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 /		Coloured pages / Pages de couleur	
	Couverture de couleur Covers damaged / Couverture endommagée		Pages damaged / Pages endommagées	
	Covers restored and/or laminated / Couverture restaurée et/ou pelliculée		Pages restored and/or laminated / Pages restaurées et/ou pelliculées	
	Cover title missing / Le titre de couverture manque		Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées	
	Coloured maps / Cartes géographiques en couleur		Pages detached / Pages détachées	
	Coloured ink (i.e. other than blue or black) / Encre de couleur (i.e. autre que bleue ou noire)		Showthrough / Transparence Quality of print varies / Qualité inégale de l'impression	
	Coloured plates and/or illustrations / Planches et/ou illustrations en couleur Bound with other material /		Includes supplementary materials / Comprend du matériel supplémentaire	
	Relié avec d'autres documents Only edition available / Seule édition disponible		Blank leaves added during restorations may appear within the text. Whenever possible, these have been omitted from scanning / II se peut que	
	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.		certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été numérisées.	
\checkmark	Additional comments / Continuous pag Commentaires supplémentaires:	gination.		

JOURNAL OF

Apper



EDUCATION,

Canada.

Vol. VIII.

TORONTO: MAY, 1855.

No. 5.

CONTENTS OF THIS NUMBER.	
I. The Smithsonian Institution, Washington	
2 Lord Ashburton on the profession of Teaching. 3. Dr. Layard of Education. 4. Modes of testing the qualities of teaching. 5. Evils of absence from school. 6. Teachers' salaries. 7. Art of interesting the scholar. 8. The mode of questioning. 9. Comprehension of words. 1 Absolute prographs of Ventilation.	n. of ie 0.
IV. Female Education and formula Education	
3. A Public School examination, N. Y. 4. The boy at the Dyke. 5. Th Seat of War. 6. Lecture on the Geology of Canada. 7. Machinery th power of nations. 8. Exquisite story by Lamartine. 9. Be courteour 10. Moral honesty. 11. Various papers by T. Tota.	l. e e
Parliamentary aid to Education. 3. British and Foreign monthly Summary. 4. Church Education society. 5. Education question in England. 6. Scotch Education hill. 7. United States Monthly.	2. y
VII. LITERARY AND SCIENTIFIC INTELLIGENCE.—1. The Niagara Falls in Winter. 2. The Electric Light. 3. Principal Falls and Rapids in the U.S. and Canada	1
III. Public Library Notice and Advertisement.	

kind:—"to increase and diffuse knowledge among men"—without restriction as to origin, country, creed or colour.

The conception of so noble a design is due to a native of England, a scion of one of its ducal houses, and a distinguished member of one of its chief universities.

The foundation of this handsome structure was laid at Washington—the metropolis of the United States—in 1847. The architecture is of the Romanesque or later Norman style. The material of the building is of fine reddish sandstone; and the structure itself, (as represented below) with its picturesque towers and irregular beauty of outline, presents an imposing appearance. It is situated on the "Mall," a wide area of ground which slopes down with a gentle declivity from, and directly in front of, the capitol. The extreme length of the building is 450 feet; its width 140 feet. It has nine towers, varying in height from 75 to 150 feet. The grounds which surround it are very extensive and are tastefully laid out.

The institution derives it name, by will, from its founder, the



THE SMITHSONIAN INSTITUTION, WASHINGTON.

In the fulness of its scope and purpose, the Smithsonian is the most important scientific and literary institution in the United States—or even in the world. The principle upon which it was founded, was of a most beneficent and philanthropic

late James Smithson, Esquire, son of the first Duke of North-umberland.

He was educated at Oxford, where he distinguished himself by his scientific attainments. In 1787, the year after taking his Master's degree, he was elected a fellow of the Royal So-

ciety. To the "Philosophical Transactions" he contributed, at different times, eight valuable papers. He was an associate of most of the eminent men of science of the last generation in England, and was much respected for his proficiency in the department of chemistry, as well as for his amiable and unassuming manners. He had no fixed residence, and formed no family ties. The last years of his life were spent mostly on the continent, and he died at Genoa, June 27th, 1829.

From the property which he received by his mother, and the ample annuity allowed him by his father, his frugality enabled him to accumulate a fortune, which, at the time of his death, amounted to about 120,000 pounds sterling.

By his will, he directed that the income of this property, (after deducting some small annuities) should be paid to his nephew, Henry James Hungerford, during his life, and that the property itself should descend to his children, if he had

any, absolutely and forever.
"In case of the death of my said nephew without leaving a child, or children, or of the death of the child or children he may have had, under the age of 21 years, or intestate, I then bequeath the whole of my property (subject to an annuity of 100 pounds to John Fitall, and for the security and payment of which, I mean stock to remain in this country,) to the United States of America, to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men."

Such are the words of the will, and the only words of Smithson which have come to us relating to this remarkable bequest.

Of the reasons which led him to make this disposal of his fortune, we know nothing except by inference. He was never in America, had no friends or acquaintances here, and is supposed to have had no particular fondness for republican institutions. No sentence among his papers, no book in his library, no recollection of his associates, shows that he had made the United States an object of special thought and study. It was, we may suppose, as a friend and patron of science and learning, and to accomplish a noble work, that he made this bequest; which he did without trammelling the legacy by any condition, restriction, reservation or direction.

Young Hungerford died at Pisa, on the 5th of June, 1835, without issue. The property thus descended to the United States. The particulars of the bequest were communicated to that government, and both Houses of Congress passed a bill, which was approved the first of July, 1836, authorizing the President to appoint an agent to prosecute, in the Court of Chancery of England, the right of the United States to the bequest; and pledging the faith of the United States to the application of the fund to the purposes designated by the donor.

Hon. Richard Rush, of Philadelphia, was by the President appointed the agent of the United States. He proceeded to England, instituted a suit in the Court of Chancery, recovered the fund and paid it into the Treasury of the United States, in sovereigns, during the month of September, 1838.

The amount of the fund at this time was \$515,169. It was not till eight years after this period, 10th August, 1846, that the act establishing the Smithsonian Institution was finally

passed.

This act creates an establishment, to be called the Smithsonian Institution, composed of the President and Vice President of the United States, the Secretaries of State, of the Treasury, of War, and the Navy, the Postmaster General, Attorney General, and Mayor of Washington, with such others as they may elect Honorary Members. It devolves the immediate government of the Institution upon a Board of Regents, of fifteen members; namely, the Vice President of the United States, the Chief Justice of the Supreme Court, and the Mayor of the city of Washington, ex officio, three members of the Senate, to be appointed by the President thereof, three members of the House to be appointed by the Speaker, and six persons to be chosen from the citizens at large, by joint resolution of the Senate and House, two of whom shall be members of the National Institute, and the other four inhabitants of States, and no two from the same State.

The act establishes a permanent loan of the original fund (\$515,169) to the United States at six per cent. interest; appropriated the accumulated interest, then amounting to \$242,-129, or so much as might be needed, together with so much of the accruing income as might be unexpended in any year, for the erection of a building; provided for the establishment of a Library, Museum, Chemical Laboratory, &c., and left most of the details of the organization to the Board of Regents.

As the result of the labors of the Board of Regents, a plan of organization has been adopted which seems to give universal

satisfaction, and promises the widest usefulness.

The cost of the building is limited (with furniture, grading the grounds, &c.) to \$250,000. This will be taken mostly from the income of the original and building funds, so as to save \$150,000 of the building fund, which will be added to the original fund, making a permanent fund of \$675,000, yielding nearly \$40,000 per annum.

This income, with all sums received from other souces, is to be permanently and equally divided between two great methods of increasing and diffusing knowledge—the first by publications, researches, and lectures—the second by collections of litera-

ture, science, and art.

The first two volumes of a series entitled "Smithsonian Contributions to Knowledge," in 4to, have been issued; also, several works in a series of a more popular character, and in 8vo. form, entitled "Smithsonian Reports." It is proposed, also, to publish for still wider circulation, a monthly "Bulletin." Researches in various departments of science have been instituted, or aided by the Institution, and several courses of free lectures have been delivered.

The various publications of the Institution have been very liberally distributed among the literary and scientific Institu-

tions of this country and of foreign countries.

The Library has been commenced, and although the funds have not been available for its rapid growth, it is destined, we hope, to meet that great want of American scholarship, a National Library for reference and research. Measures have been taken, also, for supplying the Cabinet of Natural History and the Gallery of Art.

THE SCHOOLMASTER'S MISSION.

Lecture by the Rev. C. H. BROMBY, M. A., Principal of the Training College, Cheltenham, England.

To obtain to a due conception of the Schoolmaster's Mission, we must recur to the first principles of all such inquiry. What is Education? Now, education has been so often and so variously defined, that it becomes difficult to know which definition to choose; we had, therefore, better think of a new one. I would define education as the instrument of fitting the child for the future man; I speak of the term in its usually restrictive sense. In its larger sense, we ought to say that it is the instrument of fitting man for his future state of being. We are engaged with the term in its first sense. The true object of education is to prepare the child, in order to enable the man to discharge all the duties and to enjoy all the privileges of his manhood. We accept it as a truism, that education, to be real, must not be special, but universal. It must take cognizance of the entire being—the physical man, the moral man, the intellectual man, the religious man. It must seek to develope harmoniously and consentancously the whole faculties which constitute his nature. In short, the educator, if he knows what he ought to be, should vie with the artist who strikes out of his unshapely block of pure marble the character and lineaments of a perfect form. Education should begin with the earliest years, or rather, I would say, that as education must begin with the beginning of life, whether we will or no, whatever advantages, whatever appliances artificial education has to offer should be brought to bear upon the earliest years. That just-awaked infant, crowing on its mother's lap, is educating itself. The look, the smile, the love of its mother's soul, and the light of its mother's eye, have begun the work. Would that its whole infancy and childhood were carried onwards so propitiously. But in too great a majority of instances, it soon must pass from so favorable a nursery to the streets and lanes of the neighborhood. Now, since the hope of a whole generation, and, in a measure, the gradual development of the human race, depends upon the faithful discharge of our duty to children, it becomes a very important question -how we shall secure fit men to whom we may entrust the interests of the multitude, and the office of presiding at the fountains of our humanity. All thinking men must be convinced that the whole course

of Popular Education depends upon the fitness of the educator. Write it as an axiom never to be forgotten—" As is the Master, so will be the Scatter over the land men of inferior stamp, who will treat children as so much stock in trade, and who form their estimate of their mission by the amount of profit they are likely to realise—men without high purpose, without sympathy, without heart—and a generation of these men of earth, men of hard machinery, will rise up and mock every hope of practical Christianity. According to our view of the aim of education, so will be our estimate of the educator. The day has day has gone by when men thought the mission of a schoolmaster was to beat the rebellious will into submission, to teach the barest elements of mechanical instruction, or to keep a herd of children out of harm's But men are beginning to realise the fact that there is in every infant mind, immured in every alley, the germ of a spirit that can hold converse with the spiritual world, and will outlive the destruction of this this material universe; that there are there the first rudiments of mental greatness and moral grandeur, which need but the blessing of God to make them expand into possessions more beautiful, more precious, than all the most exquisite creations of mechanical skill. It is upon such material as this, that the educator has to work; and if the workman is to be estimated by his work, what manner of men, I ask, should our workmen be? What keen sympathies, what a sense of the beautiful, what love of justice, what devotion to truth, what Perfection of morality, what mental endowments, what grace of the spirit, what bond of perfectness, what love and knowledge of Christ, the Country of the co the Great Teacher!

It seems to me that it is impossible to overrate the qualifications of the educator. I do not speak of acquired so much as of natural quali-fications. So far I have thought more of that mental and moral greatness which shall early enlist the sympathies of the child on the side of his own higher attribute, and so force upon his young and pliant nature an early faith in good, which, in later years, the rough world may not wholly obliterate. But while natural qualities are the most indianal. indispensable—for which no acquirements can be possibly substituted

I do not mean that the latter are unimportant. These acquirements should be solid and special. If education includes the physical, the educator should know on what conditions the state of health depends If education includes the mental and the moral, he should know the laws of mental science and of moral—the ignorance of which has stunted and distorted the growth of so many millions of our once Promising peasantry. And if education includes the spiritual part of han, he should be thoroughly conversant with Holy Scripture, and at the same time deeply penetrated with its spirit—not that he may arm his youthful scholars with texts to serve no higher purpose than warlike missiles, but that he may teach them to love and worship Truth at its purest sources, and to slake their ardent thirst for pleasure at the

Fountain of Religion.

Above all—the educator must be the perfect example to his school. do not mean perfect in God's eye, nor do I mean perfect in men's byes absolutely; but perfect in his children's. Of what earthly use can be all our brilliant gallery-lossons on humanity, when the quicksighted scholars can observe the teacher conceited to the very shape of his boots? on holiness, when they see him to be a companion of bad men! on truthfulness, when they know that at every recurring examination he can palm a cheat upon the world by a system of descritful cramming? I again repeat the Prussian adage, "as is the master, so will be the school." Every school possesses its peculi ir and distinctive character, and that character is the character of the master. And how can it. can it be otherwise? A child is an imitative and an inquisitive animal; and, except when he is eating and sleeping, is almost entirely in the presence of his master. Think how readily a child takes impressions, and how prone he is to be affected by any influence, good or badhow accessible his heart, and how easily its affections are moved—and how should we be surprised that the whole future senior life is in the teeping of its teacher, to whom it appertains to guide its first tottering tootsteps, and to cast its die for moral weal or wee to its dying hour!

There is no particular on which there is a greater necessity to lay these than this—the moral training of our schools—both for its own intrinsic value and because of the habit of under-estimating it. has been great improvement in many departments of education. Better schoolhouses have been built, more skilful teachers have been prepared, superior class-books have been published; but I fear I must not say that moral training has advanced with equal steps. The school is not say that moral training has advanced with equal steps. is not sufficiently formed after the model of a home, and the school-master after that of a parent. The old boast of the master is that he stands in the school of the should but what parent stands in the place of a parent—and so he should; but what parent would work all day long with a stick in hand, under a mistaken notion of snow here. of supporting his authority? God has furnished him with another and far better instrument, and that instrument is love. The teacher must employ it too, and just in so far as he does will he deserve the honorable appellation of a moral trainer. Nor is it a suitable weapon with the good and gentle of the children only—but its omnipotence will be felt among the self-willed and refractory. Nay, I doubt whether there is any spirit of childhood so utterly hardened that it will not,

sooner or later, yield to the influence of a love which refuses to be discouraged or wearied out. The great idea of Christianity is love it is God's own weapon for subduing the alienation of the human heart. The Great Teacher was a living exponent of its power, and every other teacher must adopt the same method. What is that obedience worth which is based on fear? Depend upon it no fruits are worth the gathering in any single school where the heart remains a wilderness. But where love rules, every other humanity will follow; love not only gives birth to every virtue, but it compacts them harmoniously together. That is a beautiful definition of the Apostle from meditation on which I write, "Love is the bond of perfectness." What a bond het weap shill and ability and believe and together. between child and child, and between children and teacher. If in the home-circle the loving husband is the house-band, so in the school-life the loving teacher should be the school-band. Without love, he may speak and teach the living words of God's truth; but they will have no life for the children. If he "speak with the tongue of angels, and have not charity, he becomes as sounding brass and as a tinkling cymbal" He cannot in any sense employ the language of his Master, the words that I speak unto you they are spirit and they are life.'

I pass to another view of the mission of the elementary schoolmaster. He has a social mission. To him the country looks to disseminate right principles of social duty. A man that lives a life of animal drudgery, that subsists from hand to mouth—dwarfed in mind, stunted in moral growth, spending the hours of his leisure in animal gratification—what should he know of his duty to his neighbor or to the State, when he knows not his real duty to himself? It is the province of the schoolmaster to enforce provident habits, to explain the consequences. moral and physical, of self-indulgence—the ruinous effects of drinking habits—the pleasure and self-respect of laying up a little property; and he may safely appeal to a lawful ambition of self-advancement in It belongs to the schoolmaster to teach the first rudiments of our British constitution, that he may contrast its privileges and securities with those of governments, and that he may, if future events allow it, prepare the population for an extension of the elective franchise, and for the discharge of that high social duty of appointing their own representatives in the council of the nation, It belongs to the schoolmaster to disarm the people of unreasoning prejudices, which often rise up to imperil, at different crises of the national history, their own prosperity and that of the country. To what but to an universal ignorance of first principles is owing that constant collision between capital and labor-not only ignorance of the benefits of machinery and improved art, but of the rights of labor, whether regarded in relation to the workman himself, the master, or the body of his fellow-operatives? To what but to a low intelligence is owing that rising in arms against the hoarding of corn in the face of short harvests, and the consequent rising of the price of bread, which very increase of price is the only security against the rapid exhaustion of our stocks, and the consequent horrors of famine, before another yield of harvest?

So much for the mission of the teacher. The more we think of it,

the more we shall feel how high and holy it is. In every child you admit into your school, the parent expects you to send back a better man, the State a more exemplary citizen, the Church a holier disciple. I wish now to make a few remarks upon your duties to others, towards whom you will stand in official relations. And first, your duty to the parent. Instead of honoring you, it is possible they may slight you, or insult you, and you will need more than human forbearance to sustain you. Be careful, above all things, to give no occasion of offence, that your office be not blamed. Form questionable characters, contract questionable habits, or even carry yourself morosely towards parents; and what is the consequence? Parents and neighbours will talk and slander; boys and girls will listen and carry away the estimate they have heard; and then must fall the fruits of all your rich studied lessons of moral beauty, and perish the last vestige of your moral authority. Depend upon it, if you would live in the affections of your children, you must also live in the esteem of their parents. And then there is

your duty to the ministers of religion.

But in order to become a moral trainer, the first step a teacher should take must be to overhaul the present expedients of his school government. Does he rule his little empire by the law of love or of fear? Does he secure order, obedience, and industry, by infusing the spirit of work from a lawful desire to please others, or honest love of approbation, and from the principle of duty; or does he force results, if not by a rod of iron, by the rod of hard and elastic wood? I am no advocate for weak discipline, properly so called; but I do not call that discipline which subdues the spirit of a child, instead of forming his pliant character. There are a thousand arguments against the rod. It is a very easy expedient—an irresistible argument—which the worst master who has but a man's strength can employ. I cannot but think, however, that it is occasionally placed upon the wrong pair of shoulders, when I see a boy punished for indolence or indifference, for which the want of tact and skill in the master is alone to be blamed. The master cannot interest his class—the boy is inattentive. The master is the cause, the boy is the effect; the effect is punished, and the cause escapes. Depend upon it that the teacher who avails him-

self of all the moral means of discipline which he could find, if he only looked for them where they are to be found—in the sympathies of our common nature-will produce a better condition of discipline, and with far less trouble to himself. School government built upon these sympathies, and backed by public opinion, will be far safer, far pleasanter, and far more productive of fruits, than one enforced by violence and fear. I know that it may be said universal practice seems to show that the rod must have had its origin in some principle of our nature. This argument I grant; but that principle may be the unfitness and the inertness of the master's nature, and not the want of response to a higher appeal, which will be found in the boy's nature, unless it has perished for want of exercise. An ignorant man and an unskilful man, of whom accident, and not nature or cultivation, has made a schoolmaster, will find opposed to him the whole sympathythe public opinion—of his scholars, and he has no alternative but rebellion or the use of his wooden rod; and, as in all stimulus the dose must be increased, he has no limit to the extent of the employment of it, until a boy too big or too brave for him shall measure his animal strength with his own. There are innumerable objections to the indiscriminate use of this weapon at least, if not its use altogether. (1) It is seldom applied without passion. (2) A blow inflicted, if it afterwards be proved in error, cannot be recalled. (3) It takes no cognizance of the temper or animus of the culprit. (4) It draws out a direct and hating antagonism among the children. (5) A fault so punished is regarded by the culprit as expiated as soon as the atonement is made. (6) It hardens the sensibilities of a boy's moral nature. Corporal punishment, when anything good is left in a boy, breeds a reckless temper that defies the pain in the bold, and tends to depress and to extinguish that becoming self-esteem, and spoils the very spirit of the more gentle boy. As war is the last appeal of kings, death is the last appeal of the law, so the rod should be that of the school-master. I know, as well as any one here, that there must be punishment; but it should consist in the moral sense of disgrace, and not in the animal sense of pain. What a bad master calls a bad boy, may be the bravest and the finest boy in the school. The master has never courted his affections, or challenged his confidence, and now he despises pain without flinching, for it is the price at which he buys the secret admiration and the sympathy of all his peers. If a master would secure a high state of discipline without the rod, he must begin to organise the school better, to prepare lessons of deeper interest, and adapt them to boy-nature more skilfully—he must claim their sympathies, condescend to play with them, to become a boy with a boy, a child with a child—he must listen to their tales of woe—every school has its own laws of morality—he must be himself an invisible party to their fabrication-he must seek to secure public opinion (what Stow calls the "sympathy of numbers") on his side, and then the stoutest heart of his most obdurate boy, robbed of the approbation of his equals, will not need his strong arm any more, he will wince before the very look of his displeasure. Severity either begets defiance, or it begets terror. If defiance, the whole discipline fails, unless you can pass from rods to scorpions, and from scorpions to thumb-screws. If it begets terror, terror will take its coward refuge in cunning or falsehood; and, as all the blossoms of nobility of character drop off one by one, instead of a man, you have made a very slave of the boy. We have tried the rod long enough, and if a voice from our prisonsif a voice from our reformatories—tells us that the words of human kindness alone can touch a string, the only string left that will vibrate within the broken instrument of an outcast's heart, surely we are doing a crying injustice to our comparatively innocent children whose natures are not utterly unstrung. Last winter I wandered into the Sessions House in Hull, and I witnessed the trial of a boy of tender years. The Recorder was affected with emotion when he found that he was a hardened and oft condemned criminal, though young. He had behaved throughout his trial with the most sullen indifference. In passing sentence, the Recorder followed a new track. "My boy," he said, "I can find none to say a word for you, but I can pity you from my heart; you even know not who your father is, and your other unnatural parent deserted you while a child; you have had no friend to guard you, no monitor to warn you; you have never known a tender mother's love, and were never taught by her to think of God and to pray to Him." The boy, who could hear of former committals and endless thefts without an emotion, began to lower his head when the Recorder used the first tore of compassion; lower and lower it went; but at the name of mother—though one worth the name of mother he had never known—the dry channels of his eyes became filled, until at last the boy sobbed as if his heart would break for the very unwontedness of his emotions. So taught the Saviour of mankind the outcast, the publican, and the sinner, and shall we fall back upon terror and fear with the tender children of our daily schools?

There is no profession considering its interests and the isolated normal condition of many of its professors, that requires so largely the interchange of friendly feeling, and the benefits of mutual conference, than that of the teachers. Of old, a chance good teacher, whose strong genius hit upon able expedients, sprang up, but he died,

and all his experience died with him. I am aware that a good teacher is to a large extent independent of systems, and that no system will make a bad one good. I am aware that, without a special fitness and call, a teacher may try every so-called system in turn, and, after all, his will be, not a sacred, noble mission, but a miserable trade. But with all this, if associations shall afford opportunities, not of display, but of conveying the experience and results of the most successful members of their profession-opportunities of discussing the ways and methods employed to obtain them, and the principles of real education which, in spite of varying systems, must enter them all-opportunities, not of gratifying the passion of self-love, but the high desire of promoting a noble and philanthropic calling, and if truth and not controversy, if not the self-truths of party, but the whole truth of a general cause, be the steady object kept in view—if the object of deserving respect and social grade, and not of demanding it in your relation to the world without—and if, in relation to yourselves, all words and insinuations calculated to give offence and to hinder harmony and good-will be rigidly avoided—then a man will have very little faith in anything if he does not most hopefully expect large and beneficial results to flow from an association like this, founded upon the general design of advancing the cause, dear to all good men, of popular, scriptural, and general education. If I understand your object aright, you would not have the records of a successful teacher to be lost. From the records of the past you would gather aid for the future. You believe that successful teachers are great men; and-

"Lives of great men all remind us
We can make our lives sublime,
And, departing, leave behind us
Footprints on the sands of time.

"Footprints, that, perhaps, another, Sailing o'er life's solemn main, A forlorn and shipwrecked brother Seeing, shall take heart again.

"Let us, then, be up and doing, With a heart for any fate, Still achieving, still pursuing, Learn to labor and to wait."

Yours is the interchange of practical ideas, the communication of frest experience, and, above all, the sympathy of a common pursuit. Yours brethren in arms, with one desire and one idea. That idea is to make yourselves as efficient as pains and manly efforts can—that desire is, in God's strength, and in a Christian man's purpose, and in the might of a noble cause, to advance the highest and most sacred interests of the millions of our people, and so, in the spirit of awe and responsibility, to discharge the schoolmaster's holy mission.—English Educational Expositor.

LORD ASHBURTON ON THE PROFESSION OF TEACHING.

The following address to the schoolmasters and schoolmistresses of Hants and Wilts, England, has just been issued by Lord Ashburton:

"You should bear in mind that the best attainable evidence of good teaching is not to be found in your written papers, however full they may be of apt and brilliant illustrations, but in the condition of your schools. If the children under your care have had their memories burdened by barren, disconnected facts, by mere names and datas affording no materials for the exercise of reflection, comparison, of judgment, no extent of knowledge on your part will be allowed the redeem the errors of your practice, and your claims will be rejected If, on the other hand, your pupils display a knowledge of the principles which explain the ordinary operations of life, it they can combine and illustrate those principles in such a manner as to show that they could at their need adapt them to use, if it appear that their minds are open to the observation of new facts, then you will have afford the best available proof of the skill and judgment of an effective teacher. I say the best available proof, because a still more satisfactory test might be conceived.

"The artist-teacher, like every other artist, can only be tested with perfect accuracy by the examination of his completed work. In the school his work is not complete. The trials of after life can along reveal what habits have been engendered by judicious training, what faculties have been developed—whether the knowledge implanted has spread like a vigorous seedling, or whether it has withered and dimappeared like a bough cut from another stock and set in without rook But, unfortunately, this test is not attainable. It would be useless attempt to analyze the character of any generation with the view of distinguishing and comparing the merits of all the several teachers who had borne their part in its education; we must be content, therefore, with the incomplete test of school proficiency; we must conjecture the ultimate yield of crop from the vigour with which the plant first appears above ground.

"There are, however, objects for which it would be highly desirable to analyze the character of our present generation—objects perfectly attainable, of high professional interest to you, and immediately connected with the study of the principles of common things. The trying incidents and fearful struggles of the Russian war afford us the oppor-

tunity.
"We know that education has been spreading day by day; the present generation is better instructed, more civilized, more softened manners, more amenable to just contro., than any preceding genera-

tion within the period of our known history.

"What has been the result of this increased knowledge, this higher civilization, those softened manners, on the conduct of that portion of our people which has been exposed to the arduous trials of a winter campaign in the Crimea? Have they fallen behind their predecessors in own. in courage? Has increased knowledge rendered them airogant and Presumptuous, less amenable to dicipline, less attached to their officers? Far from it. Never has a British army displayed such chivalrous gullantry before the enemy, such order and regularity in quarters, such heroic constancy in the cheerful endurance of extreme privation. So far the evidence is most satisfactory. The prognostics of those who distrusted the effects of education are disproved. But is there no reverse to this picture? Education has indeed been proved to have a contract of the contr to have worked no ill, but has it worked all the good of which it is capable? I fear not; I fear that some more permanent mischief has hear been at work. So long as our troops had to contend against hostile bayonets, to storm hostile batteries, they showed every virtue, every capacity of a soldier, but when it became their lot to contend with nature, when appeal was made to their ingenuity and contrivance in their encounter with material difficulties—when they came to provide themselves with shelter, food, and clothing, officers and men alike proved themselves more helpless than the rudest barbarian, while at the same time they were encumbered by all the wants, the necessities of civilization. This has been attributed, I am aware, to our extreme civilization; but our allies did not suffer as we did; were they exempt

because they were uncivilized?

"It is certainly true that the French peasant is in the habit of making many things for himself at home which we buy at the shop; but this is not the case with the French officer, who differs from our officers in this respect only, that he has been from his early education instructed in the natural sciences, and is capable therefore of taking

care both of himself and of the men under him.

"Civilization, no doubt, like every other blessing, brings its bane with it. Civilization confines, and at the same time concentrates, the practical Civilization confines, and at the same time concentrates, the practical civilization confines. practical experience of each man to some minute detail of these operations which jointly compose perfect works, the boasted produce of our industry. The works are well, rapidly, and cheaply produced on account of this division of labor; but the result of the division of labor is that each individual in our highly civilized community becomes like a member of a Russian musical band, in which a performer has but the production of a single note assigned to him. The united harmony se exquisite; remove but a few performers, and the remainder become paralyzed, unserviceable, and worthless. But if this be the necessary effect of civilization, that we should each of us earn our livelihood by the employment of one mechanical process while we hire others to do for us whatever else we may require,—if civilization consists in using Tailways without a notion of the steam engine—in masticating food prepared by others we know not how, and all but put for us into our mouths—in occupying palaces without an idea of the mechanical contrivances by which they have been constructed—in the enjoyment of the luxuries of Sybaris, with knowledge inferior to the knowledge of nature possessed by the savage, who can at least, in his own rude way, provide for himself food, shelter, and raiment,—if the civilized man must be turned out into life with the knowledge only of one note in the in the world's concert, helpless when thrown upon his own resources, why then it becomes a question whether civilization be, indeed, a blessing—whether it be anything but corruption and rottenness, the precursor of decay and dissolution.

But the facts are not so; civilization may have a tendency to produce these evils, but it has its remedies; civilization carries with it in its train those who can redress the evil if they be only permitted to do

The schoolmaster is its rightful minister. He can teach us how to deal not only with the wills of men, but with the powers of nature; he can in early childhood impart such habits of observation, such insign. insight into the workings of nature, such powers of turning its operations to account, as will arm the grown man with resources to meet whatever casualties he may have to encounter. But then the bent of mind must be given in childhood. The practical faculties must be called called out before they get withered by inaction. No time must be lost for they get withered by inaction. lost, for the power of resource, the faculty of ingenious contrivance, can be imparted only as the result of long habit. They are not to be picked up from books, for they depend upon the cultivation of the eye and the touch, of the ear and the smell, as well as on the cultivation of the touch, of the ear and the smell, as well as on the cultivation of the touch, of the ear and the smell, as well as on the cultivation of the touch, of the ear and the smell, as well as on the cultivation of the touch, of the ear and the smell, as well as on the cultivation of the eye of that which combines, compares, and uses their perceptions.

"God gave us these senses for our defence and preservation; and because in this age of peace and order we can, without danger to life or property, dispense with their exercise, are we to allow them to become all but obliterated by inaction? The young child is restless and inquisitive. It is ever exercising its senses on the objects within its reach. It is by its senses that it lays up its stores of facts whereon to employ its rising faculties. Nature at the same time gives it a love of sport that it may develop its limbs, that it may acquire strength and symmetry by their use; but what is our practice? We seat it upon a bench and make it learn from books. But I hear a voice say on the authority of Miss Nightingale that four-fifths of our soldiers have been seated at no school. I do not done the fact but I anguest that there seated at no school I do not deny the fact, but I answer that these four-fifths are the Pariahs of civilization. The rest are its spoiled, its I do not deny the fact, but I answer that these misdirected children. In what condition is that society which comprises no others? If I had space I would attempt to shew you that it is not in the Crimea only, but that in our fields, in our towns, at our very thresholds, are to be found the same fatal results of misdirected intelligence. I would take you on that sea which we claim as our element, and show you the sails of our merchantmen cut against all rule of science to hold the wind rather than to stand flat as a board; would take you amid the high-priced stock of our farms, and shew ou that the medical attendace to which their care is intrusted is as inferior to the instructed veterinary practitioner as was the surgeon-barber of Queen Elizabeth's time to Astley Cooper or Brodie of the present; I would shew you our churches built without reference to acoustics—our schools and houses without regard to ventilation. All this misdirected industry in manhood is the fruit of the misdirected bias imparted in childhood; you are answerable for that bias; may your efforts be successful!

"I remain your obedient servant,
"ASHBURTON." April, 1855.

AUSTIN LAYARD, ESQ. D. C. L. ON PRACTICAL EDUCATION.

Dr. Layard, the celebrated explorer of Nineveh, having been recently elected Lord Rector of Marischal College and University, Aberdeen, Scotland, delivered the following forcible address at his installation. After referring in very eloquent terms to the talents and acquirements of his more immediate predecessors, Dr. Layard proceeded to say that education-practical education-was the great question of the day. "This subject," he said, "I firmly believe to be one of the utmost importance at this moment—one well deserving the thoughtful and earnest consideration of every one truly anxious for the welfare of his country, jealous of her renown, and trembling lest, unhappily, she should fall from her ancient greatness. It is only when great emergencies arise that nations, as well as individuals, know what is required of them, and what they are capable of effecting. Such an emergency—one almost unparalleled in the history of our country—has arisen. We are engaged in a great war, after a long peace. It is, perhaps, well for us that the emergency has occurred before it is too late to meet it. No impartial man will venture to assert that we have not been found wanting. The reputation of this great empire has, to a certain extent, been tarnished; and its high estate among the nations of the earth has been shaken. In a moment of national difficulty and danger we have been found unequal to the duties which are imposed upon us. To account for so great a calamity—for calamity it undoubtedly is—we must seek for the evil at home. While we have undoubtedly to deplore as the cause of enormous evils the reckless manner in which merit is overlooked in public employments, and is passed over to satisfy private and party interests and influences-a subject upon which I do not now wish to dwell-I believe that among the most prominent and immediate causes of our misfortune, will be found the defective condition of our system of national or State education. It may seem strange that I should venture to make such an assertion in the middle of the 19th century, when I may be reminded that at no period of our history has education been more general or been brought more within the reach of all classes. But a vicious application of the very best principle may be the cause of as much evil as its right application would be of good. After all, the test of national education must be its result upon the national character and upon the condition of the people. Unless that result be to raise us as a nation—to make us more wise, more honest, more capable of filling that station which Providence assigns to a truly civilized and educated people—national education is of little comparative value. If our educational system should tend rather to enervate than to strengthen the mind—if we should find that the intellectual powers with which God has endowed us are rather paralyzed than brought into full vigorr—if it should appear that it rather favours error than encourages truth—surely we may well infer that there is something essentially wrong in that system. I fear there is too much reason to suspect that the evils to which I have alluded have already, to a certain extent, ensued, and that they may extend still further. I believe that our present system of education is rather directed to the overcharging of the memory than to the true cultivation of the intellect and strengthening and discipline of the mind—that it

is leading us to treat men as mere machines, rather than as reflective responsible beings." Now, there never had been a stronger desire to promote education everywhere than at present, and much, very much had been done to promote it both in England and Scotland of late years, but, though it had been shown that the number of youths under education had increased, there was reason to fear that the quality had not kept pace with the quantity enjoyed. If they did too much to educate the memory and too little to educate the judgment they would cramp the mind; and if the mind were to be cramped by the mere acquisition of isolated facts it would be as effectually injured as by ignorance. He had seen in public examinations of schools in England much readiness displayed by children, which on closer examination turned out to be mere feats of memory, mere tricks, enabling the children to answer difficult questions, but which, unconnected with any logical process of the reason, when once forgotten, left them in their original state of ignorance. The end, therefore, of education had not in these cases been attained. Against this he warned them. He did not say it was generally characteristic of our system of public educa-tion, but he feared it was too commonly so, and where it did prevail he felt that even self-instruction was on many accounts to be preferred to it. (Applause.) They generally found that great writers, great inventors, great thinkers, and great public benefactors had been men who had struggled against overwhelming difficulties, and had to rely entirely on themselves to form their own characters and to educate their own minds; and it was such a system of education as would stimulate those qualities of the mind which led to self-reliance which he desiderated as the great want of the present age. This was the great defect of modern education, that blind and unreasoning adherence to mere form and rule—through which men had become as it were mere parts of a machine, instead of free, intelligent, reasoning, and practical beings. If this system was carried out to the extent which some seemed to desire, there was no despotism the world ever saw could be so terrible in its consequences upon the human mind and upon the character of a nation. (Cheers.) The best and most general system of education would be of no avail against it. A man might have the powers of a giant, while he could not do the work of a dwarf. (Cheers.) The hon. gentleman continued,—"We have received a terrible warning. Let it not be thrown away upon us. Day after day have I of late listened, as a member of the committee appointed to inquire into the condition of our army in the Crimea, to the most sickening and heartrending tale that human suffering ever furnished—one too much calculated to lower us, not only in our own estimation, but in that of the world. I cannot allude to it without a glow of indignation and a blush of shame. To what are we to attribute the grievous misfortunes which it discloses? Are Englishmen less honest, less humane, less generous, less intelligent, less fruitful in resources than they once were? Surely not; we see no proof of it in private enterprise, or in the relations of private life. How, then, have we been plunged into this abyss of national disgrace? Why, with our immense mercantile means and experience, have our stores miscarried? Why have our brave countrymen been allowed to die untended and uncared for? Why have our gallant soldiers been left to perish from want and by the sword, in default of common precautions? Why have the unparallelled resources of this great country been put forth almost in vain? It is because men who engage in the service of the State do not feel a true sense of individual responsibility—because they can shift from their own consciences a burden which, it would appear to me, it would be intolerable to a sensitive and right-feeling man to bear, unless he could persuade himself that his own free action and independence were completely controlled. If these be not the reasons, why have a few generous and noble-hearted men-and women too, who have faced dangers, dared disease, taken upon themselves responsibilities, relied upon their own exertions, not upon rules—how have they, I ask, with slender means, despite frequently of discouragement and opposition, and entirely without Government support, alleviated the sufferings and saved the lives of thousands of our unhappy countrymen? The hon. gentle-man illustrated his views of this kind of education by many references to his discoveries in Nineveh, referring to the desolation of those cities as affording in many instances, warnings which they should profit by, as well as lessons they should draw from them, and concluded by an eloquent peroration, amid the warmest applause of the meeting.

MODES OF TESTING THE QUALITY OF TEACHING.

"On entering a school, I think it important to scrutinize the looks of the children. If they appear dull and downcast—if on being questioned by the master they rarely look him in the face—if no smile or suppressed smile of delight is seen on their countenances when a clever reply is given—if they do not appear eager to do their best—we may safely conclude that the teacher has not the hearts of the children with him, and that, however much they may have learnt, they have got no real education. The alteration in the countenances of a school, even in a month's time, when a good teacher has been substituted for a bad one, must be familiar to every inspector. There

appears then a sort of joyful intelligence in their faces, which changes their whole physical aspect. Phrenologists tell us that bumps may be made to rise on the skull by cultivating particular propensities. I cannot say that my experience extends so far as that, but I am sure that the efforts of a well trained teacher will cause beams of intelligence to radiate from a child's eyes, where before was nothing but sullenness and obstinacy. * * *

"A verv simple test will shew the extent to which children will get into the habit of repeating, without the smallest understanding of what they have been saying. Let a school be examined where the teacher has never been in the practice of instructing in the meanings of words, nor enforced writing from dictation. If there is one thing more than another which the children may be supposed to know thoroughly, it ought assuredly to be the Lord's Prayer; yet, if they are required to write it out on their slates, the first line will probably be preserted thus, 'Our Father charter heven.'"—Mr. Tufnell, English School Inspector.

THE EVILS OF ABSENCE FROM SCHOOL.

- 1. If a boy learns to feel that he may leave his duties as a scholar for trivial causes, for causes equally trivial he will leave his business when a man.
- 2. The time of the teacher and the whole school is wasted while this absence is being recorded.
- 3. The teacher's time is wasted in reading and recording the delinquent's excuse when he returns to the school.
- 4. He interrupts the exercises of the teacher, or some part of the school, in finding the places at which his various lessons commence.
- 5. He has lost the lesson recited yesterday, and does not understand that portion of to-day's lesson which depends upon that of yesterday; and such dependence usually exists.
- 6. The teacher's mind and patience are taxed in repeating to him the instructions of yesterday; which, however, for want of study, he does not clearly appreciate.
- 7. The rest of the class are deprived of the instruction of their teacher, while he is teaching the delinquent.
- 8. The progress of the rest of the class is checked, and their ambition curbed, by waiting for the tardy delinquent.
- 9. The pride of the class is wounded, and their interest in their studies abated, by the conduct of the absentee.
- 10. The reputations both of teacher and school suffer, upon days of public examination, by failures which are chargeable to the absence and not to the instruction.
- 11. The means generously provided for the education of the delinquent are wrongfully wasted.
- 12. He sets a pernicious example for the rest of the school, and usually does actual mischief while absent.—Southern School Journal.

TEACHERS' SALARIES.

At a recent meeting of the School Trustees of Toronto, the subject of Teachers Salaries was brought into discussion.—Messrs. Henning and Denison were opposed to the employment of inferior teachers for young children, for the sake of effecting a small saving; and argued with much force "that it required in truth greater abilities to lay the foundation solidly and firmly, lead out—the proper meaning of education,—the latent ideas and awaken the dormant faculties of the mind, than to rear the superstructure—that thoroughly qualified teachers should, at the present crisis of our educational system be secured and properly remunerated, and then and then only will our schools be filled with pupils—the sympathies of the public be enlisted on behalf of the effort now making for the education of the young, and finally the end at which education aims be fully attained."

One of the greatest evils which is perpetrated on the youth of our country is in providing them wi h teachers of mean capacities, simply for the reason that they are cheapest. In many instances, which if necessary we might enumerate, the bargain has been struck with the applicant for the vacant school, because he consents to take a few shillings less than another, little matter at the same time as to his attainments. It is really too bad when such men are elected as Trustees who cannot discern between a teacher of youth and a driver of oxen, both are equally rated.—Fifty and six pounds are the usual salaries of teachers in the country, and the consequence is they are

generally persons of the lowest attainments.

We hope the good common sense of the Toronto Trustees will be observed and followed. It will prove the cheapest plan in the end to secure the best Teachers, who shall receive a respectable remuneration. The time of youth will be less squandered, and trouble and money saved.—Hamilton Gazette, 29th March.

ON THE ART OF INTERESTING THE SCHOLAR.

"Teaching would be rendered far more interesting both to the teachers and to the taught, if greater efforts were made in many instances to attain a power of development. A sluggish mind may

thus often be aroused, and its attention directed to any subject, susceptible outwardly of the association of chain of ideas, or of being inwardly in itself unfolded. The lines of Milton,—

'In notes with many a winding bout Of linked sweetness long drawn out,'

do not apply to music alone.

"The memory is perhaps necessarily exercised more frequently than any other faculty in early education, but I believe that the mystery of the art of teaching is more especially included in two words, substitution and inference; substitution, in the first instance, of one word only for another, afterwards of phrases for phrases, and when such preliminary steps are mastered, a long and slow process, thoughts may be substituted for thoughts, at first in direct contrast, and when these become obvious, shades of meaning in all their delicacy may be substituted for other shades, in gradual but interminable succession. If education is expected to exercise a permanent influence, it is necessary to form a taste for reading; and a perception of the force and beauty of expression, and of the powers of language, is some security that good books will be read. But there are stronger reasons than these for requiring a child continually, according to his age and understanding, to put other words, phrases, or thoughts in the place of those presented to him. Unless he can do this more or less successfully, we cannot feel certain that he has mastered what he has been taught. He has not appropriated it or made it his own, until he has clothed it in his own words. The mind also thus becomes subtle and sinewy; it gains from exercise; it acquires the power of expression; and expression forced from a child by thought suggests to him thought in its turn.

"A good teacher will habitually leave something purposely unsaid, and lead his scholars to infer it from what has gone before. His object is to tell as little as possible in direct terms. An appeal to the memory alone soon becomes wearisome, and the attention flags; they who harangue children make them dull and heedless, because they leave them nothing to do; but any man who has the skill to make the acquisition of knowledge not a burden to the memory, but step by step a continual discovery on the part of the children under his charge, will be himself probably astonished at their progress. It is not the teacher's duty to do everything for the children, but to lead them to do all they can for themselves. Education is not exempt from the general law, that whatever is valuable must be won by labor. When children are engaged in listening to what is told them, their minds are in a great measure passive, but they are active when required to find out something for themselves, not told, but suggested. It is vain to expect to teach effectively without exciting interest, and when the child has become conscious of the possession of faculties previously dormant, of their successful exercise, and of the novel pleasure of discovery, he will be interested.

be interested.

"If authority be required for urging the method of teaching by substitution and inference, we have the highest of all—it is that chosen by our Saviour Himself. In the parables a perpetual substitution is required from the hearer or reader of the remote for the common, of the unseen for the seen, of the heavenly for the earthly; and it is remarkable in these and our Saviour's other discourses how much is left to be inferred in comparison of what is directly said."—Mr. Browne, English School Inspector.

ON THE MODE OF QUESTIONING.

"One of the essential qualifications of a good teacher is, that he should possess the art of rapid and appropriate questioning on whatever his pupils have read. Deductions should be made, illustrations set forth, parallel passages quoted, and every means used to cause the pupils to think and reason on whatever is before them. Nothing tests the powers of a teacher so much as giving a good questioning lesson. If he is not thoroughly master of the subject, if he does not possess a facile power of expression, or is deficient in physical force, it is impossible he can be efficient in this particular. Some of the Scotch schools are the only ones I know, where this art of questioning is carried to perfection,—perhaps some persons may think to extravagance, though I do not. A teacher by these means, will keep a class for a whole hour in a state of the most intense mental activity, so that both master and pupils will glow with heat, and be covered with perspiration, as if they had been contending in a race. Even if this be considered as a good thing carried to excess, it is infinitely preferable to the opposite and too common evil of a lifeless system of questioning, of which I will give an example, as these matters are often best illustrated by extremes."

Mr. Tufnell also expatiates on the bad teaching of arithmetic, and the usual neglect of explaining its principles, which once so generally and still so largely prevails. He says,—"I remember one instance in which two actuaries were requested to multiply £1 19s. 6d. by the same sum. They both said the calculation was easy enough, but would take some time to perform, and took the sum home for that purpose. They next day returned the calculations entirely differing from each other. Of course, they were quite unaware that a trick had been

played them, and the question was, in fact, absurd and insoluble * When a teacher informs me that his pupils are thoroughly conversant with the double rule of three and compound interest, I usually set them questions in the lower rules, and if these are not well performed, as is often the case, I decline to allow them to show their proficiency in the higher. It is offensive pedantry for a person to put forth his knowledge of deep things, when he is ignorant of common things. In one school, where a friend was requested to examine the boys, he asked them the number of bushels in a quarter of corn, and the distance to London, without getting any response, upon which the master interiered, and asked them in a triumphant tone the distance and specific gravity of the planet Jupiter, which were readily answered."

It appears thus, that high flights and elementary ignorance are not confined to the "better" rank of schools, but infest all grades alike.

COMPREHENSION OF WORDS.

"Perhaps there is no single cause in connection with school education, that more impedes a child in his attempts to gain knowledge and improve himself when he has grown up, than this ignorance of all but the commonest words. There is hardly any department of art, science, or book of amusing and instructive reading, with which a person can make himself acquainted, if he has only learnt the vocabulary in use among the laboring classes. This ignorance of the meanings of words is, I believe, the main reason why mechanics' and literary institutions are so scantily supported, why lectures are so little attended by the classes for whom these means of improvement were chiefly designed. Hence many a sermon fails of its effect, as the hearers cannot understand the language in which it is couched. I know a gentleman in Kent, who tried to instruct and interest his parishoners in the passing events of the world by reading to them the Times newspaper. He found, however, that he could never get through twenty lines without meeting with twenty words which none of his auditors could understand. One sentence talked of the 'operations of our fleet in the Channel.' This was a complete puzzler. The word operations puzzled them; the word fleet puzzled them: they did not know what a 'fleet' was, and they had not the slightest idea of what the 'Channel' meant." -Mr. Tufnell, English School Inspector.

ABSOLUTE NECESSITY OF VENTILATION.

On returning from a recent lecturing tour, the Rev. Henry Ward Beecher wrote an article on town-halls, lecture-rooms, etc., from which we make the following extract, and beg leave to commend it to those who have the charge of our school-rooms, for we know from experience that there is much room for a reform in the ventilation of this important class of edifices:

"It is astonishing that God should have set such an example before us, and provided such wondrous abundance of air, and men take no hint from it of the prime necessity of this substance for health, brightness, and enjoyment. Almost without a single exception, new halls and old ones are unventilated. The committee will point you to an auger-hole in some corner of the ceiling, and tell you that arrangements have been made for ventilation! You might as well insert a goose-quill in a dam to supply all Lowell with water for its mills! These contemptible little holes, hardly big enough for a fat rat to run in without disarranging his sleek fur, are hardly enough for one breather, and they are set to do the work of a thousand people! Besides, no provision is made for the introduction of fresh air from below, to supply the place of that which is supposed to pass off

ply the place of that which is supposed to pass off.

"The air trunks of furnaces ought to be double the usual size, and the hot air trunks that lead from the furnace-chamber to the room should be four times as large as is usual, so that large volumes of mild air can come in, instead of flerce currents of intensely hot air out of which the moisture has been dried, and the oxygen burnt by contact with a red-hot furnace. A room that will seat a thousand persons should not have less than four venti-ducts, each one of them larger than a man's whole body. They can be placed at the four corners of the building; or they may be arranged along the sides of the wall, the number being increased as the diameter of each is diminished. But the square inches of the mouths of the venti-ducts should be at least one third greater than of the mouths of the heat trunks which come from the furnace.

"As soon as a speaker begins, he usually finds his cheek flushed, his head full and throbbing; bad air is at work with him. The blood that is going to his brain has not been purified in his lungs by contact with good air. It has a diminished stimulating power. It is the first stage of suffocation. For all that is done when a man is hung, is to prevent the passage of air down his windpipe. And if you corrupt the air till it ceases to perform a vital function, it is the same in effect; so that a public speaker in a tainted atmosphere is going through a prolonged process of atmospheric hanging. The people, too, instantly show signs of distress. Women begin to fan themselves; children grow sleepy; and well fed men grow red and somnoient.

"How people can consent to breath each other's breath over and over again, we never could imagine. They would never return to a hotel where they were put into a bed between sheets that had been used by travellers before them; no, they must have fresh sheets. They would go without food rather than eat off an unwashed plate used by several parties before them. Clean, fresh plates are indispensable. But while so delicate of their outside skin and their mouth, they will take air into their lungs that has been breathed over twenty times, by all sorts of persons, and that fairly reeks with feculence; and nothing disgusts them but a proposal to open a window and let in clean and fresh air; that brings up coat-collars, and brings down scowls, and amiable lips pout, and kind tongues declare that they will not go to such a place again, if they do not have these matters regulated better for the health!"—The Student.



TORONTO: MAY, 1855.

** Parties in correspondence with the Educational Department will please quote the number and date of any previous letters to which they may have occasion to refer, as it is extremely difficult for the Department to keep trace of isolated cases, where so many letters are received (nearly 500 per month) on various subjects.

It was intended to publish in this number of the Journal of Education the apportionment of the Legislative School Grant for the current year to the several municipalities of Upper Canada, with the requisite instructions to the various officers concerned in distributing it; but the action of the Legislature being required to determine both the amount of the Grant and the disposal of portions of it, and that action not having yet taken place, the apportionment cannot be notified before June. We regret the inconvenience to which several County Councils that meet early will be subject in consequence of this delay; but a day will not be lost in making out and giving notice of the apportionment, as soon as the amount of School Grant payable to Upper Canada can be ascertained.

FEMALE EDUCATION AND FEMALE EDUCATORS.

The work of Education belongs peculiarly to woman. God has endowed her with faculties admirably adapted to it. Man may be the better teacher, the better instructor, but woman is the better educator. Who can deny it? Can the metaphysician? Assuredly he cannot: ask him, "What is education?" he will tell you it is the drawing out,—the development of the human faculties—the moral, mental, and physical faculties with which man is endowed by the Creator. Now, is it on the male or on the female that the work of developing a child's faculties chiefly devolves? Why, unquestionably, it is the female; it is the mother, who, with a tender solicitude and a keen perception, watches with throbbing breast and beating heart to

"Catch from its eye the earliest ray Of intellectual fire."

It is she who gives the first idea to the vacant mind; it is she who (it may be) before the child can, unaided, take his first step—it is she who has formed the character of the man. Who knows whether it be not so? Then who can estimate the moral influence, for good or evil, which a mother has over childhood and youth? Ah! a father may instruct, he may give "line upon line" and "precept upon precept: he may exhort, he may threaten, he may control, he may awe;—it is the mother who caucates. We do not say that a father cannot nor does not educate his child; we do not say that a man cannot be an educator, or that he cannot be an excellent and most efficient educator. Man may become an educator, but it is necessary that he first become an educationist. Woman, without ever becoming an educationist, or even without receiving the benefit of elementary school instruction, must, unless she live in solitude, become an educator.

One of the principal elements requisite to form an educator is moral influence with those to be educated. Woman has not only a strong

moral influence, but she has also peculiar and highly favourable opportunities for exercising it.

Maternity may increase and refine the educating power, but it does not bestow it. The power is inherent in woman. The ignorant nursemaid is an educator; her look, and tone, and gesture are aids to the development of faculties perhaps of the highest order. Let not the fond parent who trusts her little boy to the temporary care of a servant maid, fancy that the girl is "only getting him ready for school." The girl is educating him morally, mentally, and physically; the cold water which trickles from his head down his healthy chubby limbs, would provoke him to try the strength of his lungs, to the no small disquietude of the house, were it not that Betty is amusing him by "such a pretty story about a great big black giant eating little boys and girls as if they were herrings." Scarcely a sentence does she utter but she exercises or developes some moral or mental faculty in such a manner as not only to counteract the good which the morning ablution might do as regards physical development, but also to do a positive injury. Now, had the girl been properly educated and instructed, her influence with the child would not have been less—possibly it might have been greater—and, O how different would the result have been !

The progress of civilisation has always been marked by the advancement of woman in social gradation; hence, in christianity, which alone is the basis of civilisation in the highest sense, there is an importance and a status given to females which no other system ever allowed. To use the words of an elegant modern writer, "Christianity freed woman, because it opened to her the long-closed world of spiritual knowledge. Sublime and speculative theories, hitherto confined to the few, became—when once they were quickened by faith—things for which thousands were eager to die. Simple women meditated in their homes on questions which had long troubled philosophers in the groves of Academia. They knew this well; they felt that from her who had sat at the feet of the Master, listening to the divine teaching, down to the poorest slave who heard the tidings of spiritual liberty, they had all become daughters of a great and immortal faith. Of that faith they were the earliest adherents, disciples and martyrs. Women followed Jesus, entertained the wandering Apostles, worshipped in the catacombs, or died in the arena."

If we look to secondary causes, how materially has Christian civilisation progressed through female influence and by female exertion! In our own land, how much has been done for religion's glorious cause by females, from Queen Bertha, in the year 597, to our beloved Queen Victoria, in the year 1855! Turn we to any period of history and we shall find that rarely, indeed, is it marked by an important event with which woman was not connected. It was a conviction of the potency of female influence that prompted the celebrated Thomas Sheridan to suggest establishing, nearly one hundred years ago, a national system of female education. He justly observed: "Women govern us; let us try to render them perfect: the more they are enlightened, so much the mome so shall we be. On the cultivation of the mind of woman depends the wisdom of man. It is by woman that nature writes on the heart of man." No one will deny that female influence is the most potent of earthly influences; and well has it been observed, that "the thoughts which occupy the woman at home are carried into public assemblies by the man."

The Bible, that "Book of books," which none but fools despise, bears

The Bible, that "Book of books," which none but fools despise, bears evidence in the strongest and most irrefragable manner, in support of what we advance with regard to female influence. It tells us that he who was not born of woman, but was made perfect after the image of the Holy One, his Creator, partook, through woman's influence, of

"The fruit
Of that forbidden tree, whose mortal taste
Brought death into the world, and all our woe,
With loss of Eden."

It tells how female influence elicited the moral weakness of Manoah's mighty son; how he, whose physical prowess could withstand, and could destroy, a thousand stalwart warriors, yielded to—until his own destruction was occasioned by—the enticement of a woman. The his-

tory of Samson proves woman's strength.

The Bible tells how the man after God's own heart, the pious David, whose valour was as conspicuous as his magnanimity, enamoured of a woman's charms, debased himself to the dark deeds of a cowardly murderer; and how the man whose wisdom, unprecedented, shall never (according to the changeless decree of wisdom's God) be equalled, proved no security against female influence;—how Solomon, the profound worshipper of "the only wise God," was led, by women who foolishly bowed the knee to senseless idols, to forget even the beginning of wisdom—the fear of the Lord. We see the purpose of the patriarchal Isaac thwarted by woman,—the mandate of the Egyptian tyrant disregarded by woman,—women the instruments of preserving from premature destruction Israel's great lawgiver and leader,—Deborah's influence instrumental in securing her country's freedom,—the warlike Sisera inveigled to his destruction by the guile of Jael, and the beautiful Esther the means of averting the contemplated annihilation

of her people. These are but a few of the many instances of female

influence recorded in holy writ.

Heathen mythology everywhere recognises the power of female influence. Homer and Virgil tuned their immortal lays to themes com memorative of the direful ten years' conflict occasioned by the charms of Helen; the history of every age is replete with proofs of female influence, and yet how remarkable it is that nothing worthy of more than a passing notice has been done to promote female education!

We need not search the chronicles of antiquity for proofs of the truth of our assertions. Look we to the history of the progress of education in Ingland. Monkish legends and historical records tell us of British females renowned for mental acquirement. We read of a St. Hilda, who, "from her convent decided on state matters, and shared in the councils of Kings;" of Osburgha, who prompted her son the great Alfred—to the pursuit of literature; of the learned, pious, and charitable Margaret Beaufort, the mother of the colleges of Cambridge and Cambridg bridge; of Lady Jane Grey, who, according to Fuller, possessed "the innocency of childhood, the beauty of youth, the solidity of middle, the gravity of old age, and all at eighteen—the birth of a princess, the learning of a clerk, the lite of a saint." We read of Queen Elizabeth, Lady Mildred Burleigh, and numerous other noble ladies remarkable for the artist and collidity of their learning but we need of no ender for the extent and solidity of their learning, but we read of no endea-Yours to extend the advantages of education more generally to females. There has ever been a wide difference between the machinery (so to speak) of female education from that of males, even in this country, where popular educational progress has been slower than in other nations, the era of whose civilisation has been nearly synchronical with it. Our noble universities and our numerous endowed grammar schools have been available for the male youth of our country; but what provision was there until very recently for female education, except that made by individual enterprise-or rather, individual necessity?—The English Governess.

Miscellaneons.

THE OLD SCHOOL HOUSE.

The remembrance of pleasant associations, of enjoyment connected with the antiquated school-room can never be obliterated but with the complete overthrow of the powers of memory. And often in later years, when corroding care furrows the polished brow, and we sicken at the world's cold-heartedness and inhumanity, we turn within for redection, and rekindle the fires of youth by the recollection of our enjoyments in childhood. The mind naturally reverts to the time and place, when, surrounded by companions as gleeful and unminiful of the future as ourselves, we existed in the joyousness of youth, and strove to emulate the acquirements of those by whom we were encompassed.

On no scene do we dwell with more pleasure, or feel a greater regret that we are past its enjoyment, than that which rises np before us with the image of the old school-room.—The old school-room! Who does not love to review its bygone scenes? Even now its form flits across my mind's vision as a cloud athwart the heavens. The great fire-place in one end, well filled with logs, seems to crackle as it did in days of yore. The clock that ticked away upon the opposite wall,

still seems to mark the passing hours.

The raised benches stretching along the sides of the room with the open space in their midst, where the master paced to and fro, or watched with eagle eye the scholars as he heard their recitations; the oldfashioned desk; the dunce-block with its burly looking occupant, and the teacher dispensing punishment to some unlucky urchin-all are seen again in the recollections which crowd upon me of years agone. And the master—but let the poet describe him.

"A man severe he was, and stern to view, I knew him well, and every truant knew Well had the boding tremblers learned to trace The day's disasters in his morning face; Full well they laughed with counterfeited glee At all his jokes, for many a joke had he;

At all his jokes, for many a joke had he;

Full well the busy whispers, circling round,

Conveyed the dismal tidings when he frowned;

Yet he was kind, or, if severe in ought,

The love he bore to learning was in fault;

The village all declared how much he knew, 'Twas certain he could write and cypher too; Lands he could measure, terms and tides presage, And even the story ran that he could guage; In arguing, too, the parson owned his skill,
For e'en though vanquished he could argue still;
While words of learned length, and thund'ring sound, Amazed the gazing rustics ranged around, And still they gazed, and still their wonder grew, That one small head should carry all he knew."

And the scholars who crowded into that school-room, where are they? Scattered up and down on the earth, pursuing various avocations, and filling different stations in society. But they are not all Some slumber in an early grave, and flowers planted by aftection shed their fragrance over their tombs. Some lie beneath the clods of foreign lands.—Some sleep far down in the deep sea whose solemn moanings forever sing their requiem; and in a little while all, like the old school-house, will have disappeared from the face of the earth, and time will efface our names and deeds from the recollection of men. G. F. W .- Rural New Yorker.

JOURNALIZING IN SCHOOL.

The habit of journalizing in a school during youth, produces the following results in later life:

A fine style of penmanship.

2. Promptness of composition and rapidity in recording thought.

- Greater accuracy in thought.

 Facility in acquiring knowledge, and certainty of retaining it.
- Greater influence in imparting the riches of thought.
- Renders our life more important in our own eyes.
- 7. Makes a person more reliable, and less impulsive in his thought and manner.
- 8. Facility in recalling the facts and events of past life, for use, of which John Quincy Adams is an eminent example.
- 9. An extensive record of one's own life, from which the next generation may know what we have been and done. - Mass. Teacher.

A PUBLIC SCHOOL EXAMINATION IN NEW YORK.

Once a year there is a high day in each of the public schools of this The pupils all dress in their prettiest, and assemble in the great room of the school-building to be examined by those amiable men and awful functionaries, the Inspectors of Common Schools. The affair goes off with the desired éclat, and the papers of the following day generally have something to say respecting the indefatigability of the teachers and the orderly behaviour of the children. We attended, a few days ago, one of these Examinations, that of the Girl's Department of a school which is justly considered to be one of the best the city can

Nine o'clock in the morning. A few visitors have arrived, who are seated on raised settees at one end of the large apartment. A group of gentlemen—teachers, inspectors, and others—are standing about the platform. The room presents a wide expanse of neat little cherrycolored desks with neat little cherry-colored chairs behind them. The walls are hung with maps, astronomical and geographical, and the general effect of the room is light and pleasant. On each side of the platform there is an open door, through which one can look down the staircases that lead to the lower stories, and observe that the editice is surcharged with girls, the stairs revealing a long line of them awaiting the signal to enter. Suddenly the piano in the middle of the room strikes up a lively march, and from the two doors two lines of little girls stream in with a quick, eager movement, and wind like bright ribbons among the long rows of desks. On they come, welling up the stairs, as from an inexhaustible fountain; and, as they gain their places, stand in long ranks behind the chairs, silent, motionless, with their arms folded behind them. At length the fountain runs dry; the room is filled; the piano is silenced; the principal waves her hand; there is a rustle of a thousand dresses, and the school, as if it were one being, takes its seat.

Who, that was not used to it, could look upon the scene without emotion? A garden bright with so many rows of immortal flowers—a

thousand of the future mothers of the city!

Amid a silence most profound, a gentleman rises and reads a chapter from the Bible; the chapter which contains the singularly apropos declaration, that much study is a weariness to the flesh, and which opens with the exhortation, "Remember thy Creator in the days of thy youth." To children, and most grown people, the other words of this celebrated passage are unintelligible: but the girls seemed to list ten to them all with fixed attention. Then followed the beautiful Lord's Description and proposition each Lord's Prayer, the girls all bowing their heads, and repeating each phrase of the prayer in a low, impressive whisper. Again there was perfect silence. At another wave from the hand of authority, a young lady resumes her place at the piano, and after a brief prelude the whole company break forth into song. They sang with good expression, and the song bursting out so unexpectedly, came near causing the softer-hearted auditors to do something which people seldom like to do in public. The song finished, the serious work of the day began. Only the most advanced classes took part in the exercises; the younger girls, or seven tenths of the whole number, sat behind them, silent specta tors of the scene.

The principal teacher waves her hand again, and fifty girls turn on their chairs and face the aisle; a second motion, and they r.se; a third, and they face the back of the room; a fourth, and they march to the centre and stand in a low, the largest at each end, and the others in the order of their size, the smallest being in the middle; a fifth, and the two tallest girls leave their places and give to each of the class a The books are received, and held by every one precisely in the same manner; every movement is made with military simultaneousness and promptitude, but without the fuss and clatter which usually This was a class in reading. Each member of mark military doings. the class read a few lines, and read them as well as girls can read without a scientific training of the vocal organs. The books were then closed, and the "hard words" were "given out" to be spelled and "defined." The spelling was good, but the definitions of that bird, so pleasing to ingenious youth, the parrot. Right-aboutface, and the class glides away to the music of the piano. Arithmetic next. A child that can add, subtract, multiply, and divide fractions, and understands the reasons for each operation, has broken the backbone of arithmetic, understands arithmetic. The class appeared to have really progressed so far; the bird just named was not once heard during the examination of this class. Another song, and then a class in grammar; parrot, only perrot, and that continually; the examination elicited only a string of definitions, which were given with thoughtless correctness. Then a class in geography, with similar results. A mass of unconnected facts of a geographical nature had certainly been committed to memory; but anything in the way of a geographical idea, a geographical cause, a geographical generalization, we graphical tasts, a geographic a class, a geographical generalization, we heard no hint of. To know that the St. Lawrence River flows in a north-easterly direction is a small matter; but to know, why it does, must flow in that direction, were a very enlightening, and, therefore, a very interesting piece of knowledge. The child that possesses it, understands the geography of the country. Then followed the most astounding exhibition of all—a class of little girls parsing in Milton's " Paradise Lost!" To comment on their Miltonian performances would be superfluous.

While Milton had the floor, we took occasion to look upon the scene before us with the eyes of Mr. Crandal, The chief duty of a child, thought we, is to grow. Have these children been allowed to perform that duty? Here are a thousand human beings designed to spend the best years of their lives in presiding over the dearest interests of a household. They are suffered to be here for the sole purpose of growing up to that high, that arduous vocation. How were the means here employed adapted to produce the great end designed, that of producing

strong, kind, intelligent mothers?

THE BOY AT THE DYKE.

It is said that a little boy in Holland was returning one night from a village, to which he had been sent by his father on an errand, when he noticed the water trickling through a narrow opening in the dyke. He stopped, and thought what the consequence would be if the hole was not closed. He knew, for he had often heard his father tell the sad disasters which had happened from small beginnings; how, in a few hours, the opening would become bigger, and let in the mighty mass of water pressing on the dyke, until the whole defence being washed away, the rolling, dashing, angry waters would sweep on to the next village, destroying life, and property, and everything in their way. Should he run home and alarm the villagers, it would be dark before they could arrive, and the hole even then might be so large as to defy all attempts to close it. Prompted by these thoughts, he seated himself on the bank of the canal, stopped the opening with his hand, and patiently awaited the approach of a villager. But no one came. and patiently awarted the approxim of a vinager. But home came, Hour after hour rolled slowly by, yet there sat the heroic boy, in cold and darkness, shivering, wet, and tired, but stoutly pressing his hand against the dangerous breach. All night he staid at his post. At last morning broke. A clergyman walking up the canal, heard a groan, and looked around to see where it came from. "Why, are you there, are ability?" he salted easiers the hor and supprised at his strange. my child?" he asked, seeing the boy, and surprised at his strange position. "I am keeping back the water, sir, and saving the village from being drowned," answered the child, with lips to benumbed with cold that he could scarcely speak. The astonished minister relieved the boy. The dyke was closed, and the danger which threatened hundreds of

lives was prevented.

Heroic boy! What a noble spirit of self-devotedness he has shown! A heroic boy indeed he was; and what was it that sustained him through that lonesome night? Why, when his teeth chattered, his limbs trembled, and his heart was wrung with anxiety, did he not fly to his safe and warm hone? What thought bound him to his seat? Was it not the responsibility of his position? Did he not determine to brave all the fatigue, the clanger, the cold, the darkness, in thinking what the consequence would be, if he should forsake it? His mind pictured the quiet homes and beautiful farms of the people inundated by the flood of water, and he determined to stay at his post or die.

Now, there is a sense in which every boy and girl occupies a position of far more weighty responsibility than that of the little Hollander, on that dark and lonesome night; for, by the good or bad influence which you do and shall exert, you may be the means of turning

tide of wretchedness and ruin or a pure stream of goodness in the world. God has given you somewhere a post of duty to occupy, and you cannot get above or below your obligations to be faithful to it. You are responsible for leaving your work undone, as well as having it badly done. You cannot excuse yourself by saying, "I am nobody-I don't exert any influence;" for there is nobody so mean or obscure that he has not some influence: and you have it whether you will or not, and you are responsible for the consequences of that influence, whatever it is.

THE SEAT OF WAR.

The CRIMEA, on the fall of the Roman Empire, was overrun by hordes of Huns and Scythians, until at length it came under the control of the great warrior Ghenghis Khan, before the prowess of whose arms China, India and Tartary had fallen. On the demise of this warrior his vast empire was disme bered and the Crimea alone remained in possession of his descendants. Between the Czars of Russia and the Crimea alone remained in the contract of the contract Russia on one side, and the Ottoman Porte on the other, the independence of the country became merely nominal. The Crimes appears generally to have leaned towards Turkey, and in the year 1716, the 24th Khan in conjunction with the Turks reduced Peter the Great to the last extremity. The Crimea, however, pleased the Russians well, and in the next war with Turkey, it was invaded and overrun with fire and sword. In 1764 another struggle was made for independence, and the Russians were expelled; but on the death of the Khan, Krim-Guerai, whom the Russians poisoned, the country again became a prey to its old foes, and now having two pretenders to the throne, a civil war was fomented by Potemkin the favourite of the Empress Catherine, and the proteat of Russia was eventually placed on the throne. The the protegé of Russia was eventually placed on the throne. The Crimea was now declared independent but under the protection of Catherine, and thus remained for some years, until the appearance of the famous Elijah Mansour, at the head of his Caucasian warriors, when a bold push was made to recover the Crimea, and man a battley won and lost on both sides, the power of Russia at last prevailing. The patriotic Tartars took to the mountains, and bravely defended each pass and defile, but when forced to the last extremity, a Turkish fleet made its way into the Bay of Yalta and carried them off to Circassia. On the establishment of Russian rule, the rest of their brethren commenced to emigrate from the Crimea, and the number of them now inhabiting that country does not exceed 800,000.

SRBASTOPOL is situated on the south-west extremity of the Crimea. and it is singular that a Frenchman should have been the first to point out to the Empress Catherine its strong military position; and that an Englishman, Major Upton, should have superintended the perfecting of its defences, and that now the respective nations of each should be engaged in levelling the place to the dust. Sebastopol, previous to the arrival of the Russians was called Atkiar, by its Tartar inhabitants; it was Catherine 2nd who gave it its present pompous title. The harbour is one of the finest in the world; the principal one is called the Roads; it extends inland for upwards of four miles, and is so deep that the largest man-of-war can lie within a cable's length of the shore, besides this there are five bays equally commodious, and al. lined by a continuation of capes, strong and easily defended, "as if formed by the hand of nature expressly for a naval station."

BALAKLAVA, a corruption of the ancient Bellaclava,—a beautiful gate or opening,-is situated on the south-east of Sebastopol. It possesses a beatiful bay, upwards of a mile in length; the entrance of which will only admit two ships to pass abreast, but the bay itself is deep enough for the largest vessels and safe from every wind. The town is very old, "and might," says Spencer, "almost impress a traveller with the belief that he was contemplating another Pompeii or Herculaneum." Here resided Demetrius, the Greek Prince, and his beautiful daughter Ianthe, at the time the Crimea was conquered for Catherine by the Russians under Prince Potemkin.

INKERMAN, from which the battle of the 5th Novr. receives its name, is a town whose old churches, towers, and battlements, have been hewn out of the solid rock. It is of very ancient date, and is thought to have been founded in the first ages of Christianity, by a colony of

BAGTCHE-SERAI lies further inland and more northward than any of the places we have noticed. Its name signifies "a palace in a garden," and here the former rulers of the Crimea kept their court. It is the only town in the Crimea to which was conceded the privilege of being exclusively inhabited by the Tartars. It has lost nearly all its ancient magnificence, although the palace of Khans is still preserved, and many bazaars and mosques with their pretty minarets.

SIMPEROPOL lies yet further inland to the north east of Bagtche-Serai, and is the present capital of the Crimea. The Tartars call it Akmechet White mosque); it is the most pleasant residence in the entire country. The climate is salubrious, the houses elegant, and the streets and squares spacious. A traveller who paid it a recent visit says,-"it may be called a considerable city, and has all the public establishments necessary to conduct the affairs of an extensive Prevince.

EUPATORIA, 80 named in honor of Mithridates King of the ancient Pontus, is situated on the coast, almost north of Sebastopol. Here large numbers of cattle are brought in to the allies, and they consider the place of such importance that they have commenced to erect fortifi-

PEREKOP is the Isthmus that connects the Crimea with the mainland of Russia. It is about five miles wide; its western shore is washed by the Black sea, an arm of which here runs in eastward, and forms the gulf of Perekop; and on the east by the waters of the sea of Azov which run through a narrow passage, and indenting the north east coast of the Crimea are known as the Putrid Sea. It is over this narrow Isthmus that Russia must now march her reinforcements. A recent writer in the Times very sensibly suggests that the allies should at once man this pass, and so "stop the neck of the bottle."

LECTURE ON THE GEOLOGY OF CANADA.

T. S. Hunt, Esq., recently delivered a lecture on the Geology of of Canada, before the St. Patrick's Society of Montreal.

Mr. Hunt remarked: In the west there are no marks of disturbance from the time of the Cambrian upwards; but in the eastern bases there are evidences of great movements between the Lower and Upper Silurian; and again between the Devonian and the Coal, which last has again in its turn, been disturbed. These successive movements have thrown up these formations into a series of mountain ridges which, extending from Gaspé to the S.E, form the great Appallachian chain trace-able as far south as Georgia. The rocks thus elevated and contorted are much altered in their texture, and have become crystalline, the fossils being obliterated. Metallic veins are formed in great numbers in these altered rocks, containing gold, silver, copper, lead and zinc. It is the *debris* of these rocks that form the gold-bearing rocks of Eastern Canada, which have been traced by Mr. Logan over 100,000 square miles, and probably extend much further. This gold region has been followed along this mountain chain as far as the Southern United States, where the gold mines exhibit the same conditions as in Canada. The lecturer then remarked that all the explorations up to the present time had gone to shew that with the present high prices of labor in this country, these deposits cannot be economically wrought; although it is not impossible that richer mines may be discovered at some future

Up to the time of the coal deposit, the lecturer said all the deposits of rocks had been marine; but now the continent offered large tracts of low fertile land. A tropical climate prevailed and favored a luxuriant vegetation of pines, palms and Fern-like plants of gigantic size, whose remains accumulated on the soil where they grew, and were afterwards covered by sand and clay and then slowly consolidated into coal. Mr. Logan had pointed out that in all cases there is a bed called under clay by the miners, immediately beneath the coal bed. This is the layer of ancient soil, and contains in great abundance a fossil stigmaria, which is now known to have been the roots of one of the most abundant plants of the time. That deposits of coal do not exist in any inferior rocks was owing to the fact that previous to their epoch, the conditions of the earth's surface were not such as to favor the rich vegetation necessary to form coal; similar conditions however frequently occurred subsequently, and coal deposits of some extent are found in several of the higher rocks. The small amount of vegetable and animal matter in the older rocks has impregnated them with a sort of mineral oil or bitu-men, which in the disturbed portions have been distilled by heat, and condensed in an altered form in the services of the overlying strata. Such is the origin of the bituminous matter so much resembling coal in appearance, which has been found at Quebec. Unlike coal, however, it occurs only in veins or fissures where the rocks have been broken in their contortions.

After the coal period, the whole area of Canada seems to have been elevated for a long time above the surface of the ocean, and only to have been submerged at the close of the tertiary epoch. At this time were deposited the clays and sands of the present valley of the St. Lawrence, which extended as far west as the falls of Niagara, and are found at least 500 feet above the present sea level. These deposits contain the remains of fishes, seals, whales and shells of the species which now inhabit the Gulf of St Lawrence. The land was then elevated by slow degrees; and successive terraces along the St. Lawrence, mark the ancient sea margins. With these clays which were deposited in quiet waters, we find great masses of sand, gravel, and boulders, which, coming from the north, are spread over large portions of the country, and indicate great currents, probably accompanied with masses of ice from the polar regions, which have helped to transport the huge boulders. Similar phenomena are found over all the northern hemis-Phere, and indicate a great catacyism immediately preceding the Present order of things, and probably corresponding with the historic deluge.

MACHINERY THE POWER OF NATIONS.

Many entertain the opinion that the 1 umber of inhabitants the climate, the extent of territory and the natural fruitfulness of the soil. are the exponents of a nation's power. If this were so, those nations would be the most powerful which possessed the greatest number of inhabitants, the largest extent of territory, the finest climate, and the But do we find this to be true respecting the nations of richest soil. But do we find this to be true respecting the nations of the earth? No! Some of the weakest and depressed of them teem with iuhabitants, basking under the most serene skies, and walking on the most extensive and beautiful plains. Look at China, at Persia, at some of the Indian kingdoms, in all Africa, Spain in Europe, and Brazil in America, for the proof of this opinion. On the other hand, a virtuous, industrious, and ingenious people will make any country great and powerful. Not without natural resources, to be sure, but what signifies an abundance of untural resources in any country, unless the people develope and apply them. This is the resource of the control the people develope and apply them. It is, therefore, the genius and industry of the people which constitute the power and wealth of

Take Great Britain at the present moment—because that country presents a prominent example. Its population amounts to about twenty and a half millions, with only two and seven tenths of an acre of land for each, a climate by no means genial, and a soil not productive naturally. It maintains the largest fleets that ever floated on the ocean since the world began, and an army both large and expensive. The annual revenue of the general government amounts in round numbers to about two hundred and fifty millions of dollars, involving a tax of more than twelve dollars for each man, woman and child. Now, if we allow one-fourth of this population—a very fair estimateas being actual producers, it stands out in bold relief that 5,135,079 pay \$250,000,000 taxes every year to the general government, besides supporting all the rest of the population, and paying the great county and municipal taxations of the country. Is not this apparently a wonderful and extraordinary thing in the eyes of men? But this small army of workers cannot perform such wonders; they cannot pay such taxes and support such armaments by the labors of their own hands. How then are these things done? By machinery; in our day that country which employs the greatest amount of machinery in every department of industry is the most powerful. It was calculated about ten years ago that Britain had manufacuring machinery equal to the labour of four hundred millions of men—nearly half the inhabitants of the globe.

This is the secret of her power and ability to raise such extraordinary revenues. The genius and industry of her people have developed her natural resources. And small though she be in extent, the roundelay of her drums beats a morning march all around the globe. Machinery is the foundation on which rests the physical power of modern nations, and multiplicity should be the aim and object of every citizen. New and useful inventions should therefore be fostered and encouraged by all, and inventors amply rewarded, because they are sources of national

AN EXQUISITE STORY BY LAMARTINE.

In the tribe of Neggdeh there was a horse whose fame was spread far and near, and a Bedouin of another tribe, by name Daher, desired extremely to possess it. Having offered in vain for it his camels and his whole wealth, he hit at length upon the following device, by which he hoped to gain the object of his desire.

He resolved to stain his face with the juice of an herb, to clothe himself in rags, to tie his legs and neck together so as to appear like a lame beggar. Thus equipped, he went to wait for Naber, the owner of the horse, who he knew was to pass that way. When he saw Naber approaching on his beautiful steed, he cried out in a weak voice,

"I am a poor stranger; for three days I have been unable to move from this point to seek for food. I am dying—help, and Heaven will reward you.

The Bedouin kindly offered to take him upon his horse and carry him home; but the rogue replied, "I cannot rise: I have no strength

Naber, touched with pity, dismounted, led his horse to the spot, and with great difficulty set the seeming beggar upon his back. But no sooner did Daher feel himself in the saddle than he set spurs to the horse and galloped off, calling out as he did so, "It is I, Daher: I have got the horse and am off with it!"

Naber called out to him to stop and listen. Certain of not being pursued, he halted at a short distance from Naber, who was armed with

a spear.
"You have taken my horse," said Naber; "since Heaven has willed it, I wish you joy with it; but I do conjure you never to tell how you obtained it."

"And why not?" said Daher.

"Because," said the noble Arab, "another man might be really ill, and men would fear to help him. You would be the cause of many refusing to perform an act of charity, for fear of being duped as I have

Struck with shame at these words, Daher was silent for a moment, then springing from the horse, returned it to its owner, embracing him. Naber made him accompany him to his tent, where they spent a few days together and became friends for life.

BE COURTEOUS.

Your little brother has fallen down; stop a moment, help him up, brush off his clothes, and speak a kind word to him. It will not keep you long from your play, and you will be the happier and better for it, besides making your brother happy. Your sister is calling you to come and help her get down the swing from the high branch, where it has got tangled. Go and help her. Both your hearts will grow warmer and kinder toward each other for every little act of kindness bestowed and received; and, above all, speak kindly, politely to each

Why should children of the same family indulge in rudeness to each other? Is it of less importance to have the good opinion of those with whom our lives are spent, than of strangers? Shall we be least polite

to those we love most?

I have no doubt you love your brothers and sisters better than all the rest of the world besides. Why not take the same trouble to make that love felt, to make it bring forth fruit? When I hear boys and girls harsh and rude to each other, I pity them. They lose the best and purest pleasures of life; and it is painful to see the eldest in a family, instead of being a guide, and instructor, and protector to the younger brothers and sisters, only use his superior age and strength to oppress them.

There was once a lovely little boy, between two and three years old, the pet and plaything of the whole house. No one loved him more than his brother, who was six or eight years the elder. He took great delight in playing with and a nusing the little one, and they were for

a long time the best of friends.

At length, unfortunately, the elder brother discovered that the younger was very amusing when he was teased; so he teased him whenever he had an opportunity, just for the pleasure of laughing at him. Soon the little brother got to dislike the older one so much that he could not bear to have him come near him. Their mother, who had watched the course of events, now talked seriously to her eldest child, and advised him to try the effect of gentleness and kindness in recovering the affection of his brother. He had the good sense to take this kind advice; and in a short time the most cordial good feeling was again established between them.

Too many children think it is not worth while to be polite to their brothers and sisters. Especially the larger boys think it a mark of manliness to be rude and overbearing to the younger ones. All this is wrong. Almost all the wrangling and ill feeling in families arises from neglect of the simplest rules of politeness. It is so easy to say "I thank you," "I you please," "Will you be so kind?" that it is

surprising children will not take the trouble to be polite.

A thousand little heart-burnings and petty disputes, which although they do not seriously disturb the family, are yet the source of much vexation, might be entirely avoided with very little trouble. If children would only think seriously, and resolve earnestly to begin the new year aright, to cultivate for all around them gentle, kindly affections, let their intercourse be marked, not by rudeness and arrogance, but by loving care for others, in honor preferring one another. -N. Y. Student.

MORAL HONESTY.

BY MRS. PULLAN.

Shall I offen for ever some of my young friends by repeating to them a caution I once heard an excellent old lady give to a beloved and only daughter? "Above all, my child, be always honest; remember that to 'do justice' is a command which comes before that other, and more favourite one, to 'love mercy.''

I dare say my countenance showed some of the astonishment I felt at hearing the mother of a most excellent and admirable girl caution

her to "be honest;" for the lady, turning to me, said:
"Has it never struck you that there is much less moral honesty in the world than we are apt to think there is?—that we may appear very excellent members of society, and even have the reputation for being charitable, and yet indulge constantly in acts of dishonesty? There is a verse in the Bible which I have often pondered over, because it presents our human nature under an aspect so revolting that very few of us would be inclined to admit it to be a true one, were the authority at all less unquestionable. It is this: 'Rob not the poor, because he is poor."

If any of us were accused of such a crime, committed from so despicable a motive, we should indignantly deny its truth on behalf of our whole sex, as well as for ourselves; "to rob the poor, because he is poor," seems an outrage on humanity of which no professing Christian could possibly be guilty. And yet we know that there must be in

human nature a tendency to commit this evil; else wherefore should HE who knows all hearts have uttered the command, and even enforced "Rob not the poor. it by the assurance of retribution for its violation. because he is poor, neither oppress the afflicted in the gate, for the Lord trieth their cause.'

"And yet," I replied, "I hardly see in what way we rob, or even

have the power to rob the poor.'

"Perhaps not. But if we examine strictly our own conduct, and the motives which have actuated it, I fear very few of us will be able truly to declare themselves innocent of this sin. To rob, in the gross sense of the word, is of course out of the question; but does it not amount to the same thing if we withhold what is justly due—if we pay less than has been honestly earned—if we avail ourselves of any might and in the emphatic language of Scripture, 'grind the faces of the poor?'"

Such a view of the case startled me into serious reflection, and I came reluctantly to the conclusion that we are indeed but too frequently guilty of what I must term Moral Dishonesty. There is hardly one of us, however moderate her means, who has not occasion to employ the services of others yet humbler than herself. The seamstress, the laundress, the domestic, for instance: all these are people with whose assistance none of us can dispense. Do we never find ourselves calculating on their submitting to take something less than a fair price for their labours, rather than lose their employment? Do we never recommend any one, in something like these words, to a friend, "Oh, she is very poor, and will be glad to take almost anything." this speech, so often and so thoughtlessly uttered, the very embodiment of the spirit denounced when we are forbidden to "rob the poor,

because he is poor.'

It is not my desire to harrow up the feelings of my readers, or I could give from my own knowledge such scenes of domestic misery, of destroyed health, ruined intellect, suicide, and death from this one cause alone, as would prevent every one of them from ever again committing this species of moral dishonesty. I could show the sick child, the darling of its parent's heart, pining to death for the fresh air which they cannot give it because they cannot "get in those little bills." I could point out the husband who in the prime of lite is compelled to leave his young wife and family without a protector, literally worn to the grave by the want of the money owing to him; and that from the very people, probably, who, if he made an urgent appeal to their charitable sympathies, would send him as a free gift far more than they now neglect to pay. I could perhaps lift up the curtain from before a yet darker scene, when a woman, young, gentle, and perhaps delicately nurtured as any of yourselves, is the victim of this heartless cruelty But I will now leave this part of my subject, convinced that I have said enough to be a caution to all who have fallen into these errors from heedlessness, not intention; and that it is the head rather than the heart which is in fault in the majority of cases I have long been convinced. Your position may be humble, and your present influence small, or they may be very much the reverse; at all events, it is but reasonable to suppose that increasing years will give you a larger sphere of action and greater powers for good or for evil; but whatever your place in society, you have doubtless the wish to do good in it, and rely upon it, in paying your debts promptly, and giving a fair days's wages for an honest day's work, you will do more real benefit to society than you could effect by placing your name on the subscription lists of a dozen charities, if in doing so you neglected the more important duty. Remember, too, it is no longer the fashion to be in debt; the greatest lady in the land, who as woman, wife, and mother, is not less admirable than as Queen, sets an example in this respect that it would be happy indeed if all her subjects imitated. Never will her name be associated with aught but a blessing by those who are happy enough to be employed by her. At fixed and short intervals all her Majesty's accounts are invariably paid, and it is said that the surest mode of incurring her displeasure is to omit sending in the bill al the proper date. What happy augury may we not draw of the character of our future Sovereign from the example he has before him of virtues which have not always graced a throne.

There is a beautiful saying of the ancients, "De mortuis nil nisi-bonum" (Let us say nothing but good of the dead). Pity that we do not adopt the motto with reference to those living dead, the absent. How many a quarrel, how many heart-burnings how much evil would be spared, if we habituated ourselves to speaking no evil of those who are not present to vindicate themselves! It is truly painful to witness the spirit of detraction which frequently pervades the conversation of a group of young ladies. What slighting, sneering expressions are used regarding the persons, minds, and tempers of their absent companions! How every virtue and every beauty is qualified by some fatal "but," which has the effect of at once destroying its excellence! The mere tone of the voice is often sufficient to give the effect of an inuendo to words which in themselves are harmless. "How beautifully Miss S. plays!" "Yes, so she ought; for she spends half her time at the piano." "Did you see the exquisite drawings Miss V. brought from school last holidays?" "Yes; they are certainly admirable. I wonder if she could do them as well if the master were not at her elbow." Is there nothing dishonest in such speeches? Is there no stealing away of that which is infinitely more valuable than existence itself—the very life of life, our character? Certainly, though it is a crime against Nature to go out of our way to speak evil of the dead, it is not so injurious either to society or to ourselves as it is thus to give way to the propensity for slandering the living. Nor let us flatter ourselves that we injure others only. The injury we do ourselves by giving way to this spirit is incalculable. We cannot indulge ourselves in such speeches without imbibing the spirit of the bitterness which they express; for although people are apt to excuse themselves by saying that they did not mean what they said, it is clear that had those feelings never existed in the heart they could not have found expression on the tongue. Moreover, there is so much self-esteem mingled with all our actions, we so greatly like to be acknowledged right, and so little wish to be proved wrong in our estimate of others, that having once expressed an opinion adverse to the character of any one, we almost rejoice in anything which may justify that opinion: we feel ourselves bound, in a manner, to maintain our own cause, even at the expense of truth and honesty; and I fear that if we had any proof of the incorrectness of our assertion, we should be inclined to refrain from giving it the same publicity which we did to our former.

Do not imagine that whilst thus avoiding injuring our neighbours we are doing no good to ourselves. If there is one cast of mind more certain to issue heavings than any other it is that which "thinks"

certain to insure happiness than any other, it is that which "thinks no evil," which habitually sees and seeks for the good points of others, end is more bent on seeking their happiness than its own. The bee sucks the honey and rejects the poison presented to it; and it is our wisdom and happiness too to discover all the good we can in those about us, and to reject the evil, while, in contributing as much as we can to the welfare of our family, friends, and country, we acquire, by the very effort to do them good, a deeper interest in their welfare, and a warmer affection for them. So true it is that some of the strongest attachments the world exhibits have arisen from having conferred on another numerous and important benefits. We love those we have aided, more perhaps than they love us,—and such is the constitution of human nature that we may confer kindnesses merely at first from a feeling of benevolence, we may defend the character of an absent person from the abstract sense of justice, but the very act itself will give us warm and kindly feelings to the person we have benefited, until our hearts are interested in their fate, and we continue from affection what we began from duty.

It is one great step gained, then, towards present and future happi-

ness, to consider, in every transaction of life, whether we are acting in the spirit of entire honesty. Are we paying a just price to those we employ? Are we giving in charity whilst we are neglecting the requirements of justice? Are we, by our neglect of little accounts, embarrassing some honest tradesman, whose life depends on our punctuality? Are we, above all, allowing in ourselves a slighting, detracting mode of speaking of others? If so, there is a deficiency of moral honesty in our character which can only be supplied by the closest watchfulness of our every thought, word, and action, aided by earnest prayer to Him who, having commanded us to "do justice," will not leave us unassisted in our endeavours to perform His will.—The English Gov-

erness.

A GLANCE AT THE HISTORY OF METHOD.

Socrates was not a great geometer, but he gave a method of philosophy which determined the character of the schools of antiquity; and the catechetical form in which he gave his instruction has been

distinguished by his name.

Euclid probably never discovered a single proposition of geometry; but he gave us the idea and form of a synthetic method which has shed an effulgence of light on the part of philosophy, and which will endure as long as there is a human soul to think, a science to be cultivated, or a law of nature to be discovered. Bacon made no discovery in mathematics, hor did he add one fact to our stock of physical knowledge; but he effected a greater purpose—he gave us the method of universal philosophy: what the one did for a single department of abstract science, the other achieved for universal knowledge. Newton was a great discoverer in every department of mathematical and Physical science, but he also gave us, in his Principia, the embodiment of a synthetic method of teaching mixed mathematics which will Probably co-exist with the law of gravitation itself. Archimedes was also a great discoverer, but, in a certain sense, his genius died with him; he did nothing to perpetuate himself, for he had no recognized method, and bequeathed to posterity no creative principle beyond the isolated facts and propositions which he discovered; his mind was essentially individual, and his contempt for concrete science, which his mind was eminently qualified to adorn, caused him to die with the

RULE AND ROTE TEACHING

Mere rules never reach the depths of the soul, and are therefore forgotten as soon as they are out of use; and what is learnt by rote is little better than so much useless lumber in the mind. Rules, in many cases, are not mere negations,—they become positive evils: they rarely, if ever, aid the development of the mind; in many cases they positively retard it. By rules we attain results, without the labor of investigation. There is something soporific in rules,—something which throws an enfeebling languor over the intellectual powers,—something which inflates our vanity, without adding to our self-respect,—something which gives to us the pretensions of the empiric, and the knavery of the juggler. We hold that the Rule and Rote system, as it is followed, is intellectually and morally erroneous.

To the earnest instructors of children we would say: Never teach by rules, when you can teach by principles; never get a child to learn anything by rote, until he understands the subject-matter; -when he understands it, then he will readily learn it by heart and not by rote,—the subject will have penetrated his soul,—he will love it, because it has become a part of himself,—it will be engraven on his mind, as with a pen of iron, and there it will remain, unchanged and unchangeable, for ever.-Ibid.

SCHOOL DISCIPLINE.

Fear should never be a ruling principle in a school. No school can be in a healthy condition where the children are governed mainly by the fear of punishment. Fear is an enfeebling passion,—it paralyses the intellect, -it makes boys deceitful, slavish, and hypocritical, -it is the last and lowest motive which can actuate a human being for good. The prison and the gallows are made to frighten wretches, sunk to the lowest depths of moral degradation, fco n the commission of crime. Punishments may check the progress of vice, but they cannot foster the principle of virtue. Capital punishments, especially when they are numerous and unmerited, betoken a disastrous condition of a state,

they are frequently the hideous forerunners of anarchy, or the —they are frequently the hideous forcumers of anatony, of the fearful epilogues of some national tragedy. So, in like manner, the prevalence of punishments, or a slavish dread of the master, in a stable is a cure indication of mismanagement and instability. That unnatural stillness in a school, which proceeds from fear, is like the deceitful calm which presages the outbreak of the tempest; without the warning of a moment, the pent-up passions may burst away the barriers by which they are restrained.....

The tormal rules of a school should be few and well chosen, and their observance should always be promptly enforced. A teacher should never magnify a fault into a crime, nor allow the panishment to exceed the offence. As the possession of natural gifts does not ment reward, so the want of them cannot deserve punishment. Talents should not always be the subject of commendation, nor dulness

THE BOY OF GENIUS.

The boy of genius is not inattentive in the ordinary acceptation of the word; for he is occasionally capable of the highest efforts of attention; he sits in a half dreaming mood watching for the moment when a subject suited to his peculiar taste shall present itself; to a common observer he appears dull, but it is the dulness which proceeds from inward thought. His absence of mina is often mistaken for stupidity; and his laconic, yet significant, answers to questions are frequently attributed to a want of a logical concatenation of ideas; but to appreciate him, we should consider what he does not say, not less than what he actually does say. He is a quiet, retiring, reflective, strange boy;—nobody can understand him,—he is always doing what he should not do, and rarely does what he is required to do,—he talks when he should be silent, and loses his power of speech when he has to answer a question: nobody can understand him, because nobody will understand him; but all at once he shews a predilection for some will understand him; but all at once he shews a predilection for some particular study,—nature at length asserts her prerogative.—his winged spirit bursts the walls of its prison-house, and mounts on high into its kindred sphere of thought; now every body understands him,—every body knew perfectly well that his wayward acts were aberrations of genius, and that there could be no mistaking the sovereign stamp which nature had impressed on his brow: poor boy! if you had fallen in taking your athereal flight, what scorn, what if you had fallen in taking your ethereal flight, what scorn, what obloquy would have been yours!

It becomes the sacred duty, not less than the high privilege, of the schoolmaster of the poor to foster and protect the boy of genius, struggling amid the pressure of indigence and persecution. When his gaing aims the pressure of indigence and persecution. When his heart is about to sink under the conflict, let him be told of the triumphs of those kindred spirits who had gone before him; Thomas Simpson, who studied mathematics at the loom,—Hugh Miller, who mused on geology when he was hewing stones,—Michael Faraday, who made chemical experiments when he was a journeyman book-binder,— Ferguson, who watched the stars as he tended his flocks,—Gifford, who studied Latin when he was making shoes,-Peter Nicholson, who wrote

Educational Intelligence.

CANADA.

MONTHLY SUMMARY.

Sir Allan McNab has introduced a bill for the establishment of a College in the City of Hamilton. No university powers are proposed to be conferred upon the college; its students may, therefore, graduate at the Toronto University, or any other College in Canada possessed of University privileges.... The examination for the past session of Queen's College, Kingston, held on 25th and 26th ult., gave great satisfaction to the Kingstonians .-The degree of Bachelor of Arts was conferred on eleven gentlemen and the students generally, from all parts of Canada bore testimony by their intellectual development, of benefits derived from their attendance.....At the recent examination of the St. Catherine's Grammar School, seventy-seven prizes were awarded.....The Rev. Superintendent of Public Schools in Nova Scotia visited the Normal School and Educational Department in Toronto lately A Teachers' Association has recently been formed in the Town and Township of Brantford. A similar association has also been formed in the City of Hamilton.... A present of a beautiful Bible and Hymn Book was recently presented to the Rev. James Baird, of Port Hope, by his pupils.... A valuable site for a central school-house has been secured in Guelph, by the consent of the rate-payers at a special meeting called for that purpose. A large building will be rented in the mean time to test the advantages of the central school plan.... At the convocation of McGill College, Montreal, held on the 8rd inst., the honorary degree of M. A. was conferred upon Professor Howe; Mr. E. J. Hemmony also received the degree of B.C.L., and ten persons the degree of M.D.

PARLIAMENTARY AID TO EDUCATION IN CANADA.

In the estimates lately laid before the House of Assembly, are the following items:

Aid to the School of Medicine at Montreal	ing items.			
Grammar Schools, U. C. 2,100 0 0	Additional for Common Schools, U. & Lower Canada £	25,000		
Aid to the Upper Canada Colege 1,111 2 2 Aid to the Victoria College 750 0 0 Aid to the Regiopolis College 760 0 0 Aid to the Regiopolis College, Toronto 850 0 0 Aid to the Episcopal Methodist College, Belleville 500 0 0 Aid to the Nautical College, Quebec 1,220 0 0 Aid to the Medical Faculty of McGill College 250 0 0 Aid to the School of Medicine at Montreal 250 0 0 Various Colleges Academies, &c., in L. C., £20,601. 250 0 Less from Jesuit's Estates and Common School Fund of Lower Canada, £16,040 4,861 0 0	Grammar Schools, U. C	2,100	0	0
Aid to the Victoria College 750 0 0 Aid to the Queen's College 750 0 0 Aid to the Regiopolis College 750 0 0 Aid to St. Michael's College, Toronto 850 0 0 Aid to the Episcopal Methodist College, Belleville 500 0 0 Aid to the Nautical College, Quebec 1,220 0 0 Aid to the School of Medicine at Montreal 250 0 0 Aid to the School of Medicine at Kingston 250 0 0 Various Colleges Academies, &c., in L. C., £20,601. 250 0 Less from Jesuit's Estates and Common School Fund of Lower Canada, £16,040 4,861 0 0		1,111	2	2
Aid to the Queen's College 750 0 0 Aid to the Regiopolis College 750 0 0 Aid to St. Michael's College, Toronto 850 0 0 Aid to the Episcopal Methodist College, Belleville 500 0 0 Aid to the Nautical College, Quebec 1,220 0 0 Aid to the School of Medicine at Montreal 250 0 0 Aid to the School of Medicine at Kingston 250 0 0 Various Colleges Academies, &c., in L. C., £20,601. 250 0 Less from Jesuit's Estates and Common School Fund of Lower Canada, £16,040 4,861 0 0		750	0	0
Aid to the Regiopolis College 750 0 0 Aid to St. Michael's College, Toronto 850 0 0 Aid to the Episcopal Methodist College, Belleville 500 0 0 Aid to the Nautical College, Quebec 1,220 0 0 Aid to the Medical Faculty of McGill College 250 0 0 Aid to the School of Medicine at Montreal 250 0 0 Aid to the School of Medicine at Kingston 250 0 0 Various Colleges Academies, &c., in L. C., £20,601. 250 0 0 Less from Jesuit's Estates and Common School Fund of Lower Canada, £16,040 4,861 0 0		750	0	0
Aid to St. Michael's College, Toronto		750	Ō	0
Aid to the Episcopal Methodist College, Belleville		850	Ō	Ō
Aid to the Nautical College, Quebec		500	Ô	Ō
Aid to the Medical Faculty of McGill College		1,220	0	Ó
Aid to the School of Medicine at Montreal		250	0	Ó
Aid to the School of Medicine at Kingston		250	0	0
Various Colleges Academies, &c., in L. C., £20,601. Less from Jesuit's Estates and Common School Fund of Lower Canada, £16,040		250	Ó	Ó
Less from Jesuit's Estates and Common School Fund of Lower Canada, £16,040				
of Lower Canada, £16,040 4,861 0 0	Less from Jesuit's Estates and Common School Fund			
		4.861	0	0
	Mechanics' Institutes and kindred Institutions in U. & L. C.	4,280	Ō	Ö

BRITISH AND FOREIGN.

MONTHLY SUMMARY.

A Parliamentary paper has been issued, containing an estimate of the sums required to be voted for the year ending 31st of March, 1856, for public education in Great Britain. The estimate to be moved on the reassembling of the House of Commons for the current year is £381,921, of which £70,000 is required for building, &c., elementary and normal schools; £4,000 for books in elementary schools; £145,000 for pupil-teachers and gratuities to their instructors. Sums are required for training-schools. In London the salaries of the establishment amount to £9,431. The secretary has £1,000, and an advising counsel £300. The cost of inspection is no less than £31,940 in the year. There are forty-one inspectors, at from £200 to £600 a year.... The Council of University College, London, at a late session, appointed to the Professorship of the Arabic in the College Dr. W. Wright, of Edinburgh, editor of the Travels of Ibn Jubair, in Arabic. Applications for the Professorship of Hindostanee were reserved for further consideration. Leave of absence for a year was granted to Professor Parkes, M.D., nominated as superintendent of a civil hospital about to be established near Constantinople by the Government. Offers were received from the Baron de Goldsmid of prizes of £25 each for the session of 1856 for each of the four following classes—geology, Hebrew, civil engineering, and analytical chemistry; and of the sum of £800 for the

Hospital, conditional on the dinner collection, then amounting to £1,400, being raised to £1,700 by other contributions....For all the sixty millions of Russian subjects, there are but six universities established throughout the empire (Poland excluded); at Petersburg, Moscow, Charkow, Kasan, Kiew, and Dorpat; and the number of students receiving a higher education, all over the empire, amounted, in 1853, to 3,443; the number of professors and officials at the universities amounting to 530, or one professor to every six students, and one student in 17,000 inhabitants. Moscow had 975 students; Dorpat, 634; Kiew, 606; Charkow, 475; Petersburgh, 383; and Kasan, 370. Besides, there were in the pedagogic institution of Petersburgh, 124 students; in the Lyceum Richelieu, at Odessa, 197; in the Lyceum Demidoff, at Jaroslaw, 121; and at the Lyceum of Prince Besborodko, at Njeshin, 82. Such is the higher education of Russia.

CHURCH EDUCATION SOCIETY, IRELAND.

"The number of schools in connection with the society for the year ending the 31st of December, 1854, has been 1,860, and of scholars enrolled in them 95,483, which number may be thus represented according to their denominations:—

 Members of the established Church
 60,546

 Protestant Dissenters
 16,064

 Roman Catholics
 18,488

Hence it appears that a decrease of 3,751 has taken place since 1853 in the number of children in our schools, but as the diminished attendance is observable chiefly among Roman Catholics, it is easily explained. Many, for instance, we believe, so designated in former years have since become Protestants. Again, in consequence of the transference of some of the schools in the west to the Society for Irish Church Missions, your society has lost the credit of the names of the schools, and the number of the children, though the general cause of scriptural education has in no wise been affected. The continued emigration, moreover, of the Romish population has in the south and west especially, greatly reduced our annual returns. But if to the above facts we add the considerations that the hostility of the Romish priesthood is notoriously more and more systematic, violent, and unscrupulous, and the decrease in the "cotter class' in many places forces the parents to take their children from school and send them into the fields to labor, the wonder is that nearly 19,000 Roman Catholics are still on the rolls of our society." With respect to the financial condition of the society, it is stated that-"The total income for the past year amounts to £44,528 11s. 8d., which indicates that the receipts of the past year appear to exceed those of 1853 by £258 ls. 2d. But it must be remarked that there is no real increase in our income, because the overplus has been caused by our having sold out a small portion of our funded property to meet our engagements. There is, consequently, rather a decrease than an augmentation in our resources for the year. The diminution is doubtless attributable to the general pressure on the resources of the community, in consequence of the war in which we are engaged; while it is observable that it is in the item of remittances from England, through the London Hibernian Society, we find the falling off; the sum transmitted by that society being £2,259 less in the year 1854 than in 1853.—Times.

THE EDUCATIONAL QUESTION IN ENGLAND.

The question of education is, year after year, exciting greater attention in this country, and its immense importance becoming better understood. The great difficulty has been and is the religious view. One party—the great Church and State connection-are for blending religious with secular instruction, and repudiate all public instruction at public expense that does not submit to the control of the Church and use the Bible and the Church catechism. Rather than give up this principle, its advocates seem to prefer that children should be brought up in entire ignorance. Another party are all for secular instruction and for excluding religious instruction from the schools, unless at stated hours, each denomination by themselves, and by a minister approved by the parents. Another party contend that the voluntary system is quite sufficient, and that any compulsory tax for the support of schools, or indeed any support from national funds, is unnecessary and unjust. Now there can be no doubt this latter is in great minority, but the difficulty has been how or in what way to adjust the religious question-how to please one party without giving offense to the other, and hence render legislation impossible. For some years a sum not less than \$1.500,000 has been administered and distributed under the direction of a Committee of Privy Council, a tribunal responsible directly to the country; but we are in expectation of a speedy remedy. It is indeed certain that at no distant date a distinct department of public instruction will be created and a responsible executive placed at its head. At the present moment there are no fewer than four distinct measures, dissimilar, and in some respects rival, in their character, under the consideration of Parliament. 1. There is the Bill of Lord John Russell, permissive in its character, allowing towns and parishes the liberty-if they think fit-to tax themselves in an amount not exceeding sixpence in the pound, or say twelve cents. for every five dollars annual Value of their properties or incomes, and conferring certain privileges of support from the national funds, on complying with certain formularies, the Principle of which is government inspection. It is generally feared that this measure is so tolerant in its nature as to please nobody. 2. The next is the Bill of Sir John Packington, nearly as liberal, but the conditions somewhat modified. Sir John proposes to divest his measure of the exclusive control of the Church. The Bible is to be read in the schools, certain hours to be devoted to religious instruction, but attendance during these hours not com-Pulsory—the schools to be supported by public rates, to be under government inspection, and open to all denominations. 3. There is, thirdly, a bill in favor of the exclusive secular system, introduced by Mr. Milner Gibson. 4. The fourth bill relates exclusively to Scotland. It is proposed the control of the schools shall no longer exclusively be in the hands of the Established Church. It is to be shared by the Free Church, and other leading Christian denominations, the Bible and catechism to be used, the schools to be under government inspection, and the emoluments of the schoolmasters to be increased with retiring allowances when incapacitated by age. There is every probability of this measure, with trivial alterations, becoming a law; and there are well-grounded hopes that compromises will at last be listened to, and either the bill of Lord John Russell or Sir John Packington, or perhaps something like an amalgamation of the two, will be carried for England. The need for such measures is urgent in the extreme, for the amount of gross ignorance, the multitudes of people in this country arrived at man's and woman's estate, destitute of even the simplest elementary instruction, is absolutely appalling. No wonder at the extent and prevalence of intemperance among us. - Correspondent of a New York paper.

SCOTCH EDUCATION BILL.

The bill to provide for the education of the people in Scotland, prepared and brought in by the Lord Advocate, Lord Palmerston, and Sir George Grey, contains 47 clauses. It provides for the establishment of a Board of Education for Scotland. To consist of a person to be appointed by the Queen as permanent chairman of the Board, the Lord Advocate and Solicitor General for Scotland, four persons to be elected by the Scotch Universities, and five more persons to be appointed by the Queen, the President of the Educational Institute of Scotland, and the Lords Provost of the cities of Edinburgh, Glasgow, Perth, and Aberdeen. The chairman is to receive a calary of £600, and to be, together with the other five persons, removable by Her Majesty. The Board is to meet at Edinburgh, and will exercise a general superintendence over all the parochial and public schools of Scotland, and make regulations for carrying out the act. Ten inspectors of schools are to be appointed by Her Majesty on the recommendation of the Committee of Council. As soon after the passing of the act as convenient, Scotland is to be apportioned by the board into a certain number of educational districts, to be placed under the charge of the inspectors. These officials are to be subject to the control and direction of the Board of Education, their duties, being, of course, to visit and inspect the parish and Public schools, to examine all candidates for the office of schoolmaster, and to make an annual report to the Board, which in its turn, will make a report to the Committee of Council. The salary of parochial schoolmasters is to be at least £50 per annum, whereof £16 will be paid out of the funds to be Voted by Parliament for educational purposes in Scotland. The salary of the master of side-schools to be from £20 to £34 per annum. A retiring allowance of £25 is provided for retiring or infirm masters. The minister and heritors of parishes are to form the committees of parish schools as heretofore. Parochial schoolmasters, on being elected by the committees, must not be inducted till examined by the inspector and approved by the Board of Education. Tests are abolished. Parish Schools may be con-Verted into public schools at the instance of the heritors, and the ratepayers may assess themselves for the purpose of maintaining them. The Board is also empowered, on the report of their inspector, to direct the sheriff to call a meeting of the ratepayers for the purpose of providing a public school where the parochial one is inadequate. The committee of public schools to consist of a certain number of the heritors and ratepayers. Public schools may also be founded in burghs, the town council to be the committee. The eost of public school buildings is to be defrayed, in the first instance, by the

Committee of Council. The salary of public schoolmasters is to be £50; one-half to be paid by the Committee of Council, and the other half by the ratepayers. These school-masters will be examined by the inspectors.—Religious instruction will be given in parochial and public schools; but no children will be bound to attend if their parents object. Parents may visit the schools. Public schoolmasters will be removable by the board, and the election of the master and all matters pertaining to the general management of the school will be vested in the school committee. The Board of Education may aid industrial and reformatory schools out of the funds to be raised by general assessment. Not more than one half-penny in the pound per a num is to be levied upon ratepayers for industrial and reformatory schools; questions as to the constitution of school committees, &c., are to be settled by the Board, or by the Committee of Council, without appeal.—

Times.

UNITED STATES.

MONTHLY SUMMARY.

The public schools of Boston are attended by about 20,000 pupils, at an annual expense of \$208,825 55. The private schools report 1,549 pupils, whose instruction was set down to \$97,000. The total population of Boston is 136,881, of which 24,204 are between the ages of five and fifteen, and the average daily attendance is nearly 19,000. The whole number of public schools is 218, for which there are 405 teachers. The male teachers receive on an average \$1,284 per annum. The female teachers \$324....The Massachusetts Legislature recently appropriated the sum of \$50,000 towards the support of a nautical school. The institution will be on board a ship. and will be sent to sea.... In the town of Ashfield, Massachusetts, two ladies. Miss Lydia Hall and Miss Marietta Patrick, have been elected school trustees. ... The whole amount paid by N. Y. City in 1354-5 for educational purposes was \$776,973 38; of which sum \$232,359 12 was for school-house accommodations. The number of public schools is 232; and the whole number of children registered last year was 146,450; though the average attendance was but little more than one-third of this number, viz.: 51,567. The schools are absolutely free to all except colored children; even books being furnished gratuitously. The system of public instruction embraces primary schools, in which children are taught the alphabet, and upward in the elements of education, until they are qualified to enter the grammar schools, where they are exercised in the elementary knowledge already acquired. and are also taught grammar, the natural sciences, history, book-keeping, composition, &c. From these schools pupils can go, if able to pass a close examination, to the free academy, which is the head of the public school system, where a more thorough and valuable education may be obtained than is secured by attendance on many of the colleges and universities of the country. And here too, everything is gratuitous, even to books, stationerv. drawing materials, and mathematical instruments.....According to Dr. Grimshaw, of 372 convicts in the Auburn State prison, 517 were never instructed in any trade or calling whereby to earn a subsistence. Of 649 males at the Sing Sing prison, 487 have never been taught a trade; 60 could not read, and 149 could read but very indifferently. The number of convicts tried in the Courts of Record in New York State, from 1840 to 1848 inclusive, amounted to 27,949; and of this aggregate 26,225 had received no education whatsoever. Of 276 convicts in the Ohio Penitentiary, nearly all were below mediocrity, and scarcely able to transact the ordinary business of life.... The Grand Lodge of Odd Fellows, of Virginia, has adopted the Martha Washinghton Female College, at Abingdon, and will take measures to insure its completion. It is contemplated to make such arrangements as will insure to the indigent daughters of every deceased Odd Fellow the benefit of a good education.

Literary and Scientific Intelligence.

THE NIAGARA FALLS IN WINTER.

We have before spoken of the peculiarly grand and imposing aspect of this great wonder of nature in mid-winter. The Lockport Courier has the following article, which we especially commend to all lovers of the picturesque:—The sight that awaits the visitors to the great cataract at this time is indescribably grand and imposing. Nature seldom takes such queer fantastic freaks as she has done this season, and those who have witnessed her singular and unique doings will never forget the sublime spectacle. The long protracted cold weather has solidified every particle of Niagara River,

which has diverged from the main current, and has even made serious and astonishing inroads upon that. The spray as it flies through the air becomes congealed and falls upon the snowy shore in infinitesimal icicles, or lodging upon the limbs of trees, clothes them with glistening robes of white, which makes them look like so many images of Grecian statuary. Below the Falls huge mountains of ice have formed, which daily rise in proportions, and which threaten to hide entirely from view the Falls themselves. At the head of Goat Island, the Rapids, which separate it from the "Three Sisters," are bridged over by the ice, and over the spet where usually runs a fierce and irresistible current, men and women walk in perfect security. The formation of ice has turned most of the water into the main channel, rendering what is left perfectly harmless. To see the Falls as they are now clothed in a clear day, when the innumerable icy spars and prisms, reflect back with dazzling brilliance the sun's rays, is a rare and felicitous treat. Many of our citizens have improved the opportunity now afforded, which they will never regret. As long as the present weather continues there will be no changes in the appearance of the Falls.

The name Niagara is a contracted form of the Iroquois name Oniagarah; or, as it was sometimes written in old authors, Oghniaga and Oneagorah. Ak, in the Iroquois, denotes "an upright rock;" ara, a "path at a gorge."

A practical application of this mode of obtaining artificial light was recently made in London, at night, for the purpose of ascertaining whether by its means work can be carried on under circumstances in which other artificial light is not available. The scene of application was at the Surrey side of Westminster-bridge. The apparatus was placed on the shore, at seventy or eighty feet distance, on a stage on which were a number of workmen. The light proceeds from an electric spark, which is continually maintained. Behind the spark was a reflector. A strong light was shed upon the stage, and the workmen proceeded with their labour apparently with as great facility as if they were working during sunshine. It was in character somewhat resembling moonlight, but very much stronger. It can be put out and re-illuminated in a moment. The quantity of light afforded, as ascertained by the photometer, it was stated was equal to that of seventy-two ordinary gas argand burners. The light has been tried many times before and with success, but the grand obstacle to its use has been the great cost of the material which formed what may not inappropriately be termed the fuel required to keep up the electricity. This obstacle, however, has been removed by the discovery that the material while employed in producing the light, can be converted into pigments of so great a commercial value that the cost of light is absolutely nothing.

PRINCIPAL FALLS AND RAPIDS IN THE UNITED STATES AND CANADA. Feet high.

	•
American, Snake river, Oregon	
Austin stream, river same name, Maine	
Au Sable, " New York	140
Baker's, Hudson river, New York	70
Bellows, Connecticut river, N. H. and Vt	40
Berlin, Androscoggin river, New Hampshire	90
Carp river, Michigan	200
Carthage, Genesee river, New York	75
Catskill, or Katorskill, New York	175
Chattahooche, river same name, Georgia	110
Chaudiere, Ottawa river, Canada West	60
Chaudiere, river same name, Canada East	180
Clifton, Little Miami river, Chio	50
Cohoes, Mohawk river, New York	70
Dead river, Michigan	96
Fall creek, New York	105
Geneses, or High, New York	96
Glen's, Hudson river, New York	60
Great, Missouri river, Nebraska	88
Great, Missouri river, New York	60
High Black river New York	63
Hoosiek miver same name. New York	40
Housetonic " Connecticut	60
Lewiston Androscoggin river, Maine	100
Little, Mohawk river, New York	42
Lodi, or Silver Thread, New York	125
Lorette, Canada	50 25
Luzerne, Hudson river, New York	
Monthorenci, Oanada	200
Horse Shoe, New York and Canada	160
American, New York.	164

	Feet high.
Passaic, New Jersey	70
Portage, Genesee river, New York	
Potomac, Virginia	76
Pusambio, Canada	
Richelieu, Canada	74
Rideau, Canada	
Rumford	
St. John's, New Brunswick	
St. Lawrence:—	
Galops, New York and Canada.	7
Rapid Plat.	
	48
Codeau, Canada	
Oddara, - F	83
Cascade, ")	
La Chine, Canada	44
Saco, or Great, Maine	72
Shawanagenne, St. Maurice river, Canada	200
Shelburne, Deerheld river, Massachusetts	70
lagncanick, New York	200
Tallulan and Rapida, Georgia	850
Ticonderoga, New York :	
Upper	100
Lower	
Torkoa, Georgia	185
Trenton, New York :	
High	
Sherman's	40
Conrad's.	
Upper	
Wilberforce, Hood's river, H. B. Com. Ter	
Williamette, Oregon	
	40

Note.—The above comprises all the principal Falls known to exist in the United States or Canada worthy of the tourist's notice, being prepared for a forthcoming work to be entitled the "Springs and Waterfalls of America."

PUBLIC LIBRARY NOTICE.

To Municipal and School Corporations in Upper Canada.

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

E. RYERSON.

Education Office,

Toronto, 1st February, 1855.

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

NOTICE.

TO THE TEACHERS OF WENTWORTH AND HALTON.

MOVED by Mr. Sangster, seconded by Mr. Kelly, and Resolved,—That
the Common School Teachers of the City of Hamilton having, some
time ago, formed themselves into an association for the purpress of mutual
improvement and the discussion of the General Principles of Education, and
being sensible of the advantages attendant on their semi-monthly meetings,
do hereby respectfully invite their fellow-Teachers in the neighbouring
Counties, to meet with them in the Central School, Hamilton, on Saturday,
the 9th June, 1855, at 2 o'clock, P. M., for the purpose of organizing and
establishing a Teacher's Institute. Teachers going to and returning from
this Convention will be carried at half fare on the Great Western Railroad,
on exhibiting their certificates of qualification.

P. S.—Several leading Educators have been invited, and are expected to be in attendance.

Hamilton, 12th May, 1855.

ALEX. R. STRACHAN,

President.

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

TERMS: For a single copy of the Journal of Education, 5s. per annum; back vols. neatly stitched, supplied on the same terms. All subscriptions to commence with the January number, and payment in advance must in all cases accompany the order. Single numbers, 71d. each.

All communications to be addressed to Mr. J. George Hodenes,

Education Office, Toronte

TORONTO: Printed by LOVELL & GIBSON, Corner of Yonge and Melinda Streets.