851, with all the increase of population to be reckoned, returns something over 27,000 criminals of all grades. In the intervening years, 1841, gives the highest number above thirty one thousand: 1845 gives the lowest—a little over twenty-four thousand. It is remarked that where work was abounded crime was decreased—that is, in the manufacturing districts. In the purely agricultural districts there has also been a decrease, except in the eastern counties—Essex, Norfolk, Suffolk, and Lincoln. Wherever there has been an increase of commitments, it has not been on any particular class of crimes, but has extended to each. Of the seventy criminals who were last year sentenced to death, only ten were executed. Female offenders generally reckon, with regard to males, as a friction less than one in four; but in cases of poisoning there were last year forty-one females for thirty-three males. Stockport is quoted as showing the consequences of non-education. It is not more discreditable than its neighbours in the report of 1851; but the riots there this year have set the statisticians calculating, and they find that, out of a population of 85,000, only three hundred and fifty were at school in the whole borough. .....The official statistics of the French departments prove that the average duration of human life is from six to eight years longer in the districts which are the most advanced in respect to education. In like manner, the inhabitants are most healthy in those departments where agriculture is most improved, manufactures most extended, and commerce most active... ...The *Milan Gazette* of the 14th publishes a notification by Count Strasoldo, Imperial Lieutenant of Lombardy, announcing that this year the two universities of Pavia and Padua will be opened without restriction, as they were before the events of 1848. Pupils may be received in the lyceums of Lombardo-Venetian provinces without any restriction respecting the legal domicile.....The death of the Duke of Wellington leaves the office of Chancellor of the University of Oxford vacant. The Earl of Derby has been elected, though Lords Rosse, Mahon, the Duke of Newcastle and others were mentioned in connection with the office. .....Last week the Duke of Northumberland laid the foundation stone of the Borough Schools at Alnwick, with great ceremony and

state.....Two professorships of Practical Art in woven fabric and metals have recently been established at Marlborough House, with a view of directing the studies of the pupils in classes, affording assistance to manufacturers and workmen who may seek it, and giving information to the public by lectures, &c., on the examples collected in the museum.....Mr Macgillivary, the eminent naturalist and professor of Natural History in the University of Aberdeen is dead.....The Plymouth Public Free School has been reported by the Inspector of Schools for the British and Foreign School Society, as fit for a model School for the West of England.....A paper published at Malmo, Sweden, says that Madame Jenny Lind Goldschmidt has deposited in the hands of trustees four hundred thousand rixthalers for the purpose of founding girls' schools in Sweden.

UNITED STATES.

MONTHLY SUMMARY.

The Brooklyn Board of Education, at their last meeting, adopted a resolution, directing all the school houses under their jurisdiction to be ventilated, by keeping the doors and windows open during recess. Ventilation is too much neglected in public buildings generally, and we should be glad to see the example of the Brooklyn authorities followed elsewhere. .....The free evening schools throughout the city, by direction of the Board of Education have been opened, and will continue open for the term of fourteen weeks. The rules of the Board prohibit the reception in these schools of any pupils whose daily avocations admit of their attendance upon the public or ward schools, and no corporeal punishment is allowed..... The new York Teachers' Association have issued an Educational periodical entitled "The New York Teacher," under the direction of twelve corresponding editors, and one resident editor, Mr. T. W. Valentine, Albany. This publication is designed to supply the place of the "District School Journal," discontinued for want of funds.

Literary and Scientific Intelligence.

MONTHLY SUMMARY.

At the opening of the British Association at Belfast, Colonel Sabine delivered an address on the objects and proceedings of the association, taking a view more particularly of the progress of science during the past year. He adverted to the subjects noticed by the council in their request to the general committee, in reference to the communications between the parliamentary committee and the government. One of the most important subjects for consideration at the present meeting, he said would be the necessity of again urging on the government the formation of a station in the southern hemisphere for astronomical observations. Among other topics of public interests to which he alluded was the probable advantage to science of having it directly represented in parliament. To that plan he decidedly objected, as scientific men ought not to have their attention disturbed by political controversy. The address, which occupied an hour and a half in delivery, was listened to with great attention, and was much cheered. A large number of highly interesting papers on science and political economy were read in the different sections during the week, and the meetings passed off with great *eclat*. Dr. Hamilton, in the Zoological section, read "Remarks on some of the marine birds which produce guano on the coasts of Peru and Bolivia, with reference to the Lobos Islands." This paper excited much interest, both on account of the recent question as to the sovereignty of the Lobos Islands, and on account of the importance of an increased supply of guano. After much matter of historical and geographical interest, the author gave his reasons for expressing his belief that large deposits of guano might still be found if the government would undertake the search, as yet there remained a large portion of the Pacific unexplored, principally that lying between Valparaiso and the Isthmus of Panama.....The Scientific Association of France commenced its annual Congress a week or two ago at Toulouse. The proceedings though interesting are of less public importance than those of the British Association.....The Liverpool Free Public Library and Museum was opened October 18. The museum will not be opened for some months. From 9,000 to 10,000 volumes have been received into the library shelves, and the librarian and his assistants are busy in preparing the catalogue. The workmen are busily engaged in fitting up the glass cases for the reception of Lord Derby's museum. The large cases are to be arranged round the room, and the smaller ones down the centre. In one of the rooms the model of Liverpool is to be placed. The Derby museum contains 661 specimens of mammalia, mounted, and 607 in skin; 11,131 birds mounted, 7,700 in skin, making a total of 20,049 specimens, exclusive of a large collection of eggs, a considerable number of reptiles, fish &c....Mr. Monckton Milnes, M.P., quaintly observed, at the opening of the Manchester Free Library, that four hundred years had elapsed since the invention of printing, yet books were not in circulation all over the globe; while the use of tobacco had become universal within fifty years of its introduction....The Directors of the New Crystal Palace have, it is said, set apart £10,000 for the sculptural and architectural decorations of the edifice now rising from the grounds at Sydenham....A congress of short-hand writers has just been held at Munich....The French Government are about collecting and publishing all the popular poems of France.....A. W. Pugin, the celebrated architect is dead. Her Majesty has granted £100 per annum to his widow in consideration of her husband's eminent abilities.....At a meeting of the N. Y. Historical Society, the librarian read a communication from John G. Shea, Esq., concerning the discovery and first exploration of the Mississippi river. It is supposed the first white men who ever saw the "great father of waters," were Cebaza De Naca, and the three survivors of Narvaez's band, who traversed the continent from Florida to California, in the year 1537. A few years later came the expeditions of De Soto, the monk De Niza, and Muscosa, by whom a great portion of the country West of the Mississippi was explored. In 1639, the Jesuit missionaries in Canada heard of the great river, and in 1641, they planted the cross at the outlet of Lake Superior. In 1673, Jollyet and Marquette were sent out to explore the river, and ascertain whether it ran to California, and opened a way to China. Marquette wrote a journal of his voyage and drew a map, which is now deposited in the library of St. Mary's College at Quebec. The Jesuits never published Marquette's journal, but Thevenot issued an edition of it, omitting any notice of the object of the expedition.....At the annual sitting of the French Academy, the prize for poetry, a gold medal worth 2000fr., was awarded to Madame Louise Collet, on the theme of 'The Colony of Mettray,' where the reform of convicts by classified labour is attempted. The prize of 2000fr. for eloquence was awarded to M. Paradol, of the Normal school, for a 'Eulogium on Bernardin St. Pierre. The first Montyon prize for history was awarded to M. Emile de Bonnechose, to whose work 'On the Four Conquests of England, reference has been made. The Gobert historical prizes, founded by Baron Gobert, were awarded, the first to M. Thierry, for his work 'on the Merovingian Kings;' the second to M. Henri Martin, for the recent volumes of his 'History of France.' Among the other prizes the most noticeable were, to M. Barnard, for his translation of Hegels's 'Lectures on Æsthetics,' and to M. Jules Barni, for an 'Analytical Examination of the Philosophy of Kant.' M. Boulay-Paty received 2000fr. for his collection of poetry entitled 'Sonnets,' and M. Jasmin an extraordinary prize of 3000fr. for poetry in the Provençal dialect. The report on the prizes for virtue was read by M. Vitet, the first of 3000fr. being awarded to a poor woman, aged 70, at Velencinnes, who had for forty years devoted herself to the support of her old mistress who had fallen into poverty. The sitting was concluded by the reading of Madame Collet's prize poem. The Report, by M. Villemain, Perpetual Secretary of the Academy, read previously to the announcement of the prizes, was a masterly piece of eloquence, and criticism, eliciting the warm applause of the distinguished audience. A brief analysis of the works honoured with prizes was given in the Report.

Wonders of the Universe.—What mere assertion will make any one believe that in one second of time, in one beat of a pendulum of a clock a ray of light travels over 192,000 miles, and would therefore perform the tour of the world in about the same time that it requires to wink with our eyelids, and in much less than a swift runner occupies in taking a single stride? What mortal can be made to believe, without demonstration, that the sun is almost a million times larger than this earth?—and that although so remote from us, a cannon ball shot directly towards it, and maintaining its full speed, would be twenty years in reaching it, yet it affects the earth by its attraction in an appreciable instant of time? But what are these to the astonishing truths which modern optical inquiries have disclosed, which teaches us that every point of a medium through which a ray of light passes, is affected with a succession of periodical movements, regularly recurring at equal intervals, no less than five hundred millions of millions of miles in a single second? That it is by such movements communicated to the nerves of our eyes that we see—nay, more, that it is the difference in the frequency of their recurrence which affects us with the sense of the diversity of colour. That, for instance, in acquiring the sensations of redness, our eyes are affected four hundred and eighty-two millions of millions of times; and of violet, seven hundred and seven millions of millions of times per second! These are, nevertheless, conclusions to which any one may most certainly arrive who will be at the trouble of examining the chain of reasoning by which they have been obtained.—[Sir John Herschell.

Gigantic Telescope at Wandsworth.—There is at present in course of construction on Wandsworth-common, a singular-looking structure, consisting of a plain tower with a long tube slung by its side, surrounded by a wooden boarding to keep off intruders. This large tube encloses a new monster telescope on the achromatic principle in process of

construction, under the superintendence of Mr W. Gravatt, F. R. S., for the Rev Mr. Craig, vicar of Leamington. The site, consisting of two acres, has been liberally presented by Earl Spencer in perpetuity, or so long as the telescope shall be maintained. The central tower, consisting of brick, is 64 feet in height, 15 feet in diameter, and weighs 220 tons.—every precaution has been taken in the construction of this building to prevent the slightest vibration, but if any disappointment in this respect should arise, (which however, Mr. Gravatt does not anticipate,) additional weight can be obtained by loading the several floors, and the most perfect steadiness will be thus ensured. By the side of this sustaining, tower hangs the telescope. The length of the main tube, which is shaped somewhat like a cigar, is 76 feet, but with an eye piece at the narrow end and a dewcap at the other, the total length in use will be 85 feet. The design of the dewcap is to prevent obscuration by the condensation of moisture, which takes place during the night, when the instrument is most in use. Its exterior is of bright metal, the interior is painted black. The focal distance will vary from 76 to 85 feet. The tube at its greatest circumference measures 13 feet, and this part is about 24 feet from the object glass. The determination of this point was the result of repeated experiments and minute and careful calculations. It was essential to the object in view that there should not be the slightest vibration in the instrument. Mr. Gravatt, reasoning from analogy, applied the principle of harmonic progression to the perfecting of an instrument for extending the range of vision, and thus aiding astronomic research. By his improvements the vibration at one end of the tube is neutralized by that at the other, and the result is that the utmost steadiness and precision is attained. The manner in which these object-glasses are fitted into the tube is a marvel of artistic invention. By means of twelve screws, numbered according to the hours of the day, they can be set in an instant to any angle the observer may require, by his merely calling out the number of the screw to be touched. The object-glasses also move round in grooves to wherever it may be considered that a more distinct view can be gained. The tube rests upon a light wooden framework, with iron wheels attached, and is fitted to a circular iron railway at a distance of fifty-two feet from the centre of the tower. The chain by which it is lowered is capable of sustaining a weight of thirteen tons, though the weight of the tube is only three. Notwithstanding the immense size of the instrument, the machinery is such, that it can move either in azimuth, or up to an altitude of eighty degrees, with as much ease and rapidity as an ordinary telescope, and, from the nature of the mechanical arrangements, with far greater certainty as to the results. The slightest force applied to wheel on the iron rail causes the instrument to move horizontally round the central tower, while a wheel at the right hand of the observer by a beautiful adaption of mechanical powers, enables him to elevate or depress the object-glass with the greatest precision and facility. So easy, in fact, is the control over the instrument in this respect, that a very slight touch on the wheel lifts ten cwt. It may be observed, also, that there cannot be the slightest flexure in the tube; no error or deflection arising from that cause can occur, while the ease with which it can be directed towards any point of the heavens will enable the observer to make profitable use of any patch of clear sky, however transient it may be. The great value of this need not be pointed out to those accustomed to making astronomical observations. With respect to the magnifying power of this novel instrument, it is only necessary to state that, though the focus is not so perfect as it will be shortly, it has already separated the nebulæ in the same way as Lord Rosse's. It has also separated some of the double stars in the Great Bear, and shown distinctly a clear distance of 50 or 60 degrees between them, with several other stars occupying the intervening space Ordinary readers will better understand the extraordinary magnifying power of the telescope when we inform them that by it a quarter-inch letter can be read at the distance of half a mile. The preparations for this really national work have been progressing for the last two years under the superintendence of M. Gravatt.

Parliamentary Literati.—A Correspondent of the *Athenæum* furnishes a detailed list of what he designates "the representatives of the literary interest in the Legislature:"—"Mr. Disraeli has hereditary pretentions to lead the literary interest in the Lower House, and I do not think that there could be any 'opposition' to his claim of being the first Novelist at present in the House of Commons..... The only other M. P. whom I can find avowedly contributing to the Fiction interest is Mr Grantley Berkley,—whose novel of 'Berkley Castle,'" and its consequences, might furnish a chapter to 'Curiosities of Literature.'..... Lord John Russell, as author of 'Don Carlos,' is the only Dramatist in the Lower House,—and he ranks also amongst Essayists, Biographers, and Historians, by his various publications..... Lord Mahon and Colonel Mure are at the head of the Historical and Critical M. P.'s; and I perceive the name of Mr. MacGregor, Mr. Torrence, M'Cullagh, and Sir John Walsh, as authors of historical writings..... Under the head of Poets, I observe Lords Maidstone and John Manners, and Mr. Mockton Milnes..... The 'Travellers' are more numerously represented in the Lower House of Parliament than most other departments of Literature:—Amongst Urquhart, and Mr. Whiteside: and I think that Sir George Staunton and Mr. George Thompson may be classed with the Travellers..... In the department of 'Political Philosophy,' I find Mr. Gladstone, Sir W. Molesworth, Mr. J. W. Fox, and Colonel Thompson ..... Mr. Cornwall Lewis, Mr. Roebuck, Mr. George Smythe, and Mr. Mackinnon, appear amongst the general Essayists..... Mr. Walter, Mr. Wilson, Mr. Wakely may be ranked with the Editorial interest; and I may add that Mr. Butt—the new M. P. for Harwich—besides being the reputed author of a three-volume novel, was for some years the Editor of *The Dublin University Magazine*..... The Biographers are represented by Mr. Grattan, author of a five-volume work on his celebrated father ..... The Phamphleteer department is represented by 'legion;' and I pass it bye with the remark that Lord Overstone in the Upper, and Mr. Cobden in the Lower House, are at its head by the importance of their publications..... Turning to the Lords, the Bishop of St David's (Dr. Thirlwall) is clearly at the head of the Historians in that assembly,—Lord Brougham, of Political Philosophy and Belles Lettres,—and Lord Campbell of the Biographers..... The Novelists are represented by Lords Normanby and Londesborough..... The 'Editorial interest' of the Peers is of a different kind from that of the Lower House,—and is represented by the Earl of Malmesbury, the Marquis of Londonderry, and Lords Holland and Braybrooke..... Lord St. Leonard's work on 'Powers' shows that he has other than *ex-officio* right to be placed at the head of living English writers on law ..... The Duke of Argyll, by his treatise on the Church History of Scotland, has added to the literary works of the Campbells..... The Marquis of Ormonde has published a richly illustrated narrative of a residence in Sicily. In Physical Science, the Earl of Rosse, not merely as P. R. S, but by his accomplishments, distances all competitors in either House..... There is only one autobiographer in the Legislature, Lord Cloncurry..... The Acted Drama, since the removal of Mr. Shiel, Sir N. Talfourd, and Sir Bulwer Lytton from the Lower House, has no other representative in the Legislature than the Earl of Glengall..... Lord Strangford represents the Poets of the Peers;—and of the Belles-Letters interest in the Upper House, the Earls of Carlisle and Ellesmere are efficient supporters..... In the interest of the Fine Arts we may rank 'Athenian Aberdeen'—and as a musical composer, the Lords have Lord Westmoreland..... A more original author neither House could boast of than the late venerable writer of 'The Wellington Dispatches.'..... I have not the means of ascertaining the number on the Bench of Bishops ranking with the literary interest; but foremost among them, besides the Bishops of Exeter and of St. David's (named *ante*), are, the Archbishop of Canterbury, the Archbishop of Dublin, and the Bishops of London and Oxford. I may add, that the number of Peers is only about two-thirds that of the Lower House,—but on the other hand, the Peers enjoy much more leisure.

Effect of the Earth's Rotation on Locomotion.—Mr. Uriah Clarke, of Leicester, has called our attention to an article in the Mechanic's Magazine by himself on the influence of the earth's rotation on locomotion. It is well known that as the earth revolves on its axis once in twenty-four hours, from west to east, the velocity of any point on its surface is greater near the equator and less from it in the ratio of the cosine of the latitude.—Mr. Clarke says:—"Some rather important conclusions in relation to railway travelling arise out of the view now taken. The difference between the rotative velocity of the earth in surface motion at London and at Liverpool is about twenty-eight miles per hour; and this amount of lateral movement has to be gained or lost, as respects the locomotive in each journey, according to the direction we are travelling in from one place to the other; and in proportion to the speed will be the pressure against the side of the rails, which at the high velocity, will give the engine a tendency to climb the right hand rail in each direction. Could the journey be performed in two hours between London and Liverpool, this lateral movement or rotative velocity of the locomotive would have to be increased or diminished at the rate of nearly one quarter of a mile per minute, and that entirely by side pressure on the rail, which is not sufficient to cause the engine to leave the line. would be quite sufficient to produce violent and dangerous oscillation. It may be observed, in conclusion, that as the cause above alluded to will be inoperative while we travel along the parallels of latitude, it clearly follows that a higher degree of speed may be attained with safety on a railway running east and west than on one which runs north and south." There is no doubt of the tendency Mr. Clarke speaks of on the right-hand rail, but we do not think it will be found to be so dangerous as he says. It will be greatest on the Great Northern and Berwick lines and least on the Great Western.—[Herapath.

Skill of Insect Builders.—Reaumur states that twenty years he endeavoured, without success, to discover the materials employed by wasps in forming the blue, gray, papery substance, so much used in the

structure of their nests. One day, however he saw a female wasp alight on the sash of the window, and it struck him while watching her gnawing away the wood with her mandibles, that it was from such materials as these she formed the substance which had so long puzzled him. He saw her detach from the wood a bundle of fibres, about the tenth of an inch in length, and finer than a hair, and as she did not swallow them, but gathered them into a mass with her her feet, he had no doubt but that his opinion was correct. In a short time he saw her shift to another part of the window, and carry with her the fibres which she had collected, and to which she continued to add. He then caught her and began to examine her bundle, and found that it was neither yet moistened nor rolled into a ball, as is always done before used by the wasp in her building. He also noticed that before detaching the fibres, she bruised them into a kind of lint with her mandibles. All this he imitated with his penknife, bruising and paring the same wood till it resembled the fibres collected by the wasp; and so he discovered how wasps manufactured their paper; for these fibres are kneaded together into a kind of paste, and when she has formed a round ball of them she spreads it out into a leaf nearly as thin as tissue paper, and this she accomplishes by moving backwards, and levelling it with her mandibles, her tongue, and her teeth. And so the wasp forms paper, placing layer upon layer, fifteen sheets deep, and thus preventing the earth from falling down into her nest.

"Lloyd's List" a Century Ago.—The oldest published Lloyd's List in existence bears date 1745, and is in possession of the committee of Lloyd's, being somewhat more than a century old. We are thus enabled to draw a tolerable accurate comparison between the shipping operations of the middle of last century and the middle of the present century. The old Lloyd's List appears to have been the last that was published once in the week. It is printed on a narrow slip of paper, about a foot in length; and, besides containing the price of bullion and the stocks, gives the rates of exchange on foreign countries; these are on the one side. On the reverse is what was then termed "the Marine List," which gives a list of 23 arrivals and 12 departures at English ports, with 34 ships at anchor in the Downs. There are also notices of four arrivals in Irish and foreign ports, with advice of three British ships taken by the enemy's privateers. Turning from this document, which gives a week's news, to one of the year 1800, published daily, we find that it contains on an average notices of 75 ships. This was in time of war; and, in comparing numbers, we find the ships noticed as ten to one against the previous date. Following up the comparison, we turn to a Lloyd's List, for 1850; one of the fullest of these covered 15 pages in the arrivals and loss books for one day, giving the names of about 160 vessels—being six times the number of those in 1800, and as numerous as the list of one entire year in the previous century. —*Dickens's Household Words.*

The New Suspension Bridge.—We give below, the proportions and other statistics of the Suspension Bridge, about to be built over the present one at the Falls. The Bridge will form a single span of 800 feet in length. It is to serve as a connecting link between the rail-roads of Canada and the State of New York, and to accommodate the common travel of the two countries. It is established by ample experience, that good iron wire, if properly united into cables or ropes, is the best material for the support of loads and concussions, in virtue of its great absolute cohesion, which amount to from 90,000 to 120,000 lbs. per quarter inch, according to quality. The Bridge will form a straight hollow beam of 20 feet wide and 18 deep, composed of top, bottom and sides. The upper floor, which supports the railroad, is 24 feet wide between the railings, and suspended to two wire cables, assisted by stays. The lower floor is 19 feet wide and 15 high in the clear, connected with the upper one by vertical trusses, forming sides, and suspended on two other cables, which have 10 feet more deflection than the upper ones.

The anchorage will be formed by sinking 8 shafts into the rock, 25 feet deep. The bottom of each shaft will be enlarged for the reception of cast iron anchor plates, of 6 feet square.—These chambers will have a prismatical section, which, when filled with solid masonry, cannot be drawn up without lifting the whole rock to a considerable extent.

Saddles of cast iron will support the cables on the top of the towers. They will consist of two parts—the lower one stationery, and the upper one moveable, resting upon wrought iron rollers. The saddles will have to support a pressure of 600 tons, whenever the Bridge is loaded with a train of maximum weight. The Towers are to be 60 feet high, 15 feet square at the base and at the top. The compact, hard limestone, used in the masonry of the towers, will bear a pressure of 500 tons upon every foot square.

WEIGHT OF BRIDGE.	lbs.
Weight of timber	910,130
Wrought iron and suspenders	113,120
Castings	44,332
Rails	56,750
Cables between Towers	535,400
	2,678,622

WEIGHT OF RAIL ROAD TRAINS.	TONS.
One locomotive	25
Twenty-seven double freight cars, each 25 feet long, and of 15 tons each, gross weight	405
Making a total gross weight of 430 tons, which will fall upon the cables when the whole bridge is covered by a train of cars from end to end: add to this 15 per cent increase of pressure as the result of a speed of 5 miles per hour, which is a very large allowance	61
Add weight of superstructure	782
Total aggregate maximum weight	1,273

The tensions of the cables, which result from a weight of 1,273 tons, and an average deflection of 59 feet, is 2,240 tons. Since this assumed maximum tension can but rarely occur, it is considered ample to allow four times the strength to meet this tension—that is 8,960 tons.—But assuming 2,000 tons as a tension to which the cables may be subjected, five times the strength to meet it is allowed, and an ultimate strength of 10,000 tons provided for. For this purpose, 15,000 wires of No. 10 will be required. At each end of the upper floor the upper cables will be assisted by 18 wire rope stays, and their strength will be equivalent to 1,440 wires; these deducted, leave the number of these wires in four superior cables, 13,560 —the number of wires in one cable, 3,390—diameter of cable, 9¼ inches.

The railroad bridge will be elevated 18 feet on the Canadian, and 28 on the American side, above the present surface of the bank, and above the present structure. It will be the longest railroad bridge, between the points of support, in the world.—*St. Catharines' Journal.*

Postage on the Journal Discontinued.

As the *Journal of Education* has been constituted by His Excellency the official medium of communication from the Educational Department for Upper Canada, on all matters relating to the School Law, &c., we are happy to announce that, by an arrangement which has been made with the Honorable the Post Master General, in future *no postage* will be charged upon any of the numbers of the *Journal* passing through the Post Office.

Examination of Common School Teachers.

THE Board of Public Instruction for the United Counties of York, Ontario, and Peel, hereby give notice, that an Examination of Common School Teachers, and others desirous of becoming such will take place in the *Court House*, City of Toronto, at Brampton, at Duffin's Creek, at Newmarket, and at Richmond Hill, on Tuesday, the 21st of December next, at 9 o'clock in the forenoon.

All Teachers presenting themselves for Examination, will be required to select the particular Class in which they propose to pass; and previous to being admitted for Examination, must furnish to the Examining Committee satisfactory proof of good moral character: such proof to consist of the Certificate of the Clergyman, whose ministration the Candidate has attended, and in cases where the party has taught a Common School, the Certificates of the Trustees of said School. Each Candidate will be expected to attend the Examination in his own School Circuit, if possible

The Certificates already given to Frst Class Teachers will be disallowed after the 31st December next, and new ones issued on the approved examination of the said Teachers at the above places.

The Board will meet at the Court House, Toronto, on Tuesday, the 28th December, at 10, A. M., for the purpose of viewing the Reports of the several Examining Committees, licensing of Teachers, and for other business.

By order of the Board
JOHN JENNINGS, *Chairman.*

City of Toronto, 19th October, 1852.

Toronto: Printed and Published by Thomas Hugh Bentley.

Terms: For a single copy, 5s. per annum; not less than 8 copies, 4s. 4½d. each, on $7 for the 8; not less than 12 copies, 4s. 2d. each, or $10 for the 12; 20 copies and upwards, 3s, 9d. each. 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.