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THE
JOURNAL OF EDUCATION

FOR

Upper Canada:

EDITED BY

THE REVEREND EGERTON RYERSON, D. D.

CHIEF SUPERINTENDENT OF SCHOOLS;

ASSISTED BY MR. J. GEORGE HODGINS,

DEPUTY SUPERINTENDENT.

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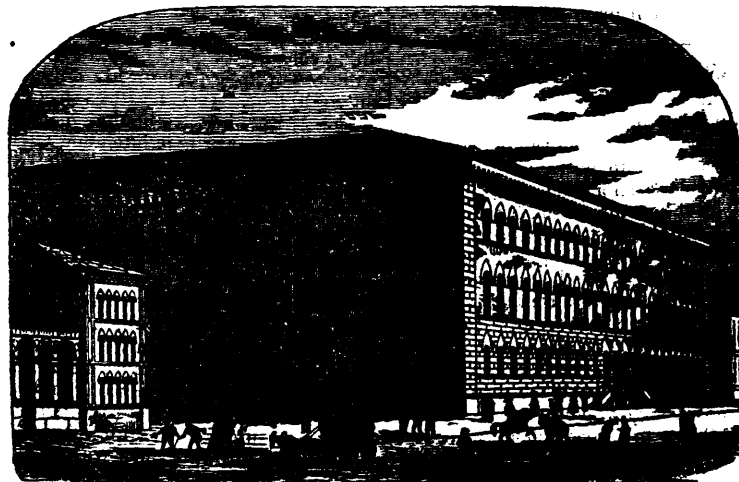
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The Royal Library was founded in the middle of the sixteenth century, by His Highness Duke Albert V.; but the edifice in which it is now placed, and of which we give an illustration in this number of the *Journal*, was only erected about thirty-three years since. It was commenced in 1822, and completed in 1842. In the same building with the library are placed the general archives of the kingdom. The Bavarian Government have granted \$25,864 annually for its support; and its yearly accumulation of books amounts to upwards of 10,000 volumes.

Owing to the fact that the building is erected on a street, (Ludwig street,) it does not appear to advantage. Its façade is not very imposing; but the general external appearance of the edifice indicates massiveness and elegance. Upon the steps of the principal entrance are placed the four statues of Aristotle, Thucydides, Hippocrates and Homer—the fathers of Philosophy, History, Science and Song.

From the ground floor where the archives are preserved, a magnificent stair-case ascends between two marble colonnades to the library. The entrance to the first library room is adorned with two statues, one of the founder of the library, Duke Albert V., the other of Louis I., to whom the building is due. This hall is that where books are



THE ROYAL LIBRARY AT MUNICH.

The City of Munich, Bavaria, has no less than seventeen public libraries open to its citizens and to strangers; but its most celebrated libraries are the "Royal Library," which contains 600,000 volumes of books and MSS., and the "University Library," with 200,000 volumes.

loaned. After this is a large hall, devoted to the purpose of reading and study, and open to the public daily, from eight o'clock until one, except upon fête days and holidays. A separate hall, assigned to the reading of periodical reviews, and of literary and scientific journals, is reserved for members of the academy and for professors in the university. The loaning of books is restricted to these persons just mentioned, to public officers of at least the rank of councillor, and resident in

Munich, and to persons who obtain special permission from the minister of the interior. Books are delivered between nine o'clock and one.

The whole number of printed works contained in the library, without regard to the number of volumes, is stated at over 400,000. In addition, there are about twenty-two thousand manuscripts. The department of incunabula contains upwards of 1,500 volumes.

Visitors at the Library are not allowed to go to the shelves where the books are arranged, without being accompanied by one of the librarians. For the gratification of strangers, however, a large number of the rarest and most curious books and manuscripts are displayed in glass cases, where they can be conveniently seen.

The library has no collection of coins, medals, statues, paintings or engravings, for there are extended collections of all these objects elsewhere in Munich. Printed books and manuscripts are the two main divisions of its property. The former of these are arranged upon the shelves into twelve principal classes, which are still further sub-divided into 180 classes. The twelve main divisions are the following: 1. Encyclopædic Works, with 11 subordinate classes; 2. Philology, with 18 subordinate; 3. History, with 40 subordinate; 4. Mathematics, with 8 subordinate; 5. Physics, with 13 subordinate; 6. Anthropology, with 4 subordinate; 7. Philosophy, with 3 subordinate; 8. Aesthetics, with 15 subordinate; 9. Politics, with 6 subordinate; 10. Medicine, with 8 subordinate; 11. Jurisprudence, with 16 subordinate; and 12. Theology, with 38 subordinate divisions.

The manuscripts include 580 in Greek; 268 in Oriental languages; 313 in Hebrew; 14,000 in Latin; 4,000 in German; near 600 in French; about 500 in Italian; with some in Swedish, Slavic, English and other languages; in all, as we have already stated, not far from twenty-two thousand.

Among the objects brought out for the gratification of casual visitors, are specimens of the different materials which have been employed in the manufacture of books. Among those in the possession of the library are tablets of wax, parchment, vellum, papyrus, paper made from the filaments of bamboo, cotton paper of about the 12th century, *papier de chiffé*, of the year 1338, the oldest of that kind in the library, palm leaves, &c.

Among the more remarkable manuscripts may be mentioned a Brevari of King Alaric, of about the 6th or 7th century; a Latin version of the Gospels, of about the same date; the Sermons of St. Augustin in Anglo-Saxon characters of the 8th century; a Latin manuscript of the 9th century, remarkable for a poetic fragment in German which is there inserted; a Sermon of St. Augustin, once possessed by Louis le Germanique, and distinguished for a fragment of poetry in German on the margin, written, it is supposed, by the son of Charlemagne himself. Besides these, which would interest the most casual inquirer, there are others of great value to scholars, and many, which, though less old than some we have enumerated, are distinguished by the exquisite skill with which they are written and embellished.

Among early printed books may be found the first printed Bible (in Latin), the work of Gutenberg and Faust, at Mayence, between 1450 and 1455; a Latin Psalter of the year 1459, upon vellum; *Le Rational de Durand*, of the same year, printed by Faust and Schöffer; the first books with dates which were printed at Augsburg, Nuremberg and Munich; an attempt at stereotyping made in 1553; the works of Virgil, of which the entire text is cut upon copper.

HOW PARENTS CAN HAVE A GOOD SCHOOL.

No more weighty obligation can exist, than that which rests upon every parent in the matter of the education of his children. Fathers and mothers are always ready to acknowledge this duty, and are not generally backward in professions of a desire to perform it. It is an every day remark: "I mean to give my children a good education, if I don't give them a cent of property." But how many consent to act up to the spirit of that remark, when a suitable test is applied? How many there are whose hearts are troubled, if, at the end of the year, they find they have not increased the sum total of their property as much as they had hoped, but who feel no sorrow because their sons or daughters have remained at home during the whole or a part of the year; perhaps lending their feeble aid in adding to the hoarded pelf, perhaps in idleness—fruitful source of all evil. "I can't afford it," is the assigned, but *avarice* is the real reason of the existence of so many poor and unprofitable schools. Is it not strange?—yet it is true—that many a man is too poor to send his children to a good school, who, at the end of the year, finds a way to buy articles of luxury. Plenty of men there are, who find means to indulge in luxuries of the table and of dress, in patronizing the strolling buffoons, of a circus or perhaps in the purchase of many things useless or even hurtful, but who will not send their children to school, unless they can induce the teacher to take half price, or can find a half-price school.

Now, this is all wrong. Acknowledging the superlative importance of giving their children the best education which circumstances will permit, men must learn to regard the accumulation of money not as an end, but as a means; and that money ought to be expended.

First, In building good school houses. By this we do not mean what is usually meant. Most school houses are as far from being good ones, as can well be conceived. A house that will keep out the rain on ordinary occasions only, and that is comfortably warm, except in the coldest days, we regard as something that ought to be abated as a nuisance; yet they can be found.

Let the house be so large, if possible, as to allow six or eight feet square for each pupil who is expected to be placed in the school. Less room will answer, if the people are, in truth, not able to expend so much in a house; but ample room prevents confusion in a variety of ways. Children will not *whisper*, if they are placed far apart. This is an evil habit not to be tolerated in any school, no school in our opinion, can be a profitable one, if it is frequent. But we believe it next to impossible to prevent communication, if pupils sit near each other. It cannot be done without a degree of harshness, on the part of the teacher, which will injure the child as much as the habit itself. Besides it is unjust to place temptation in the child's way, and then punish him because he sins.

This large amount of room is needed also, in order that those who are engaged in study may not be interrupted by recitations going on in the same room or by individuals passing to and fro.

Furnish each pupil or two pupils with a suitable desk and chair. Let both be well and strongly made, that there may be no creaking and jarring at every motion. Cover the desk with some kind of strong, thick cloth, to prevent wearing out books, and to prevent noise by moving books and slates. The chair must be easy to sit in, and not an instrument of torture. Children need just as good chairs at school as they have at home. Many a parent, who would hardly ask his son to sit on a block at home, will send him to school to sit on a backless bench, not a whit better. It is impossible to teach a child who is in pain, or uncomfortable from any cause.

Let the room, at least, be neatly ceiled and painted; or, better still, let it be plastered and white-washed. Take great care to have a good floor—firm, that it may not jar under the tread of many—of such a nature that it can be kept perfectly clean and neat. In short, a school house in its interior, should be equal to a parlor. So much the better, if it be finely carpeted and curtained, and adorned with beautiful pictures and maps. It cannot be *too elegant*, if anybody has money enough to pay for it.

The second thing for which money must be expended, is the employment of a teacher. Patrons may rest assured that a small offer, will, in all likelihood, bring a small teacher. "If all that can be made" is offered, the teacher who comes will either try to make but little, or he will determine to make the most of the chance; and either thing will ruin the school. The true way is, to offer such a salary as will induce a competent man to take the place, and render him anxious to retain it, which he will think he can most surely do by the performance of all his duties.

But in selecting a teacher great care should be exercised by those on whom that duty falls. It is of no use to try to obtain a *genius* for the schoolmaster. Such men are scarce, and when found, they don't make good teachers; perhaps because the processes of their own thought are too rapid for the comprehension of pupils, and they fail to adapt themselves to the capacity of most children. A man of common sense, generally, makes a first rate teacher, because quite as much sense is needed to teach and convince others, as is needed to do anything else. An honest man the teacher ought to be. If he is not, he will not faithfully perform his duty, and he will be sure to make his pupils untrue. It is best to select a man who has adopted the profession of teaching as a lifetime business. If he has only concluded to teach for a year or two, intending afterwards to become a lawyer or a doctor, or a minister, his thoughts will often turn to subjects not connected with his school. Or if he has some other business, as, for instance, a store or a farm, he will be tempted to cut short a recitation now and then, that he may gain time to post his books, or try a newly purchased horse. It will never do for him to be an avaricious man; since, in that case, he may confine himself too much to the subject of *Interest* or *Profit and Loss*. He must not be a lazy man; particularly, the little ladies and gentlemen will have to find their own way through all intricate passages. He must be a healthy, industrious, and liberal-minded man; a lover of learning and a lover of his profession.

Money will be needed, also, to purchase books. It is bad economy to send a pupil to school with a few sheets of poor paper, badly ruled, and that only on three sides, with a piece of newspaper or brown paper stitched on as a cover, for a copy book. An old bottle, upset by a breath, or some such contrivance, does not make a good inkstand. Pedlars sometimes sell very poor steel pens, no better than a green-quill, since with neither can any person write well; much less can a child learn to write with them. This matter of writing apparatus is better left to the teacher who can supply his pupils at a cost much less than that which the parent will incur in furnishing even the poorest stationery.

Lastly, the parent has something to do that does not cost money,

but requires *care*. He must see that his child starts each morning for the school house, at a proper hour; neither too late, nor yet too early. It is not right for many reasons, to keep the pupil behind an hour or even ten minutes, to perform some little thing which could be left to a servant. It is a very common practice, and a very bad one too, to detain a child from school a half or whole day, to do something which would otherwise call a servant from regular employment. Some parents do this thing as often as once in a week, and if their children know as much at the end of the year as at the commencement, it is by a miracle. The teacher has no time to give an extra amount of instruction on the day after the absence, nor has the pupil any time to prepare an extra lesson. The task of the teacher is harder than if the pupil was regular in attendance. But this want of regularity is injurious in more ways than one. Especially does it induce a desire for frequent absence, and the chances are ten to one that, in the end, the pupil who is frequently kept from school, will become a *truant*. He will not be so able to endure the confinement of the school room. If he was absent in the morning, he will find the evening session tedious, and if he was gone in the evening he will dislike to start for the school house in the morning. We have dealt on this point because it is a source of great annoyance to teachers; and, in our opinion, they have the same right to complain of the unnecessary absence of pupils, that parents would have to censure them if they should desert their posts upon every small pretext.

In matters of discipline and general management, we say to patrons, after you have placed your children in charge of a man in whom you have confidence—and you have no right to place them in charge of any other—*sustain him*. If you think he errs—and it is very possible he may, for he is human—go to him in candor and frankness, and state the case. It is his interest, and will, therefore, be his pleasure, to make such changes as will be consonant with his views of the good of the whole. If he refuses, in all probability it will be because he sincerely believes it would not be proper to accede to your request. You must not regard him as your servant, to whom your will should be *law*; because, first, if your *will* were to be *law*, you would probably clash with every other patron of the school; and secondly, as you perhaps have had no experience in the management of a school, your *will* would be *bad law*.

In summing up, then, we regard a liberal expenditure of money in building a good school house, in employing a competent teacher, in purchasing plenty of suitable books, a judicious care in the management of all the relations subsisting between the patron, the pupil, and the teacher, as essentials for a good school.—*Southern School Journal*.

THE USE OF THE ROD.

It is thought by many persons that corporal punishment should not be inflicted upon children under any circumstances; that it does not produce any good result, but the reverse; and that a resort to the rod is presumptive evidence of incapacity, or worse, inhumanity on the part of the teacher. Others maintain that the free use of the rod is indispensable, and that the idea of good government without such a valuable auxiliary, as that recommended by the inspired pen of the wisest of men, is entirely fallacious. Others again suppose that the true system of government lies between these extremes. It will readily be conceded, by every one whose opinion on the subject is entitled to any respect, that the teacher must, by some means, secure *good order*. We design noticing some things that operate against the teacher in attaining this desirable object.

And first, that innate spirit of opposition to government that has characterised our race, from the time when our first parents desired to eat of the fruit of that forbidden tree "whose mortal taste brought death into the world and all our woe," to the present:—A spirit which is not only antagonistic to laws that are unjust and oppressive, but to those that emanate from the very fountain of justice and goodness. Now, had the teacher nothing more to accomplish than to restrain within proper bounds, to govern aright this naturally unruly spirit which manifests itself as soon as the infant can raise its puny arm, his would be a task more formidable than "the taking of a city;" for to govern others well, a man must rule well his own spirit. Strong, however, as is this perverse disposition which, unrestrained, defies all authority human and divine, there is much of it attributable to parental training—such an abuse of parental authority, tending to increase rather than obviate the difficulties of the teacher—that it need not be thought strange that the rod is sometimes used when milder measures fail.

Take an example or two that came under our observation: A Christian family were about leaving home to attend evening preaching; father, mother, brothers and sisters were in readiness. A little boy, whose age may have been seven or eight years, being unwell, was kindly urged and entreated to remain at home with an aged relative; but no; the little fellow replied, "I *will* go to preaching;" and after every member of the family had found persuasion and entreaty useless,

the child was permitted to have his own way. These parents are strong advocates of government by moral suasion, and affirm, in presence of their children, that the rod is only fit for brutes. But how plain is it that this is no government at all, and that the child which can thus govern the family at home, will not *willingly* submit to the authority of a teacher in school.

On another occasion a little family were together quietly partaking of their evening meal. The only child, not yet two years old, was upon its mother's knee. It wished to have something on the table improper for it to have. The mother refused and the child persisted, till both became irritated, and, under the influence of angry feeling, she resorted to correction; but the moderate storm now became a tempest, for never we think did a child scream more lustily or display more virulent passion. When the mother gazed upon the countenance of her infant, as it mirrored such unusual passion, her fortitude gave way; the desired object was yielded, and in a moment the child was perfectly calm. The storm had ceased, but not so the effect. Every wish after this must be gratified or a fit of passion followed. Should this child in after years prove the self-willed, obstinate, disobedient scholar, the unamiable brother, the tyrant husband, unfeeling father and lawless citizen, who will say that the scene we have described had not a material influence in thus moulding the character?

Did parents fully realize the evil consequences this indulgence of their children has upon them in after life, many—very many—families would present a very different aspect. Indeed, families in which uniform and cheerful obedience is rendered may be considered anomalies. And yet, what are those scenes of domestic strife that destroy the peace of families, those disgraceful riots that result in the loss of life and destruction of property, and those filibustering expeditions fitted out in defiance of government and threatening national safety, but the natural consequences of unbridled passion? A deed yet fresh in recollection, which caused a thrill of horror in every feeling heart throughout our country, is thus accounted for by the unfortunate perpetrator: "A quick handed and brief violence of temper has been a besetting sin of my life. I was an only child, much indulged—and I have never acquired that control over my passions I ought to have acquired *early*; and the consequence is all this." We are informed in a memoir of Noah Webster that "in the government of his children there was but one rule, and that was instantaneous and entire obedience. This was insisted upon as *right*—as, in the nature of things, due by a child to a parent. He did not rest his claim on any explanations, or on showing that the thing required was reasonable or beneficial. While he endeavoured to make it clear to his children that he sought their happiness in whatever he required, he commanded as one having *authority*, and he enforced his commands to the utmost, as a duty he owed equally to his children and to his God, who had placed them under his control. He felt that, on this subject, there had been a gradual letting down of the tone of public sentiment, which was much to be deplored. Many, in breaking away from the sternness of Puritan discipline, have gone to the opposite extreme. They have virtually abandoned the exercise of parental authority, and endeavoured to regulate the conduct of their children by reasoning and persuasion—by the mere presentation of motives—and not by the enforcement of commands. If such persons succeed, as they rarely do, in preserving any thing like a comfortable state of subordination in their families, they fail at least in the accomplishment of one great end for which their offspring were committed to their care. They send forth their children, into life, without any of those habits of submission to lawful authority, which are essential to the character of a good citizen and a useful member of society."

But doubtless there is higher than human warrant for the enforcement of parental authority; and though we do not believe that such passages of scripture as, "He that spareth the rod hateth his son, but he that loveth him chasteneth him betimes"—"Chasten thy son while there is hope and let not thy soul spare for his crying"—"Foolishness is bound up in the heart of a child, but the rod of correction shall drive it from him"—"Thou shalt beat him with the rod and shalt deliver his soul from hell"—justify the infliction of punishment to gratify evil passions, or that they imply that children cannot, in any case, be rightly governed without the rod, yet we do think that they do clearly teach that there are cases in which the rod may and *should* be used. Much has been said and written of the inhumanity and cruelty of inflicting corporal punishment upon tender and helpless children. But that tenderness that surrenders the judgement of the parent to the child, gratifies its whims, strengthens its evil passions and destroys parental authority and respect, is not the outgushing of the truly benevolent heart. No! genuine affection is not thus blind to the dearest interests of the object upon which it centres. In the language of one who has drawn a vivid picture of the family upon which rests the curse of anarchy, "The root of the evil is a kindness most unkind, that has always spared the rod; a weak and numbing indecision of the mind that should be master; a foolish love, pregnant of hate, that never frowned on sin; a moral cowardice of heart that never dared command."—*Pennsylvania School Journal*.

COMPULSORY ATTENDANCE OF PUPILS.

Much has been said of European States enforcing by law the attendance of children upon school. All that has been asserted is correct. We have been told that in Switzerland, the oldest Republic in the world, "compulsory attendance" worked well. Now, as I happen to be a Swiss, and know something of the state of things there from actual observation, I take the liberty of saying a few words with regard to that country. The extracts read, state existing facts; but many of the circumstances and conditions, which tend to modify or explain them, are generally omitted in such reports. It is true that school legislation and effective school organization in the majority of the Cantons of Switzerland, commenced after the revolutions and political commotions of 1832. Yet some Cantons had school laws and even that of compulsory attendance (if my memory serves me rightly) much earlier, one as early as 1805. One thing is certain, that an increased interest in the cause of popular education and strong efforts in behalf of its improvement and elevation, were almost universal in Switzerland long before that period. Teacher's conferences and educational societies, the intercourse of the pastor and the school-master with the people, prepared them for the ready concurrence in most of the improvements introduced into the schools, and they also prepared them for a willing submission to the law, which compels parents to send their children to school. This law was then only the expressed legalized will of the majority of the citizens. Had it been otherwise, I could scarcely account for the fact, that, at least in my native Canton, (the Canton of the Grisons,) I never heard of a case, where it was necessary to enforce the law.

Now that there is need for such a law in our country—who would deny it! As long as there are thousands of the future citizens of our Republic growing up without education, adequate to the duties which will devolve upon them—as long as history continues to teach us with unerring certainty, that the welfare and stability of the State and the Republic, especially, rest upon the intelligence and virtue of its citizens,—as long as there are parents amongst us, who are willing to wring their subsistence from the bones and marrow of their offspring, and others, who covet the wealth, purchased by the degradation and neglect of those who are their own flesh and blood, and whom they are in duty bound to educate in accordance with the God-appointed destiny of their natures;—so long there is need for such a law.

I moreover believe that the Legislature has an unquestionable right to pass such a law; the reasons for this have been enumerated by others who preceded me; I need not repeat them nor need I add any. And yet, I consider it inexpedient that our body, should at the present time urge its passage by the Legislature. Rather, but let us recommend the subject to the earnest consideration of the friends of education—let us go home and discuss it in the public journals, in Teachers' Institutes and Associations, among our friends and acquaintances everywhere—let the county-superintendents return to their respective spheres of labor, and use the privileges and advantages of their position, in order to impress their fellow-citizens with the necessity of this measure; and rest assured, that in a few years the people of Pennsylvania will not only be ready for it, but will, as a people through their proper organs, demand its passage, and sustain its enforcement at all hazards.—*Rev. C. R. Kepler.*

WHO ARE TRAINING OUR FUTURE RULERS?

Looking over the scraps in our editorial drawer, we find the following: "We should like to know who are training the minds of those who are to preside over this great people thirty or forty years hence." This inquiring glance toward the future is suggestive of many thoughts. What are the mothers in our country doing toward training their children to become intelligent and noble citizens of this vast country? Are they training their boys to become office seekers and politicians, or true men; men who shall be qualified to honor any situation to which they may be called—whether to stand in the councils of our nations, or to fill the sphere of an intelligent citizen. The men who are to fill all these places which to-day are occupied by others are now boys, and you, mothers, are moulding their characters and guiding their minds; you are polishing the gems that are to glitter in the future history of our country.

There are boys now in some humble families, in obscure towns far away from great cities, whose voices shall yet be heard in our legislative halls. Mothers, you are training these boys. Perhaps some of these may be the son of that mother who reads this in a rude cabin at the far West. Do you not, mothers, often muse on the future career of your sleeping boy, as you watch by his cradle? Would you have him fill an honourable position in society, and prove a blessing to his country and age? Mould that plastic mind with principles of virtue, purity, intelligence, and with the love of God. Guard his expanding powers, and teach him to avoid error of every kind; inspire him with a love of country and a love of mankind; help him to early lay the foundation for a character of sterling integrity. Such are the great lessons which will qualify youth for the responsibilities awaiting them in life,

no matter how high their station may be. These are the lessons, too, which should be instilled into the minds of children by mothers.

"Who is training them?" Reader perhaps it is yourself. How, then, shall your duties be performed? May "Faithfully, thoroughly," be your answer.—*The Student.*

THE POWER OF KINDNESS.—TO TEACHERS AND PARENTS.

The following article, from M. D. G., of Indiana, conveys an important lesson to teachers and parents relative to their treatment of refractory boys at school. Its lesson is embodied in the incident related, and we hope will be read with much profit.

Power of Kindness.—"There comes the teacher!" exclaimed several voices, on the first day of school, as the "new teacher" approached the scene of his winter's labors. Anxiously they had waited his appearance, for various were their thoughts respecting the strange incumbent. Former teachers had ruled with an iron hand, and cases of severe discipline were frequent. With such precedents, it was natural that the assembled school should view with mingled distrust and fear the stranger who was henceforth to hold the reins of government. No is it surprising that unkindness had engendered the belief that severity was a predominating trait in the character of every teacher. Hence those who had long been subject to severity, which had blunted all their finer feelings, regarded the opening of school as the commencement of a series of flagellations, frequent and severe. Regarding this as their destiny, their conduct was shaped accordingly. They seemed to be governed by the adage: "No name without the game."

Pre-eminent among them was one whom we will call James. He was without friends, save an uncle with whom he lived, who treated him with great severity, at home, and invariably gave a prejudicial statement of James' ungovernable disposition to the teacher of the school, adding, that the only means of control were frequent punishments, to which course, in conclusion, he advised him to resort. Under such treatment, at the age of sixteen, James bore without shame, the ignoble distinction of "the worst boy in school."

The teacher kindly greeted those assembled at the door, and entering, followed by the scholars, he very mildly requested them to be seated. The friendly manner in which he addressed them favorably affected their feelings toward the teacher. The scholars were soon seated, when, after a few introductory remarks, the teacher proceeded to address each scholar, making inquiries as to name, studies, state of advancement, etc. He had heard of James as a very bad boy, and had been led to fear that he would, as previously, be a source of difficulty. Placing his hand gently upon the boy's head, he said with the utmost kindness, "Well, my son, are you desirous of doing all you can during the school?" Such language was unexpected; it fell like gentle music on the ear accustomed only to tones of harshness, it soothed his turbulent spirit, enkindled in his soul aspirations to which he had ever been a stranger, and melted his heart, while his eyes were suffused in tears. James was subdued.

Though till then content to be at the foot of his class, with no desire to excel in anything save turbulence, James had a well-balanced mind, capable of appreciating and retaining scientific principles. The impetus given his intellect and energy by the kind and encouraging words of his teacher was destined to work wonders in his subsequent career, transforming the idle, unmanageable boy into a studious and attentive scholar, the first in his class and the school. Nor was this all. Fired with zeal, he applied himself assiduously to the cultivation of his mind as opportunity presented; and grappling with and overcoming obstacles, which many in similar circumstances would have considered insurmountable, he pushed on till he graduated with honor at one of the most respectable literary institutions of the Empire State.

Subsequently he established a select school in Western New York, which has since grown to one of the most flourishing academical institutions in the State, where hundreds of youths have received instruction, qualifying them for the task of imparting knowledge to the rising generation. Such is the result of kind words. Go thou, and do likewise.—*The Student.*

MORAL INSTRUCTION—NEATNESS.

Moral improvement, as well as intellectual, is one of the great objects to be attained in our schools, and one that ought frequently to be urged upon teachers and pupils. It is true, that moral culture forms a part of home education, but it is also as true, that it cannot be safely separated from the intellectual training of our schools. The immutable principles of right and wrong, the various moral obligations of man, and a becoming respect for things sound, should be instilled into the minds of youth, that they may, in after life, become the governing powers of all their motives and actions. Children should be taught to despise and condemn an act of injustice or meanness; while those of benevolence, kindness, and integrity should be called to their notice to be admired and imitated. The scholar who is not made better and wiser in these things, whose moral character is not improved and

strengthened, while at school, is receiving an education that promises him but little good, and which will, at least, render him dangerous to the community.

The capacity of children to understand that some things, are right, and that other things are wrong, is susceptible of development much earlier than their ability to exercise their mind in a process of reasoning. This fact ought to elicit the utmost caution, in bringing such influence to bear upon children in early youth, as shall make favourable and correct impressions.

We would like also to see courtesy and neatness take a more prominent place among the things taught in our schools. They are both intimately connected with or form a part of, moral instruction, and are necessary to a person's happiness and success in life.

We believe it is as much the duty of the teacher to see that pupils treat each other with kindness and civility, and that they are neat in their habits about the school-room, as it is to give instruction in reading, or in any other branch. A child that is allowed to grow up saucy, boorish, and impudent, without correction, gives little promise of becoming a man or woman fit to enter decent society, or that will have any respect for the civilities of life.

We are likewise strongly inclined to believe, that boys and girls, who at school have no pride about keeping their desks clean, their books neat and well arranged, and the floor about them free from papers and litter, can hardly be expected, when they become men and women, to have order and neatness characterize their office and workshop, their kitchen and bureaux.—*Michigan Journal of Education.* S.

FAILURES IN EDUCATION.

The first error is in placing the child under the instruction of unskilled and inexperienced teachers, under the belief that any one will do to teach a child to spell and read—a sad mistake. It requires more skill, more tact, more knowledge of the science and art of teaching to conduct the first few years of a child's school exercises than it does to fill a professorship in a college. What horticulturist would suppose that an inferior gardener might answer to take care of the plants while they are small and young, though he must have one of a superior order to train them when they have nearly obtained their growth? A child placed in one of these little noisy schools, which yet, as in the days of Ichabod Crane or Oliver Goldsmith, furnish food for mirthful satire—learns much that the parent does not bargain for. He acquires a drawling or sing-song tone in reading, a bad pronunciation, an improper manner of holding his pen and shaping his letters, and habits of idleness and mental inertness, which may never be unlearned, and which will prevent his receiving the full benefit of his after instruction under able educators.

Another prominent error is

The Forcing System.—Where children are put to studying books written in language they cannot read, or do not understand. For instance: children that cannot read intelligibly or intelligently in a common school reader, are set floundering amid the well-worded sentences and nicely balanced phrases of a history of 350 pages, or buried amid the polysyllabic words and difficult combinations of a *revised* philosophy, or *simplified* chemistry, to say nothing of a voluminous geography and highly concentrated grammar. The labor thus forced on a child is intolerable; and when it is remembered that a child of the above attainments is expected to do the most of the studying at home, unassisted by the teacher, it is not to be wondered at that so many "dislike their books." Poor things, how can it be otherwise? Rayless, pathless, hopeless, they stumble through the scholastic session, the mind ever on the rack, the thirsty spirit ever unsatisfied.

Parents are mainly to blame for this. Their anxiety to have their children advanced to the study of the higher branches, induces the teacher to violate his sense of propriety. The writer has frequently lost pupils by refusing thus to gratify paternal vanity at the expense of the child; and time and again has he been annoyed with "Pa says he wants me to study Grammar," "Ma wants me put in spelling," "Pa says, why ain't I studying dictionary," "Ma don't want me turned back," &c., &c. Poverty, stern task-master, compels many teachers to yield the point rather than risk losing the pupil. If you would have the Teacher interested in his labor, let him work on his own plan. He should know best—if he does not, he is not fit to teach.

Setting Lessons.—Another evil is carelessness in assigning the lessons to be studied. Too much caution can not be exercised in setting lessons adapted to the capacity and attainments of the pupils, in seeing that they know what and *how* to study. If the pupil is not a fluent reader, the lessons should be read over at the time of assigning, so that the correct pronunciation may be required, in place of leaving the pupil to guess at a wrong one when studying. One or two lessons, not calling for more than an hour's application, are enough for home study. This will make seven hours of daily mental toil, enough for the majority of boys and girls. The effect of poorly learning a lesson is ruinous to the child. By the habit of missing he comes to think it a small thing to fail at recitation, and soon loses all self respect, all regard for his reputation as a scholar.

Want of Reviews.—A lesson once said, is generally passed by forever. New lessons engage the attention of the pupil, and soon the few landmarks of the earlier lessons are effaced, the connection of the present with the past is overlooked, and the labour of weary days disappear "like snow-flakes on the river—a moment there, then gone forever." There should be daily, weekly, and quarterly reviews in all schools. The motto should be "*not how much, but how well.*"

Irregular Attendance.—This neutralizes the benefits to be derived from the best arrangements, and the labors of the best teachers. Some persons seem to suppose, that if a child has once entered the path of learning, progress is inevitable; and that however far from the teacher, either in body or mind, there is a kind of magnetic influence, by which he is to be reached, and the teacher is held accountable for his improvement. So far is this from the truth, that a child may attend school a whole year, yet so irregularly, or at intervals so far apart, that it will be fortunate, if at the end of a year, he knows as much as at the commencement. Irregular attendance acts more unfavourably on some minds than upon others. Those who are strongly inclined to learn, will readily overcome the evils arising from absence. But those who are indifferent to study, will lose by their absence, not only the lessons of the day, but what is of far greater consequence, the interest, however small, which they may have previously felt. The boy who stays from school in order to hunt, or fish, or dance, will not only feel a positive disinclination to study his arithmetic when at school, but a positive inclination to resume his hunting, or fishing, or dancing. The girl, too, who is kept at home for the fitting of a mantua-maker, may not only lose her interest in study, but is liable to feel that the adjustment of her dress is of more importance than the improvement of her mind.

Late Attendance.—A considerable portion of each school day, during the winter, is lost, from the constant disturbance caused by the ingress of the tardy. The worst feature of this is, that the loss falls upon the diligent and innocent, as well as on the lazy and guilty. The disturbance caused by opening and shutting doors, and passing over the floor, distracts the attention of the class and teacher, and renders the recitation partial, unconnected and unsatisfactory. Want of diligence and activity on the part of the parent, or child, or both, causes the evil. It can easily be remedied if the parent wills it.

Want of Pecuniary Support.—No intellectual labor is so poorly paid as the teacher's, and no avocation is more exhausting to the system—more life destroying. "A good teacher should receive a remuneration so ample, as to enable him to live respectably; to avail himself of books, social influence and travel, to such an extent as shall better qualify him for his profession; and to place him, if he practice a wise economy, out of the reach of harassing anxiety about the means of support."

Want of Hard and Persevering Labor.—Whatever may be the talents and attainments of a teacher, he will fail if he does not work hard. In no pursuit is unwearied industry more necessary to success. Let no one attempt teaching who wishes to shun labor. The teacher must labor not only when he is establishing his school, but he should continually strive to make himself a better teacher, every successive day and year. He must labor, too, where the immediate results do not appear to the common observer, or scarcely to himself.

Want of Professional Pride.—Too many take up the vocation of teaching as a stepping stone to something else; a means of support, while they study law or medicine. Of course their hearts are not in their business, their duties are drudgeries, their success a matter of indifference. Such teachers will always fail.

Want of Qualification.—There is no vocation requiring so many enabling qualifications as teaching. The capable teacher must possess a sound education, joined with a cultivated taste. He must have *patience*, not that disposition of passive endurance of evils, but that never tiring principle that will enable him to perform cheerfully for the tenth time, that in which he has failed for the ninth, and to repeat, over and over and over again, instruction to a dull but well-disposed pupil. He must have *uniformity* of disposition, for want of which he may punish to-day what was smiled at yesterday." He must have *self-control*, capacity for governing, fondness for teaching, capabilities or tact for instructing, judgment, taste, firmness, mental activity and varied learning.—*Chronicle and Sentinel.*

SCHOOL GOVERNMENT.

School Government should be regarded as the *means* for attaining a lofty end, not the *end* itself. As the wise legislatorians to secure the happiness of the people, and not at the mere exercise of authority; so, the intelligent teacher regards his power as the servant of his good intentions. With this view he enters his sphere as the child's truest friend, not as an evil genius sent to *inflict* "hard lessons" and useless restraints; as an elder brother; full of kindness and sympathy, not as the domineering tyrant, whom it is treason to love. The teacher should secure the respect and esteem of the scholars. This cannot be accomplished by weakly humoring their faults and shortcomings; but by a firm and manly deportment; by showing himself equal to any

emergency; by sympathising with them in their difficulties; and by a dignified affability in his intercourse with them.

School Government should be based upon a knowledge of human character. In the school-room, as in the world, there is every variety of disposition. Stern words, which are necessary to rouse the slumbering energies, in one case, will discourage the best efforts in another. The expression of sympathy which one heeds not, is treasured for months in the affectionate heart of another. The blow, which reduces the *stubborn* boy to subjection, may rankle for years in the more sensitive mind of another scholar. The nobleness of one nature should not be sacrificed to the listlessness of another. Because Sahara yields no vegetation, Egypt is not condemned to barrenness.

The teacher should study his own character as well as his pupil's. He should know his own weak points and fortify them against assault. Corporeal punishment should not be inflicted in the presence of the school. Penitence, the desired fruit of correction, is often supplanted by an affectation of fortitude, injurious in the extreme to school and scholar when the punishment is public.

Good order should be rendered habitual, not infused at times by spasmodic efforts. Rash threats, uttered when confusion has banished every legitimate idea, cannot produce genuine order. They are more the consequence of a want of vigilance, than of actual necessity. Energy in thought and action on the teachers part, will soon produce their legitimate fruits on the school.

In a word, the character of school government should be mild and gentle, yet firm and decisive—based upon a knowledge of human nature, acquired by energy and maintained by vigilance. Its influence should be such as a conscientious father would exercise upon his children.—*Halifax Morning Journal*, Nov. 15, 1854.

HOW TO TEACH WRITING.

Writing has been taught solely as an art. Copies are set in the books taken by the pupils to imitate, by hook or by crook, as best they can, the handwriting of the master. Did you ever look over the pen scratchings of a district school? What quail tracks! What aspirings after utter impossibilities! What legible impressions of ideas from inky fingers and upset inkstands!

Every teacher has his own notions about teaching writing, and about every parent, too, so far as to the time when "Darling Charley" shall learn to write. So I shall not prescribe which side must lean against the desk, or how the pen must be held, or the paper lay, but shall proceed to give a few common-place notions about teaching writing.

When the teacher (not the parent) decides it is time to begin tracing characters in ink, let the pupil supply himself with a substantial copy-book, not too large, an inkstand not liable to be upset, and pens. If quills are used in this iron age, the teacher should mend and make them out of school hours, so that when the writing signal is given, nothing else may require his attention. Copies should also be set, and every arrangement completed, so that nothing whatever shall disturb the stillness of the writing hour. Let the A B C scholars alone till it is over with.

Habits of neatness and care must be formed now, if ever. Every hasty line and every blot must be scrutinized and reproved. Improper postures and habits of hand, must be repeatedly noticed and corrected by the teacher. His eye must be everywhere and on everything. None should discontinue writing, until the signal is given for all to do so. Then the pen should be carefully wiped, upon the wiper attached to the copy-book, and when the ink is dry, the book closed, and laid away or gathered up to lie upon the teacher's desk until the next writing hour.

Do you think, teacher, that this standard is too high for you? Not a whit! If you ever want the writing exercise to be a pleasant one, and your copy-books fit to be seen, you must aim high. Straight marks look well, if they show pains-taking.

"Pot-hooks and hangers," are ten times better to discipline the muscles of the fingers than all the fine hair strokes of the writing master. Suit your copies to your pupils ability, and oblige them to attend to them the requisite time. Some may teach writing in twelve lessons, to older brains and more practiced fingers, and pocket the \$5 with the consciousness that it has been a most potent incentive to the attainment of the hand, but you can't teach it in thrice twelve lessons, to the tow-heads of our common school. System and perseverance alone will enable you to succeed.

Don't forget that black board. Don't you suppose you can imitate a poor letter and show how to make a good one on it? Besides, there is the place to show the science of writing, analyze its principle more thoroughly than you know how.—*Prairie Farmer*.

RESPECT THE OLD.—Bow low thy head, boy. Do reverence to the old man. He was once young like you, but age and the cares of life have silvered his hair. Once, at your age, he possessed the thousand thoughts that daily throng your mind. Bow low thy head, boy, as you would be revered when you are aged, and your fine form bent under the weight of years.

THE ARMIES OF EUROPE.

Some days since, a pamphlet was published by G. Rimmelman, of Leipzig, from the pen of a German officer, from which we extract the following particulars regarding the comparative military and naval strength of the European Powers which are both directly and indirectly engaged in the present war.

Russia commands 540,000 infantry, 80,000 cavalry, 44,000 artillery, and 12,000 genie troops, likewise 478,000 reserve, irregular, and garrison troops; total, 1,154,000 men, and 2,250 guns. The maritime power of Russia consists of 52 line of battle ships, 48 frigates, and 24 smaller ships; total, 186 vessels and 9,000 guns.

Without doubt, however, many of these numbers are merely upon paper, many of the troops are in the hospitals, and many are in their graves, carried off by cholera, and on the battle-field; but notwithstanding this, there is still an enormous number under arms, and ready for the field, if Russia is determined to push matters to the extreme.

Turkey commands 100,500 infantry, 17,280 cavalry, 13,000 artillery, 1,700 genie troops, and 325,000 reserve troops. Total, 457,680 men, and 360 guns. The maritime power of Turkey consists of 10 line of battle-ships, 7 frigates, and 60 smaller vessels. Total, 77 ships, with 3,000 guns.

How extraordinary then was the amount of courage required from the "sick man" to venture to oppose an army in the field so much more numerous, and what extraordinary energy was required to prosecute the war single-handed, and with such brilliant success during the last year.

Of the powers at present directly engaged in the war, England and France form the second group.

England commands 119,900 infantry, 13,600 cavalry, 15,122 artillery, 2,460 genie troops, 80,000 militia. Total, 230,200 men. (East Indian army 348,000 men, including 31,000 royal troops.) England's maritime power consists of 94 line of battle-ships, 92 frigates, 185 smaller vessels, also; total, 371 ships, with 15,234 guns and 54,354 horse-power.

France commands 382,000 infantry, 86,000 cavalry, 57,000 artillery, 8,200 genie troops, and 33,800 other troops, (including 25,000 *gens-d'armes*.) Total, 566,000 men, with 1,182 guns. The maritime power of France consists of 60 line of battle ships, 78 frigates, and 273 smaller vessels. Total, 411 ships and 11,773 guns, (without bringing into account those of 112 steam vessels,) and 40,270 horse-power.

Amongst the (as yet) Neutral Powers, Austria, Prussia, and the other German States are the most important.

1. Austria commands an army of 458,000 infantry, 67,000 cavalry, 47,000 artillery, 16,800 genie, and 5,200 other troops. Total, 593,000 men and 1,140 guns.

2. Prussia commands 372,600 infantry, 67,600 cavalry, 60,100 artillery, 7,740 genie, and 74,000 other troops. Total, 580,800 men and 932 guns.

3. The other German States command 166,000 infantry, 25,000 cavalry, 14,500 artillery, 2,027 genie, and 17,000 other troops. Total, 224,900 men and 500 guns. The unanimous co-operation of these states with either Austria or Prussia would raise the balance in favor of that power by one-half. Hence the diplomatic discussions at present so energetically carried on as to whether or not it is the intention of Germany to interfere, or to maintain a general neutrality.

If Germany were united, were Austria and Prussia and the other confederate states to act resolutely and with combined strength against Russian arrogance, and its contempt for treaties and the rights of nations, then they would be in a position to enforce their will with a colossal strength of 995,600 infantry, 159,600 cavalry, 121,600 artillery, 26,600 genie, and 94,900 general troops. Total, 1,398,500 men and 2,572 guns.

BALACLAVA.

The following description of this place we copy from Dr. Clark's travels:—

"So much has been said by travellers of the famous Valley of Baidar, that the Vaie of Balacava, which is hardly surpassed by any prospect in the Crimea, has hitherto escaped notice. Yet the wild gigantic landscape, which towards its southern extremity surrounds the town; its mountains, its ruins, and its harbor—the houses covered by vines and flowers, and overshadowed by the thick foliage of mulberry and walnut trees—make it altogether enchanting. The ruins at Balacava point out the *Balaktion* of Strabo, whence some believe it derived its present name. Others, and perhaps with more reason, suppose the name to have had a Genoese origin, and derive it from *Bella Clava*, the beautiful port. Its harbor is certainly the *Symbolon Limen*, *Portus Symbolorum*; the characteristic entrance to which Strabo so accurately describes. Nothing can be equal to the fidelity with which he has laid down the coasts of the Crimea—a circumstance which may perhaps be attributed to the place of his nativity, Amasia, whose situation enabled him to acquire familiar knowledge of the shores of

the Euxine. In his account of the Archipelago and Mediterranean, although always an accurate writer, he by no means evinces the same degree of precision. According to him, the port of Balaclava, together with the Otenus, or harbor of Inkerman, constituted by their approach an isthmus of forty stadia, or five miles, which, with a wall, fenced in the minor peninsula, having within it the Church of Chersonesus. The wall we found afterwards with Professor Pallas, and its extent agreed very well with Strabo's account. The port of Balaclava is certainly one of the most remarkable in the Crimea. From the town it appears like one of the smallest of our northern lakes, land-locked by high precipitous mountains. Though its entrance is so narrow that ships can hardly find a passage, yet it affords excellent anchorage and security in all weather from the dreadful storms of the Black Sea. Ships of war, of any burthen, may find sufficient depth of water and a safe asylum there. The heights around it are the first objects described by vessels in sailing from Constantinople. But if any ill-fated mariner, driven by tempests, sought a shelter in the port of Balaclava, during the reign of Paul, he was speedily driven out again, or sunk, by an enemy as inhospitable as the wind or the waves. The inhabitants had small pieces of artillery stationed on the heights, with the most positive orders from that insane tyrant to fire at any vessel which should presume to take refuge there.

The town is at present (1809) colonised by Greeks from the Morea, a set of daring pirates, to whom the place was assigned by the late Empress, for the services they rendered in her last war with the Turks. We found the inhabitants of Misitra, Corinth, of the Isles of Cephalonia, Zante, &c., living without any intermixture of Tartars or Russians, according to the manners and customs of their own country.

MINUTE WONDERS OF NATURE AND ART.

Lewenhoeck, the great microscopic observer, calculates that a thousand millions of animalculæ, which are discovered in common water, are not all together so large as a grain of sand. In the milt of a single codfish there are more animals than there are upon the whole earth; for a grain of sand is bigger than four millions of them. The white matter that sticks to the teeth also abounds with animalculæ of various figures, to which vinegar is fatal, and it is known that vinegar contains animalculæ in the shape of eels. A mite was anciently the limit of littleness; but we are not now surprised to be told of animals 27 millions of times smaller than a mite. Monsiæ de l'Isle has given the computation of the velocity of a little creature scarce visible by its smallness, which he found run three inches and a half a second: supposing now its feet to be the fifteenth part of a line, it must make 500 steps in the space of three inches, that is it must shift its legs 500 times in a second, or in the ordinary pulsation of an artery. See *Hist. Acad.* 1711, page 23. The itch is known to be a disorder arising from the irritation of a species of animalculæ found in the pustules of that ailment; it is a very minute animal, in shape resembling a tortoise, of a whitish color, but darker on the back than elsewhere, with some long and thick hairs issuing from it, very nimble in its motion, having six legs, a sharp head, and two little horns. The proboscis of a butterfly, which winds round in a spiral form like the spring of a watch, serves both for mouth and tongue, by entering into the hollows of flowers, and extracting their dews and juices. The seeds of strawberries rise out of the pulp of the fruit, and appear themselves like strawberries when viewed by the microscope. The farina of the sun-flower seems composed of flat, circular minute bodies, sharp pointed round the edges; the middle of them appears transparent, and exhibits some resemblance to the flower it proceeds from. The powder of the tulip is exactly shaped like the seeds of cucumbers and melons. The farina of the poppy appears like pearl-barley.—That of the lily is a great deal like the tulip. The hairs of men are long tubular fibres through which the blood circulates. The sting of a bee is a horny sheath or scabbard, that includes two bearded darts: the sting of a wasp has eight beards on the side of each dart, somewhat like the beards of fishhooks. The eyes of gnats are bearded, or composed of many rows of little semi-circular protuberances ranged with the utmost exactness. The wandering or hunting spider, who spins no web, has two tufts of feathers fixed to his fore paws of exquisite beauty and colouring. A grain of sand will cover 200 scales of the skin, and also cover 20,000 places where perspiration may issue forth. Mr. Baker has justly observed with respect to the Deity, that with Him "an atom is a world, and a world but as an atom."—*Family Magazine*.

EDUCATION IN AMERICA.

That which is elsewhere left to chance, or to charity, we secure by law. For the purpose of public instruction, we hold every man subject to taxation, in proportion to his property, and look not to the question whether he himself have or have not children to be benefited by the education for which he pays.

We regard it as a wise and liberal system of policy, by which property and life, and the peace of society are secured. We seek to prevent, in some measure, the extension of the penal code, by inspiring a

salutary and conservative principle of virtue and of knowledge at an early age.

We hope to excite a feeling of responsibility, and a sense of character by enlarging the capacity and increasing the sphere of intellectual enjoyment. By general instruction, we seek as far as possible, to purify the moral atmosphere, to keep good sentiments uppermost, and to turn the strong current of feeling and opinion, as well as the censures of the law and the denunciation of religion, against immorality and crime. We hope for a security, beyond the law, and above the law, in the prevalence of enlightened and well principled moral sentiment.

Education, to accomplish the ends of good government, should be universally diffused.—Open the doors of the school-house to all the children of the land. Let no man have the excuse of poverty, for not educating his own offspring. Place the means of education within his reach, and if they remain in ignorance, be it his own reproach.

If one object of the expenditure of your revenue be protection against crime, you could not devise a better or cheaper means of obtaining it. Other nations spend their money in providing means for its detection and punishment, but it is for the principles of our government to provide for its never occurring.—The one acts by coercion the other by prevention. On the diffusion of education among the people, rest the preservation and protection of our free institutions.—*Webster*.

DECISION AND ENERGY—THE SECRET OF SUCCESS.

It has been one of the prevailing subjects of regret to the philosopher and moralist, that there should be so great a difference between early and mature life;—that so much of youth should be wasted in mere directed effort, or enfeebling indolence, as to create in later years matter for regret and self reproach.

Nothing is more common than to hear those who have passed the bounds of youth, regretting the unaccomplished projects of their earlier years, while reviewing plans of life and labor which they have formed, and which, had they been followed out with alacrity and success, would have rendered their names illustrious, and reputations enduring.

To be weak in purpose and unstable in pursuit, are the chief sources of failure and infelicity which result from human conduct in the course of life; and they are sources which no improvement in the general intellect, no accommodation of general knowledge, will be likely to correct or diminish. To those animated by the courage which always inspires the youthful heart, it may seem absurd to attribute the ills of life to weakness of purpose.

But youth is always fruitful in great purposes and good intentions. Why are these so seldom realized, but for want of strength of character to carry them out in the actual course of life? There is much truth in the sentiment which Milton puts in the mouth of the apostate angel, "To be weak is miserable," and there is grandeur of character expressed in the avowal of the prince of fallen spirits, that he possessed "an unconquerable will, and courage never to submit or yield." Impelled by such a will, and such courage, what difficulties may not be overcome,—what triumphs may not be achieved,—what good may not be accomplished by a character animated by great and good impulses. The world has seen in the career of Napoleon the power of an indomitable will and iron purpose. Sweeping like a moral hurricane over the eastern continent, he conquered armies, overthrew monarchs, and held the entire world in awe, triumphing everywhere that mind could gain the ascendancy.

Had he not defied nature, and undertaken war with polar snows, no limits would probably have fixed bounds to his conquests.

The Russian fires and Russian frosts could not be mastered by mental might, or Bonaparte's will might have swayed the world. Had he been animated by the sole desire of doing good to his race, of extending the blessings of civilization and religion, instead of a desire for universal conquest, what might not have been gained to the world by the career of Napoleon! I have made this illusion to illustrate what may be accomplished by a character of immeasurable strength and invincible will.

All men are not Napoleons, it is true, but all possess intellect which may be developed, and will which may be strengthened and guided in the right direction; and surely, the real labors and ills of life which we are doomed to meet,

"Claim the full vigor of a mind prepared,
Prepared for patient, long, laborious strife."

If the young, then, would have vigor of understanding, or pleasure in the exercise of it, they must cultivate these qualities. If instead of walking humbly, patiently, passively in paths that have been traced out by other minds, they would make vigorous, independent excursions of their own, they must cultivate these qualities; for the secret of success in any department of life is, to possess "an unconquerable will, and courage never to submit or yield."—*Michigan Journal of Education*.

ANNUAL REPORTS FOR 1854.

Blank forms of report have been sent, during the present month, to each Local Superintendent in Upper Canada, to be prepared according to the General Instructions, and returned to the Department with as little delay as possible. Should any Superintendent not have received the form, he is requested to notify the Department at once, in order that no delay may be experienced in preparing the Chief Superintendent's Annual Report, before the adjournment of Parliament. Before compiling his report, however, the Local Superintendent will notice the typographical error in column 9, in the Trustees' annual return,—which should give the balance unappropriated after payment for 1854, not 1853.

In answer to the inquiries of some local school officers, in reference to sections 11 and 12, of the General Instructions to Local Superintendents in compiling their annual reports, we reply, that the instructions and the headings of the columns of the financial part of the report should not be taken *separately*. For instance, when the amount received (column 20) is less than the amount to which the teacher is entitled for the year, (column 25,) the latter part of the 12th section is inoperative, simply because the "difference" which exists between those amounts does not accord with the heading of column 23, and cannot therefore be inserted in it. The 11th section of the Instructions should be interpreted as it reads; and with the above reference, we think no difficulty will occur in complying with the 12th and other sections of the Instructions.

A copy of the Chief Superintendent's Annual Report for 1853, has also been sent, by post, to Local School Officers and Corporations entitled to receive it.

MINERAL RESOURCES OF CANADA—WANT OF "SCHOOLS OF MINES," &c.

During the present week were shipped from Bytown a number of large specimens of ores, marbles, building stones, and other natural productions, destined to take a part in the great Exhibition of the Industry of all Nations at Paris in May next. There was a huge mass of the magnetic iron ore contributed by J. Forsyth, Esq., from the mine in the Township of Hull, weighing over two thousand pounds; another six feet long, and of about the same weight, of specular iron, from the township of MacNab, from A. Dickson, Esq.; and a piece of silicate of iron, weighing about two hundred and sixty pounds. This latter is a rare mineral, and the specimen in question is perhaps the largest yet seen. Besides these, there were two strongly hooped casks, weighing over eighteen hundred pounds of other specimens of ore, and a number of boxes and uncovered blocks of limestone and marble. The object in procuring such large masses is to enable the Parisians to form some conception of the extent of the supply by the magnitude of the specimens. A country whose mineral wealth is only represented by a few insignificant fragments will not be much known, unless the visitors receive verbal or written information that the collection only partially represents its riches. Large specimens, however, are the herald's of their own and their country's greatness. They make an impression of natural wealth on the mind which cannot be effaced. The name of Canada will be associated with the idea of one of the richest spots of the earth. And what is still better, the idea in this instance will be in no way an exaggeration. The bed of ore from which the first of the above mentioned specimens was procured is situated about six miles from Bytown, in the Township of Hull. It is about 400 feet thick, and of such an excellent quality that it will yield about 75 per cent, of pure iron. It rises into a dome-shaped mound about 70 or 80 feet above the level of the surrounding land, and it is computed that there are three millions of tons of it above the surface. The only mining operations, therefore, that will be required for a long time will be to break it up, and several thousand tons of it, have been already quarried and is now being transported. It was lately purchased by J. Forsyth, Esq., of Pittsburgh, in the State of Pennsylvania, who intends to convey it to that place and smelt it along with other ores.

The Collection of Minerals above mentioned was made under the superintendence of W. E. LOGAN, Esq., the Provincial Geologist, and no person can witness Mr. Logan's operations without being at once convinced that this Province will be creditably represented at Paris in 1855, as it was at London in 1851.

While speculating upon these huge masses of ore, we are led to make a quotation from HUMBOLDT, the great master philosopher of the nineteenth century. In commenting upon the progress of nations, and the causes which must produce pre-eminence or inferiority among the races of men who are now struggling for masterships, he remarks,—

"An equal appreciation of all parts of knowledge is an especial re-

quirement of the present epoch, in which the material wealth and increasing prosperity of nations are in a great measure based on a more enlightened employment of natural products and forces. *The most superficial glance at the present condition of European states shows, that those which linger in the race cannot hope to escape the partial diminution and perhaps the final annihilation of their resources.* It is with nations as with nature, which, according to a happy expression of Goethe, knows no pause in ever-increasing movement, development, and production—a curse still cleaving to standing still.

"Nothing but serious occupation with Chemistry and natural and physical Science can defend a state from the consequences of competition. *Man can produce no effect upon nature, or appropriate her powers, unless he is conversant with her laws, and with their relation to material objects according to measure and numbers.* And in this lies the power of popular intelligence, which rises or falls as it encourages or neglects this study. Science and information are the joy and justification of mankind. They form the springs of a nation's wealth, being often indeed substitutes for those material riches which nature has in many cases distributed with so partial a hand. Those nations which remain behind in manufacturing activity, by neglecting the practical applications of the mechanical arts and industrial Chemistry, to the transmission, growth, or manufacture of raw materials—those nations among whom respect for such activity does not pervade all classes—must inevitably fall from any prosperity they may have attained; and this by so much certainly and speedily as neighbouring states, instinct with the power of youthful renovation, in which Science and the arts of Industry operate or lend each other mutual assistance, are seen pressing forward in the race."—*Cosmos*, vol. 1, page 33.

The above paragraph constitutes one of the most profound political aphorisms of the age. It is somewhat in advance of the present time, not in its immediate practical necessity, but in the amount of appreciation which it receives,—for it is perfectly clear that although a few statesmen of superior intelligence do feel the full weight of its importance; there are many who do not. Humboldt does not intend to point out as worthy of national consideration that musty lore which qualifies men to take part in metaphysical discussions, but those particular species of knowledge which enable man to subdue the inorganic world to his will and make it yield him food, clothing and general comfort in greater abundance and with less labour,—which, in a word, teaches him to make "two blades of grass grow where but one grew before." He points out to the nations that the pursuit of certain branches of knowledge is a race in which, if any one of them fails to contend, it must soon be blotted out. Were England to take no account of her geological treasures, how insignificant would be her power in the present state of European affairs. The sulphur, nitre, iron, and coal, used by France, England and Turkey in the present war alone saves them from destruction. In view of these facts, these countries, as well as Austria, and the Germanic States, generally, have established National Schools, in which mining, metallurgy, and the innumerable chemical applications of the materials which constitute the earth's crust to agriculture, engineering, and manufactures of all kinds, are taught and investigated by the most scientific men whose services can be procured. Science is strained to its utmost tension by each of those countries, in order to prevent the nation from loitering in the rear.—Let us ask ourselves the important inquiry, is Canada to be permitted to linger behind in the race? We sincerely hope not.—The consequence of neglecting to cultivate the physical sciences under the fostering care and support of the government of the country, must inevitably be national inferiority. We have many excellent institutions of learning, devoted to almost every thing else, but we have no school especially dedicated to practical science as it is taught in the chemical and mining schools of Europe. Our educational system is, therefore, incomplete. There is a great blank in it. The key-stone of the arch has not yet been supplied. The United States governments who have stopped short in their surveys are beginning to get their eyes opened to this point, from the fact that numbers of their young men are leaving the country to be educated in the mining and chemical schools of Europe. In England too, we perceive by the last number of Silliman's Journal, that those intended for the army and navy constituted the most numerous class of pupils at the museum of economic Geology.—The reason is, they find that they cannot acquire at the Universities the knowledge they stand in need of without much more time and expense; and above all, not so thoroughly as they can while surrounded with a vast collection, and in constant association with field-taught Professors. In Canada the information acquired at such schools, might not it is true, be used by a great number in mining, but then to thousands engaged in agriculture, and the arts requiring a knowledge of geology, and the chemical properties of the materials of the earth's crust, it would be of inestimable value. Above all there would result, that enlarged understanding, those habits of accurate observation, and a love of nature continually urging on the mind to investigate the laws of the physical world, without which, in this age no man can be said to have received a proper education. As intellectual exercises, the studies pursued at these institutions have no equals, and no young

country such as Canada, where success in life depends so much upon practical mental activity, should be without them.—*Ottawa Citizen*, November 25, 1854.

THE RISE AND FALL OF NATIONS.

From Lord John Russell's recent Speech at Bedford.

There have been many causes assigned for this rise and fall; but the common delusion is, that as so many nations of ancient times have gone through these changes, all States must go through similar periods of prosperity and decay. That this is a common theory and common supposition, I need not go far to prove; for an admirable writer, whose friendship I have the good fortune to enjoy, who invests with the rich treasures of his fancy whatever he undertakes, describes a New Zealander standing on a broken arch of London Bridge sketching the ruins of St. Paul's.* Now I could never contemplate that picture with comfort. (Laughter.) It is a very disagreeable subject, and I want to know what necessity there was for making such a prophecy. ("Hear," and laughter.) If I were to investigate that subject I should engage you the greater part of the night; but I should suggest certain topics to follow out at your leisure, some of the most fitting subjects for lectures, in connection with the rise and fall of states. Many states have fallen because they were too small to contend against their more powerful neighbors; because it is obvious when surrounding states have 100,000 or 200,000 men under military discipline that the smaller ones with ten to twenty thousand will fall under the superior force of the other. We have the case of Athens and the case of Florence, then I might allude to the great state of Germany and the smaller one of Portugal. I need scarcely allude to England, because this country is large enough and strong enough to maintain itself for ages to come. (Applause.) But there is another source of decline, and which is celebrated in a line of the Roman Satirist as the immediate cause of the fall of the Roman Empire, which, after stretching its armies into almost every part of the world, fell from the effects of luxury. Well, we in modern days carry luxury to a greater extent than ever it was carried before. Many enjoyments are within the reach of most of us, and we indulge in far greater luxuries than were possessed by the ancient world, yet we have no sign that men thereby become indolent; on the contrary, we have seen that men having every means at command, when called upon to perform their duty to their country have not shrunk from encountering the greatest hardship, though previously surrounded by and living in the midst of the most refined luxuries. (Applause.) We do not perceive that the position of Her Majesty's household brigade, where it may be readily imagined luxury prevails to a considerable extent, has at all unfitted those soldiers to contend against a powerful enemy. It does not by any means follow that our soldiers are not able to overcome every obstacle opposed to courage and determination because they are not in the condition of that iron chief who kicked away the pillow of snow from under the head of his son, saying that it was too luxurious a bed for any chief to indulge in. (Cheers.) I think, therefore, that mere luxury, unless the nation itself is feeble, unless it has lost its spirit, has not that direct tendency to effect its ruin. But there are other causes which it behoves us to consider, which have occasioned the decline of nations. There have been despotic institutions, where men have been forbidden to investigate subjects of science, or discuss any improvement in art—where they have been forbidden, under penalty of fire, from holding any religious opinion different from that of the State. Where that despotism has existed—where that persecution has prevailed, the nation has withered under the influence. (Loud applause.) Where such principles prevail, the state will always be unstable; but I say there can be no danger to the people of this country on that account, appreciating as they do the liberty of thought and of expression which they enjoy, and who would not under any consideration surrender that liberty to any power whatever. (Applause.) Well, no doubt there are other causes to show why nations pass from one phase to another—from prosperity to decay—which may be meet subjects for your meditation. Nations have found, as Holland found in the last century, that the generous efforts made in the last war to secure European independence of those who ranked in the scale of nations have been disappointed, and the circumstances arising out of that period are weighty and proper subjects for the consideration of those entrusted with the financial administration of a nation: this matter, however, has an immediate political bearing, and I will not further allude to it. There is another cause which greatly tended to the decay of ancient nations, which introduced many crimes, caused a weakening of the manly character, and a falling off of the fortitude and industry which distinguished the early period of history. There was the institution of slavery—that institution which led the Romans to neglect the true interests of the empire, resulting in crime, which led them to leave the cultivation of the land to slaves—those lands which at an earlier period received cultivation from the hands of freemen. But happily those changes are not felt by this country; so far as our dominions are concerned we have got rid of that curse. In an early period we find

that the church spoke out strongly against the maintenance of slavery; and at a later period we have practically improved upon it, and those who carry on occupations of various kinds, whether agricultural, commercial or manufacturing in our dominions, are free from the curse of personal slavery. (Applause.) We have, therefore, a recognition of those mutual obligations upon which the ancient nations divided themselves, and which, as may be pointed out in the history of nations, cannot affect our personal safety. (Applause.) There are also other sources of decline—from the consequences of political events, from the calamities of war, from struggles long continued, from other objects of national interest, and other motives the effect of which no person can perceive, and upon which no man would ever be entitled to your confidence, or the confidence of a nation if he pretended to prophesy. These are subjects connected with the future, the knowledge of which is not given to man. Events may come to pass and contradict and overrule all his anticipations; but upon that subject you and your successors have a duty to perform as well as hopes to realise. It behoves you to maintain the liberty of this country, to maintain the Christianity of this country—(applause)—and my belief is, that by cultivating your minds, by extending as much as possible your researches, whether in science, whether in literature, you will contribute to that end, you will strengthen the religious and political institutions of the country. (Applause.)

LORD ELGIN'S VALEDICTORY AT SPENCER WOOD.

For the last time I am surrounded by a circle of friends with whom I have spent some of the pleasantest hours of my life. For the last time I welcome you as my guests to this charming residence, which I have been in the habit of calling my house. I did not, I will frankly confess it, know what it would cost me to break this habit until the period of my departure approached and I began to feel that the great interests which have so long engrossed my attention and thoughts, were passing out of my hands. I had a hint of what my feelings really were upon this point—a pretty broad hint too—one lovely morning in June last, when I returned to Quebec after my temporary absence in England, and landed at the cove below Spencer Wood, because it was Sunday, and I did not want to make a disturbance in the town, and when with the greeting of the old people in the cove, who put their heads out of their windows as I passed along, and cried "welcome home again" still ringing in my ears, I mounted the hill and drove through the Avenue to the house door. I saw the drooping trees on the lawn, with every one of which I was so familiar, clothed in the green of spring, and the river beyond, calm and transparent as a mirror, and the ships fixed and motionless as statues on its surface, and the whole landscape bathed in a flood of that bright Canadian sunshine which so seldom pierces our murky atmosphere on the other side of the Atlantic. I began to think that those persons were to be envied who were not forced by the necessities of their positions, to quit those engrossing retreats and lovely scenes, for the purpose of proceeding to distant lands, but who are able to remain among them until they pass to that quiet corner of the garden of Mount Hermon which juts into the river and commands a view of the city, the shipping, Point Levi, the Island Orleans and the range of Loretine hills, so that through the dim watches of that tranquil night which precedes the dawning of the eternal day, the majestic citadel of Quebec, with its noble train of satellite hills, may seem to rest for ever on the sight, and the low murmur of the waters of the St. Lawrence, with the hum of busy life on their surface to fall ceaselessly on the ear. I cannot bring myself to believe that the future has in store for me any interests which will fill the place of those I am now abandoning. But although I must henceforward be to you as a stranger; although my official connection with you and your interests will have become in a few days a matter of history, yet I trust that through some one channel or another the tidings of your prosperity and progress may occasionally reach me, that I may hear, from time to time, of the steady growth and development of those principles of liberty and order, of manly independence in combination with respect for authority and law, of national life in harmony with attachment to British connection which it has been my earnest endeavor, to the extent of my humble means of influence, to implant and to establish.

THE POWER OF MEMORY.

The power of memory as exhibited in some of the best authenticated examples, was beyond measure surprising. Drusus, it is said, could repeat the whole of Homer. Sallust knew the whole of Demosthenes. Mithridates could speak twenty two languages. And Cyrus could repeat the name of every soldier in his immense army. The lecturer then gave a number of instances to illustrate the extent of memory, and among the rest mentioned that of Saint Anthony, the hermit, who although he could not read, could repeat the whole of the Scripture from having heard them. He also mentioned instances where men's memories had been impaired by disease, but had recovered again by dint of application. Cases of parties having been able to repeat discourses after hearing them once, were also very numerous. Painters

* Macaulay's Essays.

not unfrequently execute portraits from recollection. This is an example of what is called conception, or the revival of past perception. Of this form of memory, Dr. Abercrombie gave the following remarkable exemplification. In the Church of St. Peter at Rome, the altarpiece has a large and valuable picture by Rubens, representing the martyrdom of the apostle. This picture having been carried away by the French to the great regret of the inhabitants, a painter of the city undertook to make a copy of it from recollection and succeeded in doing so in such a manner that the most delicate tints of the original were preserved with the most minute accuracy. The original painting has now been restored, and the copy is preserved along with it, and even when they are rigidly compared, it is scarcely possible to distinguish one from the other.—*From the Globe's report of the Rev. Dr. Lillie's lecture at the Mechanics' Institute.*

MEMORY.

Dr. Alexander Geward, of Aberdeen, was a remarkable instance of what may be done by the exercise of the memory. When he first assumed the office of a preacher, his recollection was so inert, that with the greatest difficulty he committed a sermon to memory in a fortnight, and never ventured to preach more than once during that time, unless he could deliver the same sermon in another place. But, as he practised the art of learning his sermons, he found his memory strengthen perceptibly, till at length he could repeat the whole of a discourse, accurately after reading it only twice! He was an instance of a man's acquiring, by mere dint of industry, the mastery of an art for which he did not appear to be fitted by nature.—*N. Y. Christian Era.*

Miscellaneous.

THE ISLESMEN OF THE WEST.

[From the Dublin University Magazine.]

THERE is mustering on the Danube's banks such as Earth ne'er saw before,
Though she may rife where she may her glory-page of yore:
The bravest of her children, proud Europe stands to-day,
All battle-harnessed for the strife, and panting for the fray.
No jewelled robe is round her flung, no glove is on her hand,
But visor down and clasped in steel, her gauntlet grasps the brand;
Oh! lordly is the greeting as she rises from her rest,
And summons to the front of fight the Islesmen of the West.

No braver on this earth of ours, no matter where you go,
Than they whose boast was aye to bear the battle's sternest blow;
No braver than that gallant host, who wait with hearts of fire
To bridle with an iron bit the Muscovite's desire.

Ho! gallant hearts, remember well the glories of the past,
And answer with your island shout the Russian's trumpet-blast;
Ho! gallant hearts, together stand, and who shall dare molest
The bristling hem of battle's robe, the Islesmen of the West?

Brave are the chivalry of France as ever reined a steed,
Or wrung from out the jaws of death some bold heroic deed;
A hundred fields have proved it well from Neva to the Po.
When kings have knelt to kiss the hand that smote their souls with
And worthy are the sons to-day of that old Titan breed, [Wo.
Who spoke in thunders to the Earth that glory was their creed;
Ay, worthy are the sons of France, in valour's lap carress'd,
To night beside their foes of old, the Islesmen of the West.

Oh, England! in your proudest time you ne'er saw such a sight,
As when you flung your gauntlet down to battle for the right;
What are the Scindian plains to us, the wild Caffrarian kloof,
That glory may be bought too dear that brings a world's reproof?
The brightest deed of glory is to help the poor and weak,
And shield from the oppressor's grasp the lowly and the meek;
And that thou'lt do—for never yet you raised your lion crest,
But victory has blest your sons, the Islesmen of the West,

Who are those haughty Islesmen now who hold the keys of earth,
And plant beside the Crescent moon the banner of their birth?
Who are those scarlet ranks that pass the Frenchman and the Turk,
With lightsome step and gladsome hearts, like reapers to their work?
The sons of Merry England they, reared in her fertile lands, [sands;
From Michael's Mount to stout Carlisle, from Thames to Mersey's
From every corner of the isle where Valour was the guest,
That cradled in the freeman's shield the Islesmen of the West.

The stormers of the breach pass on, the daring sons of Eire,
Light-hearted in the bayonet-strife as in the country fair;
The mountaineer who woke the lark on Tipperary's hills,
And he who kiss'd his sweetheart last by Shannon's silver rills.
The "Rangers" of our western land who own that battle-shout,
That brings the "Fag-an-bealag" blow, and seals the carnage rout;
Those sept of our old Celtic land, who stand with death abreast,
And prove how glorious is the fame of Islesmen of the West.

The tartan plaid and waving plume, the bare, and brawny knee,
Whose proudest bend is when it kneels to front an enemy;
The Pulse of battle beating fast in every pibroch swell—
Oh, God assoizie the m who hear their highland battle yell.
Those Campbell and those Gordon men, who fight for "auld lang syne,"
And bring old Scotland's broadsword through the proudest battle line;
You've done it oft before, old hearts, when fronted by the best.
And where's the serf to-day dare stand those Islesmen of the West?

Speak! from your bristling sides, ye ships, as Nelson spoke before—
Speak! whilst the world is waiting for your thunder-burst of yore;
Speak! whilst your Islesmen stand before each hot and smoking gun,
That rends the granite from the front of forts that must be won.
Unroll that grand old ocean flag above the smoke of fight,
And let each broadside thunder well the Islesmen's battle might;
Roll out, ye drums, one glory peal, 'tis Liberty's behest,
That summons to the front of fight the Islesmen of the West.

REVERENCE IN CHILDREN.

What state of society can be blind to the meaning of the imprecation which was pronounced at the entrance into the promised land, and joined in the same doom the idolator and him who should "set light by his father and mother?" What philosophy can gainsay the sage of the book of Proverbs, whose sententious moralizing rises in prophetic grandeur as he speaks of the unnatural son: "The eye that mocketh at his father, or refuseth to obey his mother, the ravens of the valley shall pick it out, and the young eagles shall eat it." Who needs any interpretation of the feelings of David, of Joseph, or Solomon, in their joy or trial? How heart-rending was the grief of the Psalmist over his recreant son—"Would to God I had died for thee, my son, my son!" What beauty, as well as simplicity, in the enquiry of Joseph for his father, when the Prime Minister of Egypt dismissed his courtly train, and weeping aloud, could only ask, "Doth my father yet live?" What grandeur, far above its gold and gems, surrounded the throne of Solomon, when he rose to meet his mother, and called her to a seat at his right hand! "And the king said unto her, Ask on, my mother, for I will not say thee nay." What pathos and sublimity in the Saviour of men, when embracing home and heaven in his parting words on the cross, he commended his spirit to the Eternal Father, and intrusted his mother to the beloved disciple's care! We need no more than this to show how the Gospel glorifies the law, and crowns its morality and piety alike in its perfect love—"Woman, behold thy son"—"Disciple, behold thy mother." Hear the amen that goes from Calvary to Sinai—and honor thy father and thy mother.—*Hearthstone.*

EXAMINATION PAPER

Of the English College of Preceptors, to the questions in which candidates, for the office of School Teacher, are required to return written answers under the eye of an Examiner:

1. Define Education, Instruction, Method, System, Knowledge, Information.
2. Can Knowledge be imparted? State the reasons of your answer.
3. Arrange, in a Tabular Form, the daily occupations of a middle-class school of forty pupils, from nine to sixteen years of age; showing the number of teachers required, and the proportion of time you would allot to each study.
4. What subjects do you undertake to teach? What peculiar difficulties do these subjects present? and how would you endeavour to remove them?
5. Point out the chief merits of the books and instruments which you employ in teaching.
6. Do you prefer to teach pupils in classes, or separately? State your reasons.
7. Explain the nature of analytical and of synthetical teaching. Give examples of both.
8. Illustrate the difference between Deductive and Inductive teaching.
9. Describe the course of study which you would desire your pupils to follow in your special subjects.
10. What are your views in reference to Play-ground duty.
11. How would you cultivate the Moral Faculties?
12. Are you acquainted with any of the systems of Instruction adopted on the Continent, or in America? If so, point out their merits and their defects.
13. Explain your views of Physical Education.
14. Point out the Educational errors to which inexperienced teachers are most liable.
15. By what means, and upon what principles would you maintain discipline?—*English Educational Times.*

"TAKE care," recommended a father to his children, "when you find yourself in the presence of persons who see you for the first time, to display only the best qualities of heart and mind. They will always judge you under this first impression." That father knew the world.

FISH TAMING.

The following beautiful story, written by Prof. Upham, we extract, for our school children, from the excellent paper of an old and dear friend, the Christian Times, Chicago. When our little readers have been amused with the idea of fish and turtles being tamed and educated, let them stop and think a little while about this story. Think what a power there is in kindness. Even the fish felt it and the clumsy turtles. And that little girl; how beautiful and happy she looks, as we think of her, down by that pond, calling to her fish. Dear, noble little child, may you have many imitators, not only among school children, but even among grown men and women.

A few years ago I read in a newspaper in America, that the fishes in a certain pond had been tamed, and brought back again, at least in some degree, into the original association with humanity. Being at leisure at a certain time, and having some curiosity to ascertain the truth of this statement, I embarked in a boat in Boston harbor, and went down to Hingham. It was near night. Next morning quite early, I went towards the pond, which was said to be the theatre of this interesting and unprecedented state of things. I recollect that I went through a long piece of woods, which was without habitations, and which, in its tranquility and beauty was favorable to benevolent dispositions and thoughts. The early sunbeams were sporting with the dew drops; and the birds were singing in the branches. After passing through the woods and coming in sight of the pond of water, I went to a farmer's house not far from it. I knocked, and a good-looking woman, with that intelligent and benevolent aspect which marks the women of America, came to the door. Making such apology as I was able for a visit so early, I remarked that I had come for the purpose of seeing the fishes in the neighbouring pond, which were said to be tamed. Readily accepting my explanations, she pointed to a place on the brink of the water, and said that one of her children would soon come down there.

I had not stood there long before a little girl, apparently anxious not to detain me, came running down. She seated herself on a rock on the shore and looked into the mirror of the morning waters, which reflected back the delightful image of her innocent beauty. She called to the fishes; calling them sometime by the names of their tribes, and sometimes by particular names which she had given them. There was one large one, which she called Cato. But Cato was in no hurry to come. She said it was rather early for them. They had not yet left their places of slumber. But repeating still more loudly the invitation of her sweet voice, they began to make their appearance. The smaller ones came first, and then the larger ones of many varieties; at last Cato, who was a sort of king and counsellor in his finny congregation, came among them. Delighted with this renewed visit of their virgin queen, although they seemed to be conscious it was rather early in the morning, they thrust their heads above the water; and she fed them from her hand. And I fed them, also.

Observing something peculiar at a little distance in the water, I was surprised to see two turtles making their way towards her.—Her voice of affection had penetrated beneath their dark, hard shells. And I noticed that they came with great effort and zeal; as if afraid of being too late at this festival of love. One of them, as soon as they reached the shore, scrambled out of the water, and climbed upon the little rock beside her. And she fed them both. I shall not easily forget this interesting scene, this little episode of millennial humanity.

HOW KENTUCKY GOT ITS NAME.

The origin and meaning of the name of Kentucky has been accounted for in different ways, both ingenious and plausible. The latest analysis of the word Kentucky, that we have heard, we had a few days ago from the lips of an old hunter, now in the ninety-ninth year of his age. When Boon first came to that country it was inhabited exclusively by no tribe of Indians, but was the common hunting ground for all the tribes of the adjacent country. The rich valleys were covered with a chapparal of *cane*, bearing a small berry, on which the turkeys came in countless numbers to feast. Thus, it was enough for the whites to call it the land of "*Cane and Turkey*." The Indians, trying to pronounce the words, got it Kentuckee, from that it was abbreviated into Kentuck, and finally the name by which it is now known—Kentucky—the land of *Cane and Turkey*.—*Schoolmate*.

CRIME is the moral cholera of the social body. It is a disease far more deadly than mere physical pestilence can be, however virulent. It kills both the body and the soul. It affects the future as well as the present. The taint which it leaves is in the mind. Plague is only a temporary visitant, but crime is a disease permanently epidemic, a cancer always eating into the heart of our civilization.—*Dr. Mason Goode*.

"Why did you not pocket some of those pears?" said one boy to another; "nobody was there to see." "Yes there was—I was there to see myself, and I don't ever mean to see myself do such a thing." I looked at the boy who made this noble answer; he was poorly clad, but he had a noble face, and I thought how there were always two to see your sins, *yourself* and your God.—*Christian Inquirer*.

THE CLERKS IN THE BANK OF ENGLAND.

There are in the bank upwards of eight hundred clerks, at salaries ranging from £65 per annum to £800; the patronage is in the hands of the directors, of whom there are twenty four, each, having a denomination to permit one clerk, provided he be found qualified on examination. The vacancies are not, as in most public offices, filled up as they occur by deaths, resignations, &c., but by electing from twenty-five to thirty junior clerks every four or five months; it is usual to admit one-fifth of this number from the sons of clerks already in the service. The scale of pensions for length of service is the same as in the Government. The late governor, with much kindness and consideration for the comfort of the clerks, instituted a library and reading room, which bids fair, from the handsome donations from time to time made by the directors, to rival the best of our secondary metropolitan libraries. The Bank Annuity Society, for the benefit of widows of clerks is also being remodelled, in order to combine the principle of life assurance with the granting of annuities. This society is under the management of the clerks themselves. The subscription of unmarried clerks is compulsory.

WHAT IS A SPIKE?

Most people are impressed with the belief that a spiked gun is, for some time, rendered useless; but it is not everyone who knows what a spike is. A correspondent in the *Morning Herald* makes this clear. He says:—"They are about four inches long, and of the dimension of a tobacco-pipe; the head flat; a barb at the point acts as a spring, which is naturally pressed to the shaft upon being forced into the touch-hole. Upon reaching the chamber of the gun it resumes its position, and it is impossible to withdraw it. It can only be got out by drilling—no easy task, as they are made of the hardest steel, and being also loose in the touch-hole there is much difficulty in making a drill bite as effectually as it should do. Its application is the work of a moment, a single tap on the flat head with the palm of the hand sufficing. This can be easily done, even if it is ever so dark."

PARENTAL EXAMPLE.—Your children will be more animated to vigorous perseverance and self-dependence, the more they witness your exertions to provide for your future welfare. There are few who can witness the daily display of parental and provident care, without having the desire created within them of doing something for themselves. "A thrifty father," says a Hindoo proverb, "may have an extravagant son, but a diligent father rarely has an idle son."

Educational Intelligence.

CANADA.

MONTHLY SUMMARY.

The Baptists have subscribed funds to establish a College in Toronto, under the name of Maclay College. The Rev. Dr. Bacon, late of Columbia College, New York, has been invited to take charge of the institution. . . . The Board of Trustees in the City of Toronto have, with great liberality, recently erected a very superior School-house in each Ward of the City. They are all expected to be in operation this month. The Board have adopted a regulation to open each School daily with the reading of the Scriptures and Prayer. In speaking of the causes which prevent a larger attendance at some of the Schools, Mr. Barber, the City Superintendent, justly observes:—"The successful working of the Common School system, requires that the question should occupy neutral ground, and at all times be discussed in a friendly spirit. No doubt ere long that principle will become recognised, and acted upon by the good sense of the community at large, to the great benefit of education and the consequent largely increased attendance at all our city schools, which are emphatically *the Schools of the People*."

THE BRANTFORD SCHOOLS.

To an intelligent people there are few subjects of more real interest, and none of more importance than that of Education through the means of schools, and especially of public schools. Of this the inhabitants of Brantford have given abundant proof in the splendid provision made by them for the education of the young, by the erection of several excellent and commodious School-houses, and the employment therein of teachers who are really a credit to their profession and to their employers, and of incalculable advantage to this community. In no town in Canada, of equal size, are there to be found School-houses to compare with those of Brantford, and we have not the least hesitation in asserting that the schools of Brant-

ford cannot be surpassed for their efficiency in point of teachers. Of this we speak from experience. Especially do we refer to the High School, which, lately, we have had several opportunities of visiting in company with the Superintendent, W. Johnstone, Esq., and with others of our townsmen who take and exhibit an interest in the cause of Education. Mr. Robins, the principal, is ably seconded in the boy's department by his assistant, Mr. Smith. Both seem thorough masters of their trying but most useful and honorable profession. The order which reigns in the school, the classification of the pupils, and the attention by the scholars to the word of command are all admirable. Not less so is the acquaintance with first principles shown by the boys in analysing the matters given them for study, whether they be difficult problems, abstruse lessons, or the most simple questions that fall to the lot of the schoolboy to answer. What we have said of the boys' department, we may say of the female portion of the school, under Miss Morrison, assisted by Miss Jennings and Miss Codey. The whole school is an honor and a blessing to Brantford, and cannot fail to be appreciated, by all who possess the ability and good sense to appreciate the untold advantages to society of the sound and liberal education of the young. On this subject we may say more anon.—*Brantford Courier*, Dec. 9th, 1854.

EXAMINATIONS OF THE TORONTO CITY SCHOOLS.

Last week, the ordinary Examinations, prior to the Christmas Holidays, took place in the several Public Schools, and gave, generally, gratifying evidence of substantial progress. The attendance of parents and guardians was not so numerous as might have been expected, although their presence on such occasions tends to encourage both teachers and pupils.

The Local Superintendent delivered also, in four of the Schools, the Educational Series of Lectures required by law,—the subject chosen being the history of our City Schools since 1844: their progress and difficulties. In the course of the Lectures, important statistical facts were brought forward, and comparisons were drawn between the Public Schools of this City and those in Hamilton and London, greatly to our advantage. Here we have six Ward Schools of modern construction, while the cost per head for educating pupils is less here than in either Hamilton or London.

The immense advantages furnished by the adoption of the system of Free Education, can hardly be adequately appreciated. The average assessment of each individual of those classes whose children enter our schools, or for whose benefit, principally, they are sustained, does not exceed 5s. 10d. per annum,—for which sum a parent may get education for his whole family of school age, namely, from 5 to 16 years. The actual cost to the City, per pupil, is about \$7 each per annum; the difference being, of course, paid by the wealthier classes of society.* Thus, a poor man, instead of paying \$40 or \$42 per annum for educating six of his family, gets them all educated for the average rate of only 5s. 10d., or about 1s. each per annum.

Looking at the character of the Schools, and the provision which has now been made, not only for the mental and moral culture of the youth, but for their physical health and comfort, we earnestly hope that during the coming year the value of those Educational Institutions will be more highly appreciated than they have hitherto been. Every friend of education should urge attendance at the Schools—regular, systematic attendance—upon all who may be within the sphere of their influence.—*Examiner*.

EXAMINATION OF THE HAMILTON CENTRAL SCHOOL.

The semi-annual Examination of this institution closed last evening, much to the satisfaction of all parties, and proved in every way satisfactory.

No branch of English education is neglected; and every pains is taken to have the best instruction given, in a form most attractive and most easily comprehended by the very young scholars who form a large proportion of the advanced classes. Nor are the rudiments of knowledge at all lost sight of; but the simpler elements are made a sure foundation for the noble edifice of science and intricate learning to be afterwards built upon.

The following resolution was unanimously adopted at the close of the examination:

Moved by Alderman Moore, and seconded by Alderman McLroy,—“That the sincere thanks of the parents and guardians of the pupils taught in this school are due, and are hereby tendered to J. H. Sangster, Esq., and his assistants, for their earnest endeavors to promote education in this City, under the Common School System, as evinced by the progress and efficiency of the children during the past terms and exhibited at the present examination, and, that the Trustees are entitled to the warmest congratulation on the success of their labors in this department.”—Carried unanimously.

JOHN TRILLER, Chairman.

* The cost of sustaining Colleges and Grammar Schools is also borne alike by all classes.

WATERLOO COUNTY EXAMINATION.

The Examination of scholars from the several Schools in the County of Waterloo, was held in the County Court House at Berlin, on Wednesday the 27th December, pursuant to the notice given by the Warden.

Forty competitors were present, each of whom was known, not by name but by the number affixed to the breast, and in order that nothing might be wanting to accomplish the laudable object which the County Council had in contemplation, the services of J. H. Sangster, Esq., Principal of the Central School, Hamilton, were procured, who is one of the best if not the very best Teacher in Canada.

Before proceeding with the examination, Mr. Sangster made a few appropriate remarks, and then requested those who were to compete in History to rise. An arrangement had been previously made, that each competitor who missed three times had to retire. By examining according to this mode too much time was taken up with the first three branches, so that the examiner afterwards requested those who missed once to retire. This new move occasioned some dissatisfaction for a short time, but the time being so limited it could not be done otherwise.

The first four branches, viz., Penmanship, History, Practical Arithmetic, and Mental Arithmetic occupied nearly five hours, so that in order to finish the examination the same day, a comparatively short time was left for the six remaining branches, viz., Geography, Grammar, Natural Philosophy, Astronomy, Algebra and Geometry. It was half-past eleven o'clock, P.M. before the examination closed, and it was unquestionably an excellent one. Many parties had previously formed a very high opinion of Mr. Sangster's abilities, but even the most sanguine were far surpassed in witnessing the mode in which Mr. Sangster conducted the examination throughout. He is in fact a *Model Man and Teacher*.

Several of the pupils acquitted themselves admirably well, and reflected great credit both to themselves and their teachers.

The Warden then offered a few appropriate remarks to the pupils in a very affectionate manner. He congratulated the successful competitors, and likewise endeavored to console those who were probably disappointed, by informing them, that although they would be somewhat dejected by the present disappointment yet they might probably have another opportunity next year; thinking, no doubt, that the renewal of hope would tend to console them. He also encouraged all of them to prosecute their studies with renewed vigor and assiduity, assuring them that they would ultimately be rewarded for every hour well spent in youth. He told them, in his ordinary cheerful manner, that he had come to this country from Scotland, a stranger in a strange land, that the people of Waterloo had made him Warden of the County, but that of all the honors conferred on him during his lifetime; none afforded him such pleasure and delight as those he had received when a boy at school; drawing at the same time from his pocket ten silver medals which had been awarded to him for proficiency in different branches of education. (Great applause.)

After thanking those who had attended, and proposing a vote of thanks to Mr. Sangster for the efficient and impartial manner in which he had conducted the examination, he resumed his seat. The audience responded to the Warden's proposition with great applause, and Mr. Sangster, in reply, thanked them kindly for the honor which they had conferred on him, and assured them that he had never before examined more talented pupils than some of those were whom he had examined that day. A vote of thanks was also proposed to Dr. Scott, the Warden, for the interest he had taken in promoting the cause of education in the County of Waterloo, which was likewise responded to with cheers.

Three Prizes being given for each of the ten branches, and also a Silver Medal to the best general scholar, the distribution was made as follows:

Preston School.—James Baikie, Teacher, 8 First, 3 Second, 1 Third Prize.

Galt School.—Robert McLean, Teacher, 2 First, 1 Second, 5 Third Prizes; A. Young, Teacher, 3 Third Prizes.

Berlin School.—W. B. Smith, Teacher, 5 Second, 1 Third Prize.

Ayr School.—John Walker, Teacher, 1 Second Prize.

The Medal was awarded to Johann Lehmann, of the Preston School, who had received six of the First and one of the Second Prizes. The boy is a German, and has acquired nearly all his proficiency in the short space of two years, while with Mr. Baikie, the Principal of the Preston School. The medal bears the inscription:—“The County of Waterloo Premium awarded to the best general Scholar.” On the reverse:—“Presented to Johann Lehmann, of the Preston School, 27th December, 1854.”—*Communicated*.

NOVA SCOTIA.

KING'S COLLEGE, WINDSOR, NOVA SCOTIA.

This institution which was founded sixty-five years ago originated with four clergymen in the city of New York of whom the Rev. Dr. Inglis, first Bishop of Nova Scotia and father of the second, was one. At that time, Nova Scotia, New Brunswick and Prince Edwards' Island formed but one Province. The local legislature granted a sum of money to purchase a site for the College, and gave £400 sterling per annum towards defraying its expenses. The Home government also granted aid towards the erection of the building, and £1,000 per annum for its support, and that of the academy at Windsor. The imperial endowments were however subsequently withdrawn; and an effort was made to withdraw that granted by the local legislature. In consequence of some objections to the college to provide against such a contingency it is now designed to raise by subscriptions a permanent fund of £10,000, with which to endow the College. Contributions of £100 entitle the donor and his heirs to a free scholarship in perpetuity. A gentleman in Nova Scotia has offered to give £1,000 towards the fund provided the other £9,000 be collected by a certain day.—*Condensed from Hazard's Gazette.*

PROGRESS OF EDUCATION IN NOVA SCOTIA.

In 1832, there were in Nova Scotia proper 420 schools, containing 11,771 scholars. In 1851, there were 915 schools, with 26,554 scholars, being in the proportion of one pupil to every $8\frac{1}{2}$ of the population, a proportion usually regarded as denoting an adequate supply of the means of elementary instruction. This is so far satisfactory. Still more so is the passage of the Act for the Establishment of a Normal School. If that Institution be founded on a liberal basis,—if it be well supplied with the apparatus of sound and useful learning and science,—if it be generously sustained,—and if it be managed with judgment and energy, it will prove a blessing of no common magnitude and worth. I cannot but hope that the enlightened zeal which prompted the measure will continue to be encouraged by a patriotic legislature, and that the intellectual growth of the people will not be checked by mean and sordid calculations; for it is written by the pen of inspiration that "happy is the man that findeth wisdom, and the man that getteth understanding, for the merchandise thereof is better than the merchandise of silver, and the gain thereof than fine gold." I may further observe, that the common schools of this country stand greatly in need of improvement, as the Reports of the superintendents of education abundantly testify, and that, their improvement mainly depends on the qualifications, mental and moral, of the teachers. The incompetency of a large number of the persons now holding that office is justly complained of by the superintendents. If, therefore, in the Institution about to be established, a judicious system of instruction be adopted, suited to the state and wants of the people of this province,—if care be taken that the teachers are thoroughly instructed and trained, and their capabilities practically tested, by drilling them in tuition from the alphabet form to the highest class,—and if uniformity of method, (including text books) be prescribed, we may anticipate brilliant results in the course of the next few years. And here I may be allowed to remark, that the recent efforts made by various religious bodies for the endowment of their Educational Institutions are among the most noticeable signs of the times in Nova Scotia. It cannot be said that we are not making progress, when the fact is recorded that the sum of thirty thousand pounds has been subscribed in this small province, within the last three years, for the purpose above mentioned.—*From a lecture on "The progress and prospects of Nova Scotia," by the Rev. Dr. Cramp, Halifax Oct. 23rd, 1854.*

BRITISH AND FOREIGN.

MONTHLY SUMMARY.

The Duke of Argyle has been elected Lord Rector of Glasgow University by a majority of 22 over Mr. Disraeli, the conservative candidate. . . . An official communication has been received by the Registrar of Queen's College, Belfast, to the effect that students of the Queen's Colleges who have taken the degree of A. B. at the Queen's University in Ireland, will be admitted as candidates for orders of the Church of England and Ireland, after an attendance of one year at St. Aidan's College, Birkenhead, which is under the direction of the Archbishop of Canterbury. . . . The Working Men's College, Red Lion Square, London numbers already 114 students within the first week of its opening. Most of these students attend two or three, and some as many as four or five classes; so that the average attendance

on all the classes far exceeds the total number of the scholars. This excess is the more gratifying because, as no member is admitted into the college without having passed a preliminary examination in reading, writing, and the first four rules of arithmetic, a sure indication is afforded of the serious purpose for improvement in those who have availed themselves of the instruction offered by the college. . . . The Red Lodge, Park-row, Bristol, has been purchased by Lady Byron, the widow of the poet, and by her placed at the disposal of Miss Carpenter, for the purpose of the reformatory schools established by that lady. . . . The foundation stone of Dr. Duff's new educational institution at Calcutta, was laid on the 27th of July, in the presence of thousands of the natives, who took, apparently, much interest in the ceremony. The Dr. feels severely the affliction which prohibits his return to India for many months. He is now in the South of Europe.

EDUCATION IN SCOTLAND.—From a parliamentary paper recently issued, it appears that there are in Scotland 4,984 schools, whereof 1,138 are burgh or parochial schools, 2,104 endowed (other than burgh and parochial) schools, 1,567 adventure schools, and 175 charity schools. The burgh or parochial schools have 1,342 teachers, and educate 85,190 scholars, of whom 10,257 are educated gratuitously; the endowed schools, with 3,265 teachers, educate 175,031 scholars (20,362 gratuitously); and the adventure schools, with 2,150 teachers, educate 87,660 scholars, of whom 2,173 are gratuitously educated; and the charity schools, with 284 teachers, educate 16,000 all gratuitously, with the exception of about 300 children who make some slight payment. The total number of teachers is 7,041; of scholars, 364,481; and of gratuitously educated children, 49,100. The total salaries and incomes of those schools amount to £271,641 13s 2d., of which the burgh or parochial schools have £78,382 3s 6d; the endowed, other than burgh and parochial schools, £117,844 15s 2d; the adventure schools, £64,621 1s 6d; and the charity schools, £10,793 13s.

EDUCATION IN IRELAND.—CORRECTION.

His Grace the Archbishop of Dublin has favoured us with a communication in regard to the notice of the Irish National Schools, which appeared in the *Journal of Education* for November last. He says, The Commissioners have omitted [from their report] some most important particulars. The District Model School at Clonmel was built at a great expence, on a very grand scale, wholly at the cost of the government. And it had for several years from 300 to 400 pupils, of all religious denominations, and would have had more had there been room: and it flourished much. The pupils, are now reduced to *four*, owing to grants having been made by the Board to other schools near wholly under sectarian patronage. And the like is going on, I understand, in most of the other District Model Schools.

EDUCATION IN CUBA.—The Captain General appears fully alive to the great importance of this subject. By a recent decree, a thorough reformation of the existing schools is to take place, and numerous other schools established in which the arts and sciences, as well as the ordinary branches of education are to be taught without charge. The large sum of \$50,000 per annum is granted from the Island revenue for the support of these schools; also the buildings belonging to the churches of San Felipe and San Isideo, the (Bishop's) Botanic Garden, and the grounds surrounding the suburban residence of the Captain-General, are likewise devoted to the benefit of these schools.

UNITED STATES.

MONTHLY SUMMARY.

There are in New York City, 216 public schools, with 1,084 teachers; whose salaries amount to over \$300,000. . . . A well-attended and spirited meeting of the friends of the People's College was held at Elmira N. Y. on the evening of the 22d. ult. The Trustees met at an early hour of the day, and, notwithstanding the pressure of the money market, resolved to push the work forward with all possible speed. . . . The annual report of the Boston schools contains the following statistics: "The whole number of boys in the Public Grammar, Latin, English High and Model Schools was 5,177; do. of girls, 4,887; and 140 in the Normal School. Total, 10,204. The average attendance was 9,721; number of seats, 11,327. Scholars between 5 and 15 years of age, 9,529; over 15, 675. Number of masters, 26; of sub-masters, 14; ushers, 14; and female assistants, 165." Boston is proud of her schools, and she has reason to be. Many have been educated in them who have distinguished themselves in their life-pursuits. One of the most distinguished American artists, was a pupil in the Franklin school a few years since.

INTERESTING VISIT TO THE GROUNDS OF THE NEW YORK INSTITUTION FOR THE
DEAF AND DUMB.

The directors of the New York Institution for the Instruction of the Deaf and Dumb recently visited the grounds at Fanwood, and inspected the buildings now in process of erection there for the use of the Institution.

The visit to Fanwood was made very pleasant by the presence of Sir C. Grey, late Governor of Jamaica, and formerly Chief Justice of Calcutta, and member of the British Parliament and of the Privy Council, and by the attendance of the pupils of the high class. The president, Dr. Peet, introduced the distinguished visitor to the class through the sign language, and each of the young ladies and gentlemen recorded upon slates, the name, rank, and places visited by Sir Charles, with such thoughts as suggested themselves by the introduction and surrounding circumstances.

Nothing could have been more appropriate and pertinent than these answers, and the answers to other questions suggested by the visitors. They left a strong impression upon the mind of Sir Charles Grey, who thanked the class, through the president, for the very handsome manner in which he had been received, and for the unmerited distinction which had been accorded to him. While he could not deny, he said, that he had filled the respective places named by the pupils, he felt that he was but a very poor specimen of a true British subject. He felt, too, that compared with the president of such an institution as that for the education of the deaf and dumb, his life was altogether undistinguished. The visit he was making and the interview he enjoyed would leave a deep impression upon his mind, which would last as long as he lived,—and if he should meet some of those present no more on earth, he hoped, in the words of one of the pupils, that they might meet in heaven.

After the exercises, a collation was served and speeches were made by the visitors. In reply to a toast, Mr. Brooks, of the Senate, was called upon to speak for the Legislature. He alluded, however, mainly to the visit of the distinguished gentleman present; to the origin of similar institutions in Europe and the United States; to the sentiments of affection, charity and good will which they inculcated, and to the moral effect which they ought to exercise among men of a kindred language, and nations of kindred sympathies. In conclusion, he toasted "British charity and British literature."

Sir Charles Grey responded in a very handsome and eloquent speech, full of good will and good feeling for the people of this country. He spoke of us as a military people, and yet, as he hoped and believed from the evidences he had seen, a religious people. There were no bounds to the physical growth and moral influences of such a country as this.

Rev. Dr. Adams being called upon, alluded to the influence of the English language throughout the world, and of the moral power of the British and American people. He was proud of his Norman ancestry, and of English and Americans who forget that they were divided when they were doing so much in the same good cause. He cited with pleasure the recent agreement made by eminent British philanthropists to work for the reformation of the heathen nations of the old world through the missionary societies of the United States.

Judge Campbell, one of the directors, was called out by the president, and made a fine address on the subject of the English language, literature, and charity, and especially upon the good influences springing from international courtesy, such as he had experienced when in England, and such as he delighted to see shown by our countrymen toward distinguished foreigners in the United States.

A profitable and delightful hour was occupied in hearing these respective addresses, and we have seldom heard anything more simple, truthful and elegant than the remarks of Sir Charles Grey, and those of the Rev. Dr. Adams and Judge Campbell.—*N. Y. Express.*

CENTENNIAL ANNIVERSARY OF COLUMBIA COLLEGE: HISTORICAL REMINISCENCES.

Mr. Belden tells us, in his review of "New York, Past, Present and Future," that "at various times during the early part of last century, the establishment of a seat of learning was proposed, but it was not until 1746 that vigorous measures were set on foot for the accomplishment of this object. A controversy as to the religious character of the intended college was terminated by the adoption of Episcopal forms, and, on the 31st of October, 1754, a charter under the royal seals, giving to the new institution the name of King's College, was obtained." After the revolution, the name was changed to Columbia College.

At the recent Centennial Anniversary of the College Charter, the Rev. Dr. Williams read a very copious and eloquent address, narrating the history of the College from the date of its foundation. He remarked that—

This College was established amid apprehensions and conflicts excited by fears that it would be used, under the guidance of the Church of England, to support the arbitrary power of Great Britain. It was soon seen, however, that these fears were groundless.

John Jay, the framer of the first republican constitution of our state, the first Chief Justice of the United States—John Jay, the patriot and Christian—was one of the practical gifts of this College to the revolution. He showed himself, by his inflexible integrity, to be the Aristides of the revolution, That revolution took from the shades of this College Alexander Hamilton. James Milnor, Robert W. Livingston, Edward Benson, Gouverneur Morris and Henry Rutgers, who were among the early graduates of this institution.

After the restitution of the College in 1784, under the new name, DeWitt Clinton was the first student whose name was entered in the list, Daniel D. Tompkins, another Governor, and also Vice President of the United States, was in the same class. His most enduring monument was the part he took in establishing the common school system. John Stevens, of Hoboken, was among the graduates, and he, and Robert W. Livingston, also a graduate, were the friends and patrons of Robert Fulton.

Coming to later times, in the profession of the law, it excites our gratitude that among her sons set apart for this service, so many have been found who among the entanglements of their profession have kept their career unsullied. Thrice blessed is that community, and thrice armed, whose advocates are resolved never to forget their own dignities amid their encounters with their foes, and who hold the law to be the refuge of innocence and the terror of crime. It is refreshing to remember the honored son of an honored father, who stood among the highest as an equity lawyer, and who among his professional engagements preserved a love of literature—Peter Augustus Jay. Though not an alumnus of this College, yet James Kent for many years occupied a professor's chair within its walls, and Kent's Commentaries were written and used first before the law class in this College. Of medical men we can speak of Bard, Hossack, Mitchell and Post.

To the Christian ministry many graduates of this institution have consecrated their lives. None wielded among them so wide an influence as John M. Mason. I could name, also, Phillip Milledoler, Alexander Proudfit, Gregory D. Bedell, Cornelius R. Duffy, and Hugh Smith.

The institution has lent its influence to others than those who have finished their education within its walls. John Randolph, of Roanoke, the apt scholar, the brilliant critic, though perhaps unsafe leader, was a transient occupant of the College hall. John L. Stephens, genial, self-possessed, acute and active, was also for a time in the institution. He never gave to his College studies great attention, but his practical powers seemed ever to prosper him. His travels in Central America and in the East are known, as is his last great enterprise of establishing a railroad communication across the Isthmus of Panama.

Literary and Scientific Intelligence.

MONTHLY SUMMARY.

The *Canadian Journal* for November says that the month of October, 1854, was the warmest on the records of the Toronto Observatory; and was remarkable for sudden changes of temperature; the mean temperature of the 19th was 9° colder than the mean normal temperature of that day, and that of the 30th was 17° 7 warmer than its mean normal temperature. The amount of rain was small, being the least but two (October, 1841, and 1853,) on the list for the last fifteen years; it was, in short, a warm dry month. . . . A pamphlet entitled "A Letter to the Emperor on the Eastern Question," is attracting attention. Internal evidence would seem to indicate it to be the production of a Pole, but well informed persons attribute it to M. de Persigny. It appears, indeed, very likely that it was written to order, under the very dictation of his Majesty, to serve as a feeler of public opinion. Its whole theme is the reconstitution of the kingdom of Poland by France, as a much surer way of breaking up Russia, than by ravaging its coasts, destroying its commerce, and even dismantling its fortresses. It looks to another season of belligerence, and to the contingency of Russia's still resisting, after the fall of Sebastopol. There can be no doubt that this letter is meant as a pilot balloon, and to prepare the people for the continuance of the war, during the period of the Exposition of Peace. If the Czar intends to be first in this race of enfranchisement, he must lose no time in offering Hungary her freedom; Austria is certainly giving him a fair chance. . . . The author of the brilliant description in *The Times* of the battle of Balaklava,

is reported to be Mr. W. Scott Russell. That letter written on the field of battle has excited admiration in all quarters. Mr. Somerville, "one who has whistled at the plough," is said to be the *Morning Herald* correspondent in the Crimea. . . . Sebastopol is pronounced with the accent on the penult, being analogous to Constantinople, Adrianople, etc. The termination is derived from a Greek word meaning a town. . . . The Government has ordered a copy of every Government *Gazette* containing news of the war to be sent to every sub-postmaster in the kingdom, in order that the contents might be made public. . . . At the burial of Marshal St. Armand, the flags of England and France, for the first time in history, covered the same coffin, and Mussulman cannon resounded in sign of grief at the funeral of a Christian General. . . . John Gibson Lockhart, the son-in-law of Sir Walter Scott, died of paralysis on Saturday evening, the 24th, at Abbotsford, whither he had gone in the hope of recruiting his health. . . . Professor E. Forbes, the eminent professor of natural history in the University of Edinburgh. The Professor was only in his 39th year. . . . English papers announce the death of George Mogridge, Esq., better known as "Old Humphrey," under which name he has, in his numerous writings, long ministered to the amusement and instruction of both old and young. . . . There are 160,000 books in the public libraries of Boston. They will soon be increased to 200,000 volumes. The great city of New York, with colleges and theological schools, has but 295,500 volumes in all its public libraries, while Philadelphia has but 238,500. . . . There are three classes of readers; some enjoy without judgment; others judge without enjoyment; and some there are who judge while they enjoy, and enjoy while they judge. The latter class reproduces the work of art on which it is engaged. Its numbers are very small. . . . After five years of uninterrupted labour, a construction, which for grandeur and solidity surpasses any other work of modern architecture in the States of the Church, has just been completed in the mountains of Albano. It is a bridge of five arcades, placed one over another, and each as high as a house; it has been built in order to form a direct communication over the deep valley between Albano and Aricia, on the road from Naples. . . . It is a curious fact in science, that glass resists the action of all acids except fluoric; it loses nothing in weight by use or age; it is more capable than all other substances of receiving the highest polish,—if melted several times over, and properly cooled in the furnace, receiving a polish almost rivalling the diamond in brilliancy. It is capable of receiving the richest colors produced from gold or other metallic coloring, and will retain its original brilliancy of hue for ages. Medals, too, embedded in glass, can be made to retain forever their original purity and appearance. . . . According to a correspondent of *Herapath's Journal*, steam power is to be superseded by "Poulson's Patent Pendulum T-lever," which will be brought before the public in about a month. Two men in a sitting position will be able to propel a railway engine of twenty-five horse-power, with its full complement of carriages, at any speed to be attained by steam-power. The tenders and boilers of the present engines will be constructed of about one-fourth the weight, and at, say, one-sixth or one one-eighth the cost. The wheels and frames of the present engines will be available for the new ones.

NIAGARA SUSPENSION BRIDGE.—The suspension bridge at Niagara Falls will be finished by the first of January next. The following dimensions will give an idea of the magnitude and strength of this incomparable bridge:—Length of distance from the centre of the towers 822 feet, height of the towers above the rocks on the New York side 89 feet, height on the Canada side 37 feet, height of the track above the water 260 feet, number of wire cables 4; diameter of the cables 10 inches, number of strands of No. 9 wire in cables; 3.659; weight of the entire bridge 750 tons, weight of the bridge and of the heaviest load that can be put on it 1250 tons, greatest weight which the cables and supports can bear 7300 tons.

THE WONDERS OF PHOTOGRAPHY.—At a *conversazione* at the Polytechnic Institution in Paris, a curious illustration was given of the capabilities of photography in experienced hands. Two photographs were exhibited, one the largest and the other the smallest, ever produced by the process. The first was a portrait the full size of life, and the last was a copy of the front sheet of the London Times on a surface scarcely exceeding two inches by three. Both pictures were exceedingly perfect, the portrait, it is said, being more pleasing and far more correct than those usually produced, while the copy, notwithstanding its exceeding minuteness, could be read without the aid of a magnifying glass.

PARLIAMENTARY GRANTS IN AID OF EDUCATION, LITERATURE AND SCIENCE IN UPPER AND LOWER CANADA FOR 1854.

The Legislature has, in the late estimates, granted £20,376 in aid of various colleges and academies in Lower Canada; £17,265 of this sum are derived

from exclusively Lower Canadian sources—leaving but £3,111 to be provided for out of the general revenue, to equal a like sum granted from the revenue in aid of colleges, &c., in Upper Canada. £15,000 are also added to the School Grant of the two sections of the Province. In addition, £250 are granted to each of the Faculties of Medicine in McGill College, Laval University and Montreal School of Medicine, Lower Canada; and the same amount to the School of Medicine, Queen's College, Kingston, Upper Canada; £1200 to the Nautical College, Quebec; £500 to the Industrial Farm connected with University College, Toronto; £400 to the Quebec Magnetic Observatory; £1,200 to the Toronto Observatory, including the purchase of some instruments; £2,000 to the Parliamentary Library; £121 13s. 4d. to M. De Rottermund, for his expenses in procuring, in Paris, books, maps and scientific objects for the use of the Province; £5,000 towards the expenses in contributing to the French Industrial Exhibition; £2,000 additional for the Geological Survey of the Province, and \$4,300 in aid of various Institutes and Literary Societies in Upper and Lower Canada.

ELECTRIC TELEGRAPH BETWEEN ENGLAND AND AMERICA.—The project of connecting telegraphically, Great Britain with America is at the present moment seriously engaging the attention of scientific and commercial men. Daring engineers are sanguine of the practicability of laying a submarine cable directly across the Atlantic, from Galway to Cape Race, in Newfoundland. The chief question is, whether, if a line were laid, an electric current can be passed through three thousand miles of a cable! Professor Faraday and others, whose opinions must be regarded as weighty, believe that it could not. And so (says the Glasgow Commonwealth) by far the larger proportion of scientific men favor the route to America *via* Scotland.

"To escape the at present dubious ocean path," says a well informed writer in the current number of the Quarterly Review, "It is proposed to carry the cable from the Northernmost point of the Highlands of Scotland to Iceland, by way of the Orkney, Shetland, and Ferroe Islands—to lay it from Iceland across to the nearest point in Greenland, thence down the coast to Cape Farewell, where the cable would again take to the water, span Davis' Straits, and make right away across Labrador to Quebec. Here it would lock in with the North American meshwork of wires, which hold themselves out like an open hand for the European grasp. This plan seems quite feasible, for in no part of the journey would the cable require to be more than 900 miles long; and as it seems pretty certain that a sand bank extends, with good soundings, all the way to Cape Farewell, there would be little difficulty in mooring the cable to a level and soft bottom. The only obstacle that we see is the strong partiality of the Esquimaux for old iron. The mere expense of making and laying the cable would not be much more than double that of building the new Westminster Bridge across the Thames.

THE MAGNET.—The magnet or loadstone is an oxygen of a peculiar character, found occasionally in beds of iron ore. The colors vary in different specimens, but usually of a dark grey hue, and has a dull metallic lustre. It was first discovered in Magnesia, Asia, hence the name magnet. It is found in considerable masses in the iron mines of Sweden and Norway, in the Isle of Elba, in different parts of Arabia, China, Siam, in the Phillipian Islands, and in North America. Though commonly met with in irregularly formed masses only a few inches in diameter, yet it is found of much larger size. One carried from Moscow to London, a few years since, weighed 125 pounds, and supported more than 200 pounds of iron. Artificial magnets are so constructed as to have a greater intensity of attractive power than the natural ones. It has likewise been found that meteoric stones possess a strong magnetic virtue, resembling the loadstone of the earth.

DISCOVERIES IN THE OLD RED SANDSTONE IN SCOTLAND.—The *John O' Groat Journal* says, within the last few weeks two very important and highly interesting discoveries have been made in the Lower Old Red Sandstone beds of Wick and Thurso, by Mr. Peach of this place, the well-known naturalist and zoologist. Fossil wood and shells, the existence of which in Caithness was hitherto unknown, have been abundantly found *in situ*; the former at Thurso and both wood and shells at Wick and in the vicinity; the shells having undergone considerable abrasion. These are facts extremely interesting to geologists, and will give new life to the explorers of the old red sandstone formation, bestowing as they do, positive evidence of what has formerly been considered at best but doubtful—the existence of vegetable organism in the land of the Old Red period

"All forms that perish other forms supply;
By turns we catch the vital breath and die."

INSTANTANEOUS FLOWERING OF PLANTS.—On Saturday, M. Laurent, of Onslow House, Brompton, exhibited to a few visitors some experiments in the instantaneous flowering of plants by a process said to be peculiar. The

plants to be experimented upon, a selection of geraniums and a rose tree were placed in two deep boxes, of, to all appearance, common garden mould. and, having been covered with glass shades or bells, each having a small hole in the top, which was at first plugged, M. Herbert proceeded to water them, if we may use the word, with some-chemical amalgam, which acting upon the chemicals already in the earth, for it was evidently, and, indeed, was admitted to be prepared for the purpose, caused a high degree of heat, as was evinced by the rising of a steam or vapor within the ball, which was allowed in some measure to escape through the hole alluded to, and, indeed, by the feel of this vapour, M. Herbert appeared to regulate the heat necessary to effect his object. In about five or six minutes from the commencement of operations, the buds on the geraniums began to open, and within ten or twelve minutes they were in full bloom, and the blossoms distributed among the ladies present. The experiment with the rose-tree was unsuccessful, M. Herbert alleging that it had only been in his possession about half-an-hour, and he had, therefore, not had sufficient time to prepare it. From this it will be seen that the whole of the operation is not so instantaneous as would appear to the mere looker-on at the moment of blossoming; but, nevertheless, the invention may prove useful to those who wish to deck their boudoirs or drawing-rooms with flowers before nature brings them forth in due course.—*Observer.*

ANCIENT BABYLON.

It may be known to many of our readers that the French Government has employed a party of gentlemen to explore the site of ancient Babylon. From reports just received from them it appears that they have ascertained, beyond reasonable doubt, that the ruins beneath a tumulus called the Kasr are those of the marvellous palace-citadel of Semiramis and Nebuchadnezzar. They are in such a state of confusion and decay that it is impossible to form from them any idea of the extent or character of the edifice. They appear however, to extend beneath the bed of the Euphrates—a circumstance accounted for by the change in the course of the River. In them have been found sarcophagi, of clumsy execution and strange form, and so small that the bodies of the dead must have been packed up in them—the chin touching the knees, and the arms being pressed on the breast by the legs. These sarcophagi have every appearance of having been used for the lowest class of society; but notwithstanding the place in which they were found, the discoverers are inclined to think that they are of Parthian not Chaldean origin. There have also been found numerous fragments of enamelled bricks, containing portions of the figures of men and animals, together with cuneiform inscriptions—the latter white in colour on a blue ground. According to M. Fresnel, the chief of the expedition, these bricks afford a strong proof that the ruins are those of the palace of Nebuchadnezzar, inasmuch as the ornaments on them appear to be sporting subjects, such as are described by Ctesias and Diodorus. The foundations having been dug down to in certain parts, it has been ascertained that they are formed of bricks about a foot square, united by strong cement, and they are in blocks, as if they had been rapped in all directions. In a tumulus called Amran, to the south of Kasr, interesting discoveries have also been made. They appear to be the ruins of the dependencies of the palace situated on the left bank of the Euphrates; and they contain numerous sarcophagi, in which were found skeletons clothed in a sort of armour, and crowns of gold on their heads. When touched, the skeletons, with the exception of some parts of the skulls, fell into dust; but the iron, though rusty, and the gold of the crowns, are in a fair state of preservation. M. Fresnel thinks that the dead in the sarcophagi were some of the soldiers of Alexander or Seleucus. The crowns are simple bands, with three leaves in the shape of laurel on one side, and three on the other. The leaves are very neatly executed. Beneath the bands are leaves of gold, which it is supposed covered the eyes. From the quantity of iron found in some of the coffins it appears that the bodies were entirely enveloped in it; and in one there is no iron but some ear-rings, a proof that it was occupied by a female. The sarcophagi are about two and three-quarter yards in length by between half and three-quarters of a yard wide, and are entirely formed of bricks united by mortar. In addition to all this, a tomb containing statuettes in marble or alabaster, of Juno, Venus, and a reclining figure wearing a Phrygian cap, together with some rings, ear-rings, and other articles of jewellery, has been found, as have also numerous statuettes, vases phials, articles of pottery, black stones, &c., &c., of Greek Persian, or Chaldean workmanship.—*Literary Gazette.*

A MAGNIFICENT EYE OF SCIENCE.

The Telescope recently procured for the Observatory at Ann Arbor, Michigan, is the third in size in the world. The object glass is thirteen inches in diameter. Few persons have a correct idea of the time, the toil

and the skill requisite to prepare one of these glasses. First, there are the manufactures of the rough disks. A mass of glass weighing about 800 lbs. is melted together. When in a state of perfect fusion, the furnace is walled up, and the whole is left to cool gradually. The cooling process occupies some two months. By this process the glass is annealed. Afterwards the furnace walls are removed. The entire mass is then fractured, the manner of doing this is a secret with the manufacturers; but it is accomplished in such a way that every piece is homogeneous in refractive power. The pieces are next softened by heat and pressed into moulds, giving disks of different size. The telescope-makers purchase these and grind them into the required thickness and lens-form. Two separate disks, one of crown, and the other of flint glass, are necessary to form an object glass. One of these is concave, the other convex. It is by the union of the two that the object glass is made achromatic. The grinding is a slow and most difficult process, as the utmost exactitude must be attained. First, the edge is ground to enable the maker to see whether the glass is clear and without air bubbles. It not unfrequently happens that many disks have to be rejected. When a very superior glass is finished, it is of great value. The twelve inch glass of the Cincinnati Observatory alone cost \$6,000. And so it is, that these great lidless eyes of science are carved and polished, and turned towards the upper deep, unravelling the mighty lace-work woven in the loom of God.—*Chicago Journal.*

RUINS OF THE ALEXANDRIAN LIBRARY.

It is stated in the London News, that Captain Newnham, an Admiralty agent on the Southampton station, who has just returned from Alexandria, visited, while there, the ruins of the Alexandrian Library. A large mound in Alexandria has been believed for ages to mark the spot where once stood the famous library which was burned by the Caliph Omar. This mound is now in process of removal, and splendid houses are to be built on its site.—While Capt. Newnham was there, an immense stone of blue granite was dug out, which weighed several tons, and is covered with apparently Coptic letters. The Captain was unable to take a tracing of these letters. Beneath the mound the remains of a building, something like a star fort, have been discovered, and masses of double columns—also signs of wells of water, and of places for heating. The brick work is of immense strength and thickness—the brick being not so thick as English ones, but longer and broader. An immense number of Arab boys and girls were engaged in carrying away the rubbish in baskets.—Capt. Newnham picked up many curiosities there, such as pieces of conglomerated brick, mortar and metal work, bearing evident marks of having being fused together by intense heat. The Captain learned in Egypt that the French savant who discovered the buried city of Socarah, beyond Grand Cairo, was picking up an immense number of treasures for transportation to France.

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