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# JOURNAL OF EDUCATION,

Upper  Canada.

Vol. VII.

TORONTO: SEPTEMBER, 1854.

No. 9.

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## INTERESTING AND VALUABLE REMARKS ON THE CHARACTER AND MANAGEMENT OF PUBLIC LIBRARIES.

From Papworth's "Museums, Libraries and Picture Galleries."

In determining the general division of books, many circumstances render desirable the adoption of that prefixed to Brunet's "*Manuel du Libraire*," &c. 8vo. Paris, 1844, of which the principal features of each subject are alone extracted on the present occasion. Each branch should have its history, mode of study, theory, dictionaries, and general treatises prefixed viz:—

- I. Theology.—*a.* Bible, 647 works. *b.* Liturgies, 112. *c.* Councils, 40. *d.* Fathers, 344. *e.* Systematic Theology, 992. *f.* Singular opinions, 75. *g.* Judaism, 15. *h.* Oriental superstitions, 38. *i.* Freethinking, 50.
- II. Jurisprudence.—*a.* Natural and social law, 10. *b.* Political law, 12. *c.* Civil and criminal law, 742. *d.* Ecclesiastical law, 130.
- III. Sciences and Arts.—*a.* Philosophical sciences, 900. *b.* Physics and chemistry, 262. *c.* Natural sciences, 20.1. *d.* Medical sciences, 1259. *e.* Mathematics, 1100. *f.* Occult philosophy, 178. *g.* Fine arts, 1179. *h.* Mechanical arts and trades, 89. *i.* Gymnastics, 171. *k.* Games, 36.
- IV. Belles Lettres.—*a.* Philology, 1495. *b.* Rhetoric, 220. *c.* Poetry, 4711. *d.* Prose fictions, 1173. *e.* Criticism, 509. *f.* Dialogues, 36. *g.* Epistles, 273. *h.* Polygraphists, 453. *i.* Collections and extracts, 116.
- V. History.—*a.* Prolegomena, 1866. *b.* Universal, ancient and modern history, 71. *c.* History of religion and superstition, 1841. *d.* Ancient history, 335. *e.* Modern history, 5705. *f.* Archæology, 3122.
- VI. Encyclopædias, journals, reviews, &c.

The figures above attached refer to the number of *works*, not of volumes, mentioned under each head in Brunet's Manual. Experience has shewn, in a library of more than 10,000 volumes, that they averaged 2½ volumes to a single work or title.

Each member of the Library Committee should give, in addition to his general duties, his attention to the formation or perfection of that branch of these divisions with which taste, opportunity, or education may have made him well acquainted.

In determining the probable extent of the accommodation to be provided for each branch of whatever division of the books may be adopted, the great point is to decide what is to be the general or particular *object* of the library in question, public or private; and if public, whether it is to be accompanied by a reading room, or whether the books are ever to leave the building, *i. e.*, to be a *lending* library. Libraries are not storehouses merely, but should be the *fittest* place of study, in which the overawing abundance of literary resources and of applicants for them, must secure that precision of working, and attention to the public, both in matter and form, which can never be attained in the secluded study of the German author, or in the turmoil of a French café.

Of course the greater the accessibility to a reader, the more restriction will there be as to the books in a library; the regulations as to the admission of books, require notice at some length. The recommendation to the librarian ought to carry some weight; it is always desirable to have a register for the titles of books that are wanted by the readers, with the understanding that they will be recommended for purchase, if a certain number of persons ask for them; sometimes a number, two, five, or ten, &c. if fixed beforehand in proportion to the extent of the library, will give a desirable freedom of choice.

Public libraries, to be successful, should be well supplied with new books, and this causes a difficulty in preventing the reading room from becoming a sort of club, which it ought not to be. The librarian may give every facility to those who want to acquire information or to improve themselves, but the reading room ought not to be merely a saloon to which people could go and spend five or six hours at leisure with the first book whose title they may remember; the setting apart therefore a room for reading periodicals, such as literary and scientific journals, &c., is a really grave question, and is not here recommended; the general reading room, if supplied like those of the British Museum and Bibliothèque Nationale at Paris, with dictionaries of all sorts, the best editions and translations of classic authors and principal polygraphists, the elementary and general treatises upon the arts and sciences, the best works upon ancient and modern history both general and particular, topographical works, the principal voyages, the accademic collections, the blue books, and a gazette or annual register, with a few of the literary and scientific journals—will always be sufficiently amusing for a lounge in a public library; such a reading room is nearly a representation of the library; which ought to possess these large collections, such as memoirs of foreign societies, laws, &c., not

to be found in private unprofessional libraries, and of which the want is more felt in provincial towns than anywhere else.

There are books of universal interest which should not be wanting in any library; but at the same time, in order to make a provincial public library perfectly useful, the wants of the population ought to be first consulted; it is not intended here to adopt the idea that, "It should never be attempted to use, as a popular library for the working classes, the large libraries intended for a superior class of readers," except in one sense, viz., that to be well supported by the lower classes, the library must contain books that a narrow-minded librarian might consider only amusing. It might be sufficient for the committee to join with themselves on each occasion the most regular readers, and go to the ballot for any book proposed; an absolute majority should be required, or else grave inconveniences may occur. In such a system, suggestions from the working classes would receive attention, and all works would be admissible, for religion, and politics, and novels, could not be excluded from the shelves. The deficiency of modern foreign works in almost all English libraries, is mentioned as something very observable in relation to the great spread of the knowledge of the French and German languages.

The statistics of the mechanics' institutes shew that the members read a little history and political economy, and a great deal of fiction; in the United States, the same thing occurs, with the addition of travels, agriculture, and horticulture, while in England, the demand for works on the different sciences is gradually increasing. In addition to political, military, civil, literary, artistic, scientific, and natural history, the trustees will have to provide works of local importance; for instance, Manchester, in England, possesses a large class of operative naturalists, a set of botanists, and a museum of natural history; Birmingham and Newcastle have given attention to geology; in the Midland Counties, the works most in demand seem to be the older historic chronicles and works of similar interest. The demand for books relating to different occupations and trades is said to be very limited compared with that for the above-mentioned branches of literature; it is not only probable, but given in evidence, that miners, for instance, never wish to study mining, thinking that they know more about mines than the writers of books: in short, popular libraries must have novels and light literature.

When therefore the committee has taken into consideration the nature of the works generally desirable, and has made some calculation, based upon the extent to which they will favor particular departments, the division of the number of volumes in each group by 46 may be fairly supposed to give the architect the number of times in which a space two feet high by two feet wide will be required: i.e. four square feet will hold about 46 volumes on an average throughout a library, be it a public establishment or a large private collection. This is easily tested by application to even a moderate bookcase.

Among the regulations specially affecting large public libraries abroad are the following: the public admitted to view the library, but not the reading rooms; children under sixteen (on a note of their names and addresses signed by a parent or schoolmaster), and between sixteen and twenty years (upon production of their tickets of admission to a college or great school), allowed to be readers, but in some cases those under sixteen enter with a proviso that they accompany a person above twenty-one years old, who is to be responsible for their conduct; no admittance in the evening except to readers engaged in serious study; books brought in by a reader, to be shown to an attendant, who will give passes for them; in some places there is no such pass given at all, but on the contrary all books once in the library must remain there; it is forbidden to walk about, to converse, to stand near the readers or to look at their books, to look at papers on the desks of the attendants, to sit anywhere but at the tables, to write upon the furniture or walls, to sully the building in any way, or to attempt to pass into the interior. Many of these ordinances are fortunately not thought requisite in writing, as warnings to readers at the British Museum, where they are even permitted to assist themselves to the books of reference which are placed in the cases round the room; on the continent persons are reminded that they are not to touch anything exposed to view, not to use the steps and ladders, in short not to lay hands upon anything not delivered to them by the attendants, except, in a few cases, the catalogues.

The directions issued for the British Museum, which may be varied according to circumstances, stand as follows:

"The reading room of the museum is open every day, except on Sundays, on Ash-Wednesday, Good-Friday, Christmas-Day, and on any Fast or Thanksgiving Days ordered by authority: except also between the 1st and 7th of January, the 1st and 7th of May, and the 1st and 7th of September, inclusive.

"The hours are from nine till four in the months of November, December, January, and February; from nine till five in the months of September, October, March, and April; and from nine till six in the months of May, June, July, and August, with the exception that on Saturdays in these last months it closes at five. [The hours of some evening libraries range between five and eleven.]

"Persons under eighteen years of age are not admissible.

"The librarians are strictly enjoined to use all possible despatch in supplying the readers with the printed books or manuscripts they may apply for; but in so extensive a library it may not be possible to find every article immediately.

"Readers, before leaving the room, are to return the books or manuscripts they have received to an attendant, and are to obtain the corresponding ticket; the reader being responsible for such books or manuscripts so long as the ticket remains uncanceled.

"Readers will be allowed to make one or more extracts from any printed book or manuscript; but no whole, or greater part, of a manuscript is to be transcribed, without a particular leave from the trustees. The transcribers are not to lay the paper, on which they write, on any part of the book or manuscript they are using; nor are any tracings allowed without particular permission of the trustees.

"No person is, on any pretence whatever, to write on any part of a printed book or manuscript belonging to the museum; but if any one should observe a defect in such book or manuscript, he is requested to signify the same to the officer in waiting, who will make proper use of the information.

"It may be sufficient merely to suggest, that *silence* is absolutely requisite in a place dedicated to the purposes of study.

"N.B. Readers are, under no circumstances, to take any book or manuscript out of the reading rooms."

In compliance with the continental system of education, translations of the classics are denied to young persons under sixteen years old, and to those above that age and under twenty-one who do not show that they are at a college; there must be a power in the hands of the librarian to deny certain books to youths and to ladies; besides these there are regulations in the libraries abroad, which do not allow him to give out *editiones principes*, etc., except at discretion; to issue engravings, maps, plans, etc., until they are bound, etc., or to furnish any works until their edges have been cut, and the proper process of collation, stamping, placing, numbering, and cataloguing has been performed; manuscripts are to be asked of the librarian himself, and to be read at a separate table; particular books, periodicals, collections, and literary and scientific journals in parts, are only to be read at reserved tables, on which no ink is allowed, and where extracts or sketches must be made in pencil only; evening readers are expected to ask for the works which they will want, on the evening or morning beforehand; if only one attendant be in the room, he is to be excused leaving it in search of books; at the British Museum, manuscripts are not furnished half an hour, and printed books a quarter of an hour, before closing; in some libraries the latter are not given half an hour before that operation. A good specimen of the mode of asking for books is offered by the example of that used in the British Museum, of which a copy is subjoined.

(IN FRONT.)

Press Mark.	Title of the Work wanted.	Size.	Place.	Date.

(Date)

(Signature).

Please to restore each volume of the Catalogue to its place, as soon as done with.

(AT THE BACK.)

READERS ARE PARTICULARLY REQUESTED

1. Not to ask for more than *one work* on the same ticket.
  2. To transcribe *literally* from the Catalogues the title of the Work wanted.
  3. To write in a plain clear hand, in order to avoid delay and mistakes.
  4. Before leaving the Room, to return the books to an attendant, and to obtain the corresponding ticket, the READER BEING RESPONSIBLE FOR THE BOOKS SO LONG AS THE TICKET REMAINS UNCANCELLED.
- N.B. Readers are, under no circumstances, to take any Book or MS. out of the Reading Rooms.

In some French libraries the reader gets a numbered pass on entrance, and an attendant calls the numbers in regular order at the close; but this seems unnecessary, for at the British Museum, a bell, rung five minutes before the time, is obeyed by the restoration of the books by the readers. The supply of books is variously determined abroad as follows: No reader to have more than one book at a time; than two volumes at a time, and only one of each work that may happen to be in more than one volume, especially if in octavo or duodecimo; than two works at a time; than three books during one time of service, the third not to be given while any other demands remain unsupplied; while the most liberal arrangement on the continent does not allow many books, but leaves the quantity of the supply to the discretion of the librarian: books in parts, and journals, not to be given out, except

scientific or law periodicals, at discretion. In the reading room of the British Museum there is practically no difficulty in having even more than fifty works at a time, and unbound works, or parts of works, are frequently delivered in reasonable cases.

It is very rational to lay down rules that books of folio or quarto size should be laid flat on the desk or table, so that the backs may not be broken; that no book should be weighted by another to keep it open; and that no books should be held upon the knees. Almost all libraries provide pens, ink, and blotting paper (the Berlin Royal Library does not allow pen and ink; notes must be taken in pencil only), and some add paper weights and paper knives; it is curious to observe that a French regulation states that if a penknife be wanted, it must be asked of an attendant and returned to him. In some cases half a sheet of letter-paper is given to the reader: of course it should not be placed on the books, which are not to be put between the paper and inkstand. It is a matter of discretion with the committee or librarian, whether any tracing should be allowed; artists accustomed to that practice might be permitted to use tracing paper that was not greasy or oiled, during good behaviour, as in some continental libraries, where *papier végétal*, or *à la gelatine*, or *de glace* is stipulated; in others, especially when manuscripts are being read, tracing, bread crumbs, the use of compasses and colours, are absolutely prohibited: colours are allowed in the British Museum. There can be no question that blotting, underlining, writing, sketching, or folding leaves in a book, are instances of bad behaviour, deserving immediate expulsion, but these are sometimes observed; it is found to be a good plan to insert in the registry of admission an engagement to replace precisely, such books, binding included, or even to pay double the price of the entire work, at the option of the librarian; such spoilt books, although replaced, to remain the property of the library.

If many persons require the same book at a time, it should be given to the applicant whose study is nearest the subject of the book; if this does not apply, then it must be bestowed at the pleasure of the librarian.

In England, where comfort is so much studied, it is hardly necessary to announce, as is the practice abroad, the days on which warming the rooms will commence and cease: at all events if the times are fixed, it will prevent many complaints. Where stoves or open fires are used, it is customary in France to forbid the approach of readers to the fire; and this is even the case in the hall of the reading room at the British Museum. Sometimes it is ordered that no fire, nor any light except in a closed lantern, be taken into a library.

Although scarcely 50 libraries out of 350 public ones abroad and at home lend on any condition, there can be no doubt that, in general, the books of public libraries in England will, to a great extent, be lent, as is the case in numerous instances abroad: it may be said that all the public libraries in France, Belgium, and America are lending libraries (nearly all those in the United States lend their books); and in Denmark, where the loan of books is considered to be the principal utility of public libraries, even the University library is open on liberal arrangements. This University library of Copenhagen, with 150,000 volumes including pamphlets, and increasing at the rate of 600 volumes per annum, lends about 15,000 volumes a year to the students whether resident or not in the college; each work is lent for six weeks, but to no one out of the city unless the borrower be actually engaged on a literary work. At Ypres, a library containing from 9,000 to 9,500 volumes, representing about 3,400 works (without counting pamphlets), is divided into two parts, viz.: *a.* the true "library" books, which are only lent to the class of important personages, and *b.* about 1,500 or 2,000 volumes of less value, are lent indiscriminately. At Stockholm, a library of 80,000 bound books, growing at the rate of 8,500 volumes a year, and open daily from eleven till two, lends about 6,000 annually.

In university and other corporation libraries, books are sometimes lent upon the introduction given by a particular professor or curator, who becomes responsible; and most libraries of societies are lending libraries for the members. In the Edinburgh University library, twenty-five volumes are lent at a time to any individual member.

It is true that the experience of some libraries shews that the loan of books, if not prejudicial, is at least inconvenient, from the necessity of careful applications for their return, yet in the university city of Ghent, between 5,000 and 6,000 volumes are lent in a year without any damage or loss. It has been calculated that a loss of about five per cent. on the books annually added, may be stated as the average reasonable depreciation of a lending library; and this loss and disadvantage may be chiefly ascribed to the want of good regulations, especially as to period of loan and vouchers of respectability, which would secure the library from any loss, except that of fair wear and tear, which must always be attendant upon the system, and forms the most considerable objection to it; Siou College library has not, in twenty years, lost twenty-five pounds worth of books out of a collection of more than 35,000 volumes. In Paris, great loss has resulted from the insufficiency of the regulations respecting the return of books, and it is reported to be notorious, that a considerable number of books upon one subject have been absent for years without being returned. In

the New York Mercantile library, from ten to twenty copies of many books are worn out in the first five years of their circulation; in fact, more are damaged than lost.

It is recorded that in the United States, a library, once a lending library, has hardly ever ceased to be so; though some libraries, once public, have nearly ceased to be so. Complaints have been made in some cities about abuses in lending libraries, but they may be supposed to arise in consequence of inadequate regulations, and might have been obviated by better management; there should certainly be an assurance of responsibility equal to double the value of the book lent out; the Philadelphia library lends to any one depositing three times the value of the work, and paying sixpence for its use; and University College in London, lends to its students on a deposit.

The experience of the Mechanics' Institutes in the midland counties shews, that the circulation of each volume in their libraries amounted to six issues annually: at Liecester, a library of 3,000 volumes showed 13,000 issues, and, subtracting books that do not go out, the average was perhaps thirteen or fourteen issues per volume a year; but at least three times the number of volumes may be taken safely, as the average of the total issues.

Some libraries refuse to issue works in folio, or such as are too heavy to be easily carried; others restrict the borrower to the use of two works, and of those only five volumes altogether, and of works in several parts only one part at a time.

If the lending library be small, a register by catalogue titles, and if it be large, two registers (one by catalogue title, the other by the borrowers' names) must be kept of books lent; and it seems good to follow nearly the course adopted abroad, of filing duplicates of a ticket containing some, if not all, of the following particulars, viz.: the name of the library, the date, the number of the ticket, the press mark, &c., as given above in the form for daily use, the state of the book, the value, the penalties hereafter named, the date till which it is borrowed, the signature and address of the borrower, his authorization of delivery, and the signature of the librarian acknowledging its return; the book must be supposed to be in good condition if not otherwise expressed upon the ticket when it leaves the library, and must be returnable upon demand, even before the expiration of the time stated, however short a time it may have been out of the library; so that, in fact, the borrower gives a bond to the library, and is only to be acquitted of the possession of the book, by receiving the librarian's dated signature to the ticket, to which he is not entitled until the book has been examined upon its return.

The general duration of the loan varies from fifteen days for an octavo and less sizes, and thirty days for all above; to terms of one month for all sizes, but in some libraries three months is allowed; and if the works are not returned upon the first demand, the librarian, or the committee, should refuse another loan to the offender for at least three, and not more than twelve months. Books may perhaps be safely lent for two months, but if asked for by another person after the first fortnight, they should be, as a matter of course, demanded by the librarian; even persons employed in the library should not be allowed to borrow without passing through these forms; the borrower must be a known person, an inhabitant in the town, and able, if the books be lost, to replace them; strangers and foreigners wishing to borrow, may be expected to produce a recommendation from a person who will become responsible. No book should be redelivered to the same person, until the expiration of a week from its return; at the very least it must go back to the library and be taken out by a fresh ticket, and the last person using it should be postponed to any fresh applicant. Also no book should be out during the holidays, when the registers should be cleared, a survey of the library made, and a report prepared by the committee. It would be very useful also to arrange, that all subjects of dispute as to peculation or damage should be arbitrated by some fixed person.

The duties generally imposed upon the librarian of a public museum are, to keep the library in order; to see that books are forthcoming when asked for; to have them bound by leave of the committee, and well preserved as far as the funds allotted for the purpose will allow; to class the works according to the arrangement adopted by the owner or committee; to keep the registers of accession and loan, the inventory of objects and catalogues; to recommend and advise the committee as to works for purchase; to buy the books that may be ordered; and to report from time to time on the collection. Whoever is entrusted with the direction of a large library, should particularly apply himself to the recommendation of works which sooner or later will be asked for, and consulted with profit, by men who desire to examine things thoroughly. He is also sometimes, and should perhaps invariably, be made responsible for losses which he does not trace to the offender. In some foreign libraries, it is expressly counted amongst the regulations that the librarian is to be polite, and that he is not to be absent, except from illness, for more than one space of service at a time. All orders to his subordinates should pass through his hands.

The possession of a good catalogue is of more importance to the readers and consultors of a library than to the librarian himself, be-

cause, if that gentleman be at all equal to his task, he knows the books and their places perfectly well. M. Van de Weyer's opinion is expressed in these words, "The librarians who seem to underrate the value of catalogues, want to make themselves personally indispensable." With respect to the catalogue, as well as to the arrangement of a library, every error is a great danger, which cannot be avoided except by having a sufficient number of clerks to take up every book as soon as it arrives at the library, and by employing sufficient space to place the books suitably from the commencement, when they may actually become a sort of classed catalogue in themselves. Every acquisition should be collated, numbered, and entered in the registry of arrivals, and be stamped with the name of the library on the title and on several other pages; the use of the register is to shew the rate of additions, their prices, the circumstances under which they were received, and their state; it also forms a check upon the librarian, by shewing the date of entry in the catalogue. When stamped, the librarian has to indicate the number, class, division, and section, title and author's name, on the blank form prescribed in the catalogue, and to place it among its companions. The act of giving a location appears to be the great source of trouble to librarians; when placed to the satisfaction of the official, he has to mark, on the inside of the book and on the form, the notation of its position in the library; it is then ready for delivery to the readers, who of course cannot get it until it is entered in the catalogue or catalogues. There are many ways of conducting this part of the librarian's business, but if the book be stamped within three days of its arrival, and in as many weeks be entered in the catalogue, the librarian should be considered to work well; in some cases three months is not too much for a decision on a difficult book. The system of carbonic ink, or manifold writing, offers many advantages by abolishing the delay and errors arising from a large staff of clerks. It enables a librarian, who understands, and will do, his duty, the opportunity of making as many sorts of catalogues as he pleases. He has,

1st. A registry according to numbers, which shews the date of the arrival and stamping of every book, its price, donor or seller, state, class, division and section, position in library, and date of entry in catalogue.

2nd. An inventory, called a hand catalogue or press catalogue, according to the position of the book in the library, which will shew at every survey whether any book be missing, and if so, whether it is to be found in the registry of arrivals. This, and perhaps the preceding one, should be kept in duplicate at the Town Hall.

3rd. An alphabetical catalogue by names of authors.

4th. An index of anonymous works, and of the many different subjects of which some account is to be found in the library.

5th. An alphabetical catalogue by titles of subjects.

6th. A classed catalogue, with observations upon the books, as to price, rarity, printers, binding, contents, value, &c.

In these four last, the same book may be entered many times, and the catalogues may be very voluminous; but the essential feature of the establishment of a library, public or private, large or small, *i.e.* the saving of time to the reader, is more certainly accomplished: in such catalogues, a judicious librarian will even insert the popular names of books.

The fourth catalogue is mentioned particularly as being suggested by that in the catalogue of the library of the London Institution, of which the "Introductory Preface" contains some good remarks on the importance of classed catalogues. It is not without deference to this and the other systems of classification, that Brunet has been taken above as a model; but one recommendation of it has great weight, namely, that it is a work which is sure to be in every large library, whereas there is no certainty of finding the works of the authors of more than *thirty other systems*. Such was the number examined by the Royal Dublin Society (a trouble how rarely likely to be taken!) which adopted an alphabetical catalogue by names of authors and popular titles, with a classified index at the end, for a library of more than 10,000 volumes.

In the only published volume of the new printed catalogue of the library of printed books in the British Museum up to 1839 (fol. London, 1841), the ninety-one rules, approved by the trustees, are given at full length. Audiffredi's commencement of the catalogue of the Casanate library at Rome, is quoted by M. Panizzi with approbation. Watt's *Bibliotheca Britannica* is an example of the catalogue alphabetically arranged by titles of subjects; it may be said, that nearly all classed catalogues ultimately resolve themselves into catalogues by names of authors.

The want of accurate catalogues is stated by M. Guizot to be one of the chief causes of the losses in the lending libraries of France; and this danger is obviated in the United States by the course adopted in nearly all the libraries containing more than 1,000 volumes, of having a printed catalogue. The New York State library publishes a catalogue every five years and a supplement annually. Whether it be reprinted every five or ten years, a printed catalogue is a desideratum which may easily be obtained for the largest libraries in the world; and if the library be well managed, although the publication of the catalogue

may be attended with some expense at first (if such publication has been delayed too long), yet the formation of the catalogue need not be costly.

#### VICTORIA, AS A QUEEN, A WIFE, AND A MOTHER.

The following passages are from a sketch of Queen Victoria, written by Mrs. S. J. Hale, for the *Woman's Record*. The interesting view in which the Mother of the Queen appears will be readily appreciated; a noble woman truly, to whose wisdom and fidelity the virtues of Victoria are a lasting tribute of honour:—

Victoria, the reigning Queen of Great Britain and Ireland, was born at Kensington Palace, May 24, 1819. Her father was Edward, Duke of Kent, fourth son of George III., and her mother was Victoria Maria Louisa daughter of the Duke of Sax-Cobourg. Left a widow when her delicate infant was about eight months old, the Duchess of Kent devoted herself to the great purpose of training her daughter to be worthy of the crown which it seemed probable that she might wear. Queen Victoria is, therefore, the exponent of female nature rightly cultivated for the highest station a mortal can inherit by birth. The means by which this instruction was perfected, and the results to humanity, are studies for the statesman, philosopher, and Christian.

In our brief sketch we shall only allude to some of the small circumstances, yet really great events, because influencing a mind that was to have a vast influence on other minds. The ordering and training of Queen Victoria was entirely the work of her wise-hearted mother, and chiefly accomplished by female agencies. That her education was of the highest and most perfect order for her station, there are ample proofs; it has given to the greatest monarchy in the world, the best sovereign the world contains; the best of her royal line; the best, morally speaking, that ever sat on England's throne. More than this, Victoria was trained to perform all her duties; she is an accomplished lady, as perfect in her feminine, as in her queenly character; a dutiful daughter; a loving wife; a watchful mother; a kind mistress; a generous benefactor; an exemplary Christian. There are no startling contrasts; no weak inconsistencies in her conduct. Such uniform adherence to the right and proper, under circumstances where selfish propensities are so often stimulated and so easily gratified, must be the result of the conscientious principle early and unceasingly cultivated. In this lies the germ of all moral goodness, and the element of all true greatness. From conscientiousness, enlightened by the Divine precepts, are educed the virtues of obedience, temperance, truth, justice, mercy, prudence, fidelity, benevolence and self-control, while the sweet feelings of love, hope, and faith, whose union and exaltation form the crowning grace of piety, owe the best and holiest charm to the same principle of right. Let us see how the teachings of a mother could thus lead her child in the way of righteousness, whose end is always happiness. Before the birth of this precious child, the Duchess of Kent had shown—in the previous circumstances of her life, and particularly, in the personal sacrifices and risks she endured, when, leaving her own home in Germany, she hastened to England, so that her offspring might be British born—her deep devotion to duty, and that innate wisdom which has guided her through every task and trial. The Duchess of Kent nursed her infant at her own bosom; always attended on the bathing and dressing; and as soon as the little girl could sit alone, she was placed at a small table beside her mother's at her meals, yet never indulged in any except the prescribed simple kind of food. Thus were the sentiments of obedience, temperance and self-control early inculcated and brought into daily exercise.

The Duke of Kent died in debt for money borrowed of his friends. The Duchess instructed the little princess concerning these debts, and encouraged her to lay aside portions of money which might have been expended in the purchase of toys, as a fund to pay these demands against her deceased father. Thus were awakened and cultivated those noble virtues, justice, fortitude, fidelity, prudence, with that filial devotion which is the germ of patriotism. And thus throughout all the arrangements during the first seven years, the order, the simplicity, the conscientiousness of the teacher were moulding the ductile and impressible mind and heart of the pupil to follow after wisdom and to do the right. Love, in her mother's form, was ever round the little princess; the councils and examples of that faithful monitor, like an inspiration, served to lift up the young soul to have hopes in God and faith in the Lord Jesus Christ.

Well was it that the Duke of Kent left his wife sole guardian over his child. The Duchess could arrange the whole manner of Victoria's education and superintend it. She did do this. From the day of her husband's death till Victoria was proclaimed Queen, the Duchess of Kent never separated herself from her daughter. They slept in the same apartment; the first lessons were given by maternal lips, and when careful teachers were employed, still the mother was present, sharing the amusements and encouraging the exercises and innocent gaiety of the child. Thus was Victoria trained. Her intellectual education was as thorough as her physical and moral. From her



cradle she was taught to speak three languages—English, German and French. In her fifth year, her mother chose as preceptor for the Princess, the Rev. George Davys, now, through the gratitude of his pupil, Bishop of Peterboro'. In the co-operation afforded by this gentleman with the wise plans of the Duchess for her daughter's instruction, he evinced great excellence of moral character, and his faithfulness was well rewarded. The Duchess confided in him fully. When the Princess became heir-presumptive to the throne, and it was intimated to her mother that some distinguished prelate should be appointed instructor, and Earl Grey named the Bishop of Lincoln, then was the conscientious and truly noble mind of the Duchess displayed. She expressed her perfect approval of Dr. Davys as her daughter's tutor, and declined any change; but hinted that, if a dignified clergyman were indispensable to fill this important office, there would be no objection if Dr. Davys received the preferment he had always well merited. He was soon afterwards made Dean of Chester. Such traits deserve notice, because illustrative of the good influences which surrounded the young Princess, and also because they exhibit a constancy of woman's esteem when gained by worthy conduct.

Besides her preceptor, Victoria had an excellent instructress, the Baroness Lehzen, whose services were likewise retained through the whole term of her education; and the long harmony so happily maintained between the mother and her auxiliaries in this important work of preparing a Sovereign to be worthy of a throne, is an example worth consideration by those who would seek the best models for private education.

It has been stated repeatedly and never contradicted, that the Princess Victoria was not aware of her claims on the succession till a little before the death of her uncle, George IV. The Duchess had thus carefully guarded her child from the pernicious flattery of inferiors, and kept her young heart free from hopes or wishes which the future might have disappointed. When the accession of King William placed her next the throne, she had completed her eleventh year, "and evinced abilities and possessed accomplishments very rare for that tender age in any rank of life," says an English author. "She spoke French and German with fluency, and was acquainted with Italian; she had made some progress in Latin, being able to read Virgil and Horace with ease; she had commenced Greek, and studied mathematics, and evinced peculiar aptness for that science of reality; indeed, in all the sciences connected with numbers, the royal pupil showed great skill and powers of reason." She had also made good proficiency in music and drawing; in both of which arts she afterwards became accomplished. Thus happily engaged in acquiring knowledge of every kind necessary for her royal station—among which the knowledge of the people was not neglected, nor the arts, sciences, and employments which most conduce to the prosperity and advancement of a nation—his young Princess passed the intervening years till her majority, May 24, 1837. The day was kept as a general holiday throughout the kingdom. The city of London voted addresses of congratulation to the Princess Victoria and the Duchess of Kent on that occasion, which we notice in order to give a few sentiments from the reply of the Duchess. She said: "The Princess has arrived at that age which justifies me in expressing my confident expectation that she will be found competent to execute the sacred trust which may be reposed in her; for, communicating as she does, with all classes of society, she cannot but perceive that the greater the diffusion of religious knowledge and the love of freedom in a country, the more orderly, industrious, and wealthy is its population; and that the desire to preserve the constitutional prerogatives of the crown ought to be co-ordinate with the protection of the liberties of the people."

In four weeks from that day, the sudden death of William IV. gave the sovereignty of the British Empire to this young maiden of eighteen. Beautifully has she fulfilled the expectations of her mother, and the hopes of the nation. The manner in which the Duchess relinquished her power over her daughter, was a fitting sequel to the faithfulness with which she had exercised it. The great officers of State and privy councillors, a hundred or more of the nobles of the land, assembled on the morning of June 20, at Kensington Palace. They were ushered into the grand saloon. Soon Victoria appeared, accompanied by the officers of her household. After the Duchess had seen her royal daughter enthroned on a seat of state prepared for the occasion, she withdrew and left the young Queen with her Council. From that hour the Duchess treated her august daughter with the respectful observance which her station, according to court etiquette, demands. No more advice, no further instructions, not even suggestions, were ever offered. Doubtless, if the Queen seeks her mother's council in private, it is always given in love and truth; but the good seed had been sown at the right time; it put forth, by the blessing of God, spontaneously. The soul, like the soil, must bear its own harvest.

On the 17th of June, 1837, the young Queen made her first public appearance as sovereign over her realm; she prorogued Parliament in person; never was the act done more royally.

On the 28th July, 1838, she was crowned in Westminster Abbey.

Never were the long and tedious ceremonies more gracefully endured. From that time onward there has been no diminution in her zeal. Every duty devolving on her, every form prescribed, every custom held important in the old and cumbersome British Government, Victoria has performed, observed, and cherished. She has been the model of female royalty. But this is a trifling matter, compared with the salutary influence her high principles, refined taste, and graceful propriety of manners have wielded over those who gave the tone to fashionable society in England. Vice and folly retire abashed from her presence.

Great Britain is governed by laws, but the ruler is not amenable to these laws. Hence the importance that the sovereign should show obedience to the laws of God, from which the morality of all Christian codes is deduced. With wickedness on the throne, pollution in the palace, infidelity at the head of the Church, how can the nation increase in piety, virtue and goodness? The great blessing of a female reign is in its purity of court morals, and in its decorum of manners. These strengthen the religious elements of human nature, and give the soul the supremacy over sense.

This example of strict virtue on the British throne was imperatively needed; hence the great blessing conferred by the reign of Victoria, who is, in her private life, a model for her people. She was married on the 10th of February, 1840, to her cousin, Prince Albert, of Saxe-Coburg, who had been for a time, her associate in childhood; and whose development of character and talents has fully justified the wisdom of her choice and the worth of her influence. The union was one of mutual affection, and has been remarkably happy and fortunate. The royal pair have eight children:—Victoria Adelaide, Princess Royal, born November 21, 1840; Albert Edward, Prince of Wales, born November 9, 1841; Alice Maud Mary, born April 25, 1843; Alfred Ernest, born August 6, 1844; Helena Augusta, born May 5, 1846; Louisa Coroline, born March 5, 1848; Arthur Patrick, born May 1, 1850; and another son, born April 9, 1853. All these children are carefully trained under the supervision of their royal parents, and the family of the Queen is one of the best governed and guided in England.—*Morning Star*.

#### THE CLASSICS AS A GROUNDWORK.

The study of Latin and Greek has been objected to because it is a mere study of words. A study of words! and what study could possibly be more important? That the classics force us to study them is one of the principal things to be urged in their favour. A distinct conception of the force and meaning of individual words must be at the root of all mental acquisitions. What exercise, what habit better than that of not resting without a precise idea of their first origin, and of their full value! The world has been filled with errors from the want of this: an indistinct conception of words, says Reid, has been a far more common source of mistake and misunderstanding among men than wrong judgment or incorrect deduction. No one who has marked the sad waste of time and reasoning caused by misconception, or an ambiguous use of terms—no one who is accustomed to read carefully, or to observe the progress of false opinions, and the immense and often political importance of a single word, will deny this. Bacon has devoted an important section of his great work to the evils that arise from a misapplication and misapprehension of language; and Plato, with an eye to these errors, has even said, "I will account him a god who can properly divide and define." No pains that we can take are too great to check the loose, careless, and vague applications and understanding of words. *To ascertain their meaning as a business, and as a habit, by reference to sure authority, and not to pick it up by the imperfect and chance inductions of a limited experience, is surely an object worthy of our most anxious care. To seek as far as he can the primary meaning of a word, and to see how it runs into its other significations, is at first a necessity, and then becomes a habit, with the young student of Latin and Greek. He begins at first with no notion of the meaning of his words at all—to ascertain them must be a distinct business, and to this he is forced to apply himself before he can advance a step. On turning to his dictionary he finds, probably, first the usual signification of the word, then its various deviations, and as a key to all, its root—thus putting the associating principle on a good track. At the same time he will be making in most cases an advance to the understanding of forms of the same word in three at least of the Modern European languages. No one ever yet met with an intelligent teacher of the languages of Modern Europe, who did not most gladly and eagerly appeal to any knowledge which his pupils had previously acquired of the Greek and Latin.*

But not only is the habit most important, of not resting till the right meaning of individual words is discovered—there is another habit which is equally so—that of giving a distinct attention to every word in a sentence. This is done literally when we commence learning a new language, and though the closeness of attention may be diminished as progress is made, still the discipline is kept up far more than would be the case with our own language, to which, nevertheless, we may fairly anticipate that the habit will be in a measure transferred.

How common is it for persons, whom we know not to be remarkably deficient in the power of recollection, to lay down a book and lament that they scarcely remember what they have been reading. This is, in most cases, the effect of a want of early discipline of the attention, of that injury which the mind receives from the indulged custom of reading cursorily—a practice so much encouraged by the great supply of light literature in the present day, that we ought to take every means in our power to counteract it. When we come with this habit to the pursuit of a book of real weight and value, it often happens that the use of some term escapes us which affects the purport of the entire work, and which we might have understood, but which we have not noticed. Thus a very few words easily escaping a careless reader materially qualify the sense of nearly all the political writings of Burke, and of course many instances of the same kind might be brought forward.

The benefit, in many cases unacknowledged and even unsuspected, which the mind of the upper and middle classes has received from the cultivation of the principles to which we have been referring, through the medium of even indifferent classical instruction, we believe to have been incalculable. We can in some measure judge of what the effect of the entire removal of this kind of discipline would be, by observing the minds of the class usually called uneducated; of course we do not mean here the lowest, the absolutely ignorant. Even in the case of persons whose faculties are naturally good, and where these have been to a certain extent exercised by ordinary and casual reading, every man must have observed, say in the instance of his more intelligent servants, the extreme difficulty of keeping them to a point; and how they are carried away by the use of a word, however kindly meant, which seems to attack their prejudices. It may also be observed we think in the case of this class that, even where the strongest natural sense is shown in what they originate, the moment you attempt to introduce your series of ideas, you often find them at fault, though your words may be as intelligible as you can make them. Individuals of this class have often been instructed in reading, writing, and arithmetic; and we know not how to account for this marked difference, if it be not from the absence of that exercise of the reasoning faculty which is called forth by the analogical study of language. Nay we are inclined in some measure to refer what is sometimes considered to be the defect of the female mind, namely, a want of the power of close reasoning, to the absence of that particular discipline in accuracy and analogical deduction which is forced upon boys in the close grammatical study of an ancient language. Sheffield, in one of his essays, observes, "Women are thought generally by nature to be much inferior to men in understanding, but I believe the difference lies mainly in education, by which they give us great odds, and yet I know some that can hold up the game pretty well against us."

Another valuable exercise of the mind, in the study of a language not our own, is the quick transference of thought and the mental readiness which it requires, all in obedience to certain laws.

Take the construing and parsing of a Latin sentence of eight or nine words, the simplest you can find, and observe what has to be done. The general sense of the words has to be remembered, and a particular sense with reference to the context has to be selected, this perhaps qualified by adverbs, &c.: their mutual dependencies, as agent and object, have to be observed, and the relation of the agent to his means or instrument, and all must be referred to the general rules or laws of the language; how often is the mind here called upon to change its direction, and to make a prompt use of some of its most valuable powers, attention presiding over them all!

And here it may not be out of place to observe that these mutual dependencies of words are, in the early Latin subjects, simple and distinctly marked out, and easily ascertained; the idioms not reducible to regular rule being at first very rare, but increasing in number as the student advances to those authors who have borrowed some of their constructions from the Greeks, especially Horace.

In childhood, we see the tendencies of studies and their palpable effects, and we have often noticed in those who have more than usual power of consecutive thought on abstract and uniform subjects—good arithmeticians for instance—a want of that power of the ready transfer of thought upon which we have been dwelling, and which is so important for many of the ordinary purposes of life. We ought not to be silent either upon the wholesome and corroborating effect of the great frequency of confirmation which a boy receives in every case in which his decision has been correct, or of the moral effect of the quick decisions which he is obliged to form. His master approves or is silent, and the boy goes on firmly and confidently. This is an advantage which perhaps no other study possesses to the same extent with that of language, when learnt on strictly grammatical principles. To the very young this frequently recurring and just encouragement is especially beneficial, far more so than any pampering applause, or that direct commendation which soon loses its effect if very frequently repeated; here, as in after life, the silent is sometimes the highest approbation, and perhaps we may add the least prejudicial.

If any one can be proved to have possessed a high and orderly

intellect without the means and appliances above-mentioned, or rule is nevertheless, for the majority of cases, a true and good one. We may say, in the words of one of our old poets, Ben Jonson—

"But because some are able to leap ditches,  
We must not all shun to go over bridges."

J. F. B.

—*English Journal of Education.*

#### SCHOOL PREPARATION AND ATTENDANCE.

Of the numerous difficulties and discouragements with which the teacher has to contend, probably the total neglect, or imperfect preparation, of the lessons at home, and irregularity in attendance, form the most insurmountable. Every one who has thought at all on the nature of the human mind, must be conscious that attainments in knowledge are not to be made without patient and long continued application. Notwithstanding the great variety of talent possessed by different individuals, it may be safely affirmed of him who is endowed with the greatest, as well as of him who is least gifted with natural abilities, that a regular course of mental cultivation is necessary, in order that his faculties may be expanded and rendered available for the various purposes of domestic and social life.

It seems almost unnecessary to point out how essential to the good management of a large school is the proper arrangement of the scholars in classes. Now, such an arrangement is evidently unattainable, unless regularity of attendance be given. Whether it be generally the case or not, it always ought to be so; that no day should pass without some instruction being communicated, some knowledge acquired, some progress made. If this be the case, then it is evident, that by a single day's, yea, even a single hour's, absence, the pupil sustains a positive and serious loss. At all events, no class in a well-conducted school can long remain stationary; and so, if a member be occasionally absent, he must soon experience the painful mortification of seeing his companions shoot far ahead of him in the several classes to which he belongs.

It is not absolutely impossible that he may, by great exertion, regain his position, but that is a consummation rather to be wished than reasonably expected; for this among other plain reasons, that, by the time he has gone over the ground which his class fellows passed over in his absence, they have again made a farther advance; and so it often happens, that, after spending a few days in vain endeavours to reach a constantly receding goal, he gives up the hopeless attempt, and becomes a contented booby; the sound of deserved praise, so grateful to the youthful mind, has now ceased to fall upon his ear; and emulation, that noblest stimulant of the ingenious boy, no longer influences his conduct. Should the experiment be tried of joining him to a lower class, he meets with many discouragements. He feels himself degraded in the eyes of his former associates, his spirits become depressed, and the probability is, that he either remains totally indifferent, without making due progress, or refuses to give attendance at all. Such is a true picture, so far as it goes, but greatly falling short of the reality,—of the results of irregular attendance, too frequently manifested in all our schools. If, in addition to all this, there be taken into consideration the discouragements, the distraction, the vexation, and chilling effects that these goings and returnings, with the additional aggravation of its being applicable chiefly to those who, without any daily extra attention, would make little or no progress whatever, accompanied frequently, too, by the common but improper and most prejudicial practice of withholding the necessary supply of school books, must occasion to the teacher [whom the parents, by a strange inconsistency, seem still to reckon accountable for the improvement of his pupils, just as much as if they attended regularly,] it seems impossible to resist the conclusion to which a celebrated writer on education has come, that "constant attendance at school is a great hinge on which the whole machine of education turns."

But there is another and stronger light in which the matter may be viewed. The object of education is not only to communicate knowledge, but also to infuse principles and form habits. If it were possible to furnish the mind by instantaneous inspiration, with all that knowledge which is actually obtained only by persevering application to study, it is by no means certain that such a consummation were desirable. The labour of acquiring the knowledge is as useful as the knowledge itself which is acquired; just as the exertion of climbing a hill is of as much benefit to the valetudinarian, as is the regalement of the prospect, and the breathing of the pure air on its summit. It may be safely affirmed, that a man is not more benefitted by the ability to read, write, and calculate, than by the habits of application that are formed in the acquiring of these powers; so that even if all the instruction communicated in school could be gained by the irregular as well as by the regular attendant, the former is still a greater loser,—the loser even of that habit of application and punctual attention to duty which is not of less value than a mind stored most richly with the soundest information. It is scarcely credible to what an extent our characters as men are affected by the circumstances in which we are placed in

our early days. It is generally thought indeed that the influence which is exerted upon the mind during the first eight or ten years of existence in a great degree guides the destinies of that mind for time and eternity.

It has been said with much truth, that "the boy is the father of the man;" for it is not more contrary to nature to expect the fruit of a tree to be of a different kind from the seed, or the young of animals to be of a different species from their parents, than to expect that the ill-disposed boy will become a well disposed man, or the boy who has contracted habits of irregularity, and consequently of idleness and inattention to his duties while at school, will, in after life attend punctually either to his duties as a man of business, or to his higher duties as an immortal being. It is not meant to be denied that changes take place on the character after the season of boyhood has passed away; and least of all is it denied, that the Spirit of God often worketh effectually to counteract as well the bad habits as the bad principles of depraved humanity. But these things are not in the ordinary course of nature, and even when they do occur, the existence of those early formed and deeply rooted habits to which we are alluding, often costs their possessor a long and painful conflict, and greatly diminishes the amount of present happiness, if not of his future attainments. It may be stated, however, as a general rule, that we have no more reason to expect to find the idle boy become an industrious man, than to expect to gather grapes from thorns, or figs from thistles. A miracle may indeed realise either of these unnatural phenomena; and assuredly the power is not less, which will suffice to set aside and reverse one of the most powerful laws of man's moral nature—the law of habit, than that power which might annul the law of vegetable reproduction.

If then parents would have their children duly fitted for the duties of more active life, by being trained to habits of obedience and docility, perseverance and self-control; if they would have them duly qualified for any employment that requires continued attention (and they must be aware that few of the duties of active life can be discharged aright by him who applies to them only by fits and starts;) if they have any ambition that they should spend happy days and useful lives in the world; that they should be ever ready to respond to every call of duty, (and what parent does not wish this?) then it becomes them to take care that they enlist the strong principle of habit on the side of good; instead of harassing and distressing the mind of the teacher by withholding them for days and sometimes even for weeks at a time for some frivolous reason, or perhaps for no assignable reason whatever. It were surely better to avoid as much as possible all such irregularities, having so direct a tendency to impress their youthful and susceptible minds with a false estimate of the value of education, by making duty give way when it comes in contact with pleasure or amusement.—*Scottish Educational Journal.*

#### THE PEOPLE'S COLLEGES.

EDUCATION is by no means indissolubly connected with any particular form of government. It may flourish alike under a limited Monarchy or a Republic; but it is requisite for the full development of either. And if we see the Tree of Knowledge exhibiting a brighter hue, or a more vigorous growth in the western world, the system of the western gardener demands our attention. If we find here, unprecedented results of mind upon matter, we may well ask, what has aroused the mind to action? What has given the impulse and direction to its movements? And what is to be their effect and result?

A deep-seated respect for learning is evinced in the constitution and laws adopted in succession by every state in the union.—To defray the expenses of preliminary education no specified tax is imposed, and it remains optional with every town, to raise the amount which may be deemed necessary; but the desire to extend education is evinced by the fact that, as the legislature specifies at least one dollar and a half as the *minimum* amount which should be raised, for every child, male or female, within the educational ages, of five and fifteen, so the amount raised by voluntary subscription, is nearly three-fold the amount required by the statute.

But the duty of preparing children for the business of life, does not, or at least, should not, end with attendance on the primary schools. This has long been admitted in reference to the learned professions properly so called; and accordingly we have universities and seminaries in which the hearts and sciences, as they are separately presented, are well and elaborately taught. But this teaching is after all, limited in its application. It produces the physician and the divine, the architect, the chemist, and the lawyer; but it does not teach, or attempt to teach, all the various branches of the business of life. This omission is now about to be supplied in the state of New York, by the establishment of PEOPLE'S COLLEGES, when the machinist, est, who now wields but little knowledge of the principles of their construction, the steam engine and other motive powers, by which such wonders have been wrought in our own day, may acquire an accurate and scientific acquaintance with the power he directs, and the forces he attempts to keep within well defined limits of safety.

So in mining, which has also come in our day, to acquire an activity and importance second to no other pursuit, and requiring the most profound scientific attainments. In the absence of such direction, how much money and time, and labour has been expended in opening veins that were certain never to prove remunerative in the production of ore; or in searching for coal, where no coal could possibly be found. How much better would it have been, that the money thus buried in the earth should have been expended in forming institutes to expel the ignorance which led to its profitless employment. When the geologist Murchison, sitting in his Laboratory in London, predicated from specimens of minerals sent him by Leichardt and Strelecki, and from maps and charts of the country, that certain ranges of mountains traversing the whole breadth of Australia, were rich in the auriferous ores, *because* the formations were identical with the gold producing Ural Mountains of Russia, he merely brought the theoretical knowledge he possessed, to bear on practical conclusions. How many hundred young men are there, on this wide continent, who in anticipation of profitable and respectable engagements would gladly devote some months to a thoroughly practical course of instruction in chemistry, geology, mining, and metallurgy, if the college with the requisite apparatus and specimens were within their reach?

We might go on from every day observation, to multiply instances of the value of such knowledge, but the facts are self-evident. It has been well observed, that the future contests of nations will not be confined to war-like encounters. The nations will have to meet in the field of Science and the Arts, and that nation will attain to the highest distinction, who shall excel all others in the arts of peace. To do this we must cultivate the human intellect. We must appreciate the value of the disciplined mind of educated labor. The American Citizen considers himself the foster-father of the orphan, and the protector of the offspring of the poor, the natural guardian of those whom heaven has entrusted to him, and under moral obligations to educate his wards. Let him see that this self imposed duty is properly fulfilled.

There has grown up of late, in this, far more than in any other land a practice of communicating knowledge by popular lectures. Every subject susceptible of being so treated and illustrated, is dealt with in turn. Anatomy, architecture, agricultural chemistry, general chemistry, geology, mineralogy, botany, electricity, galvanism, and Natural Philosophy have all, and many more, their itinerant teachers. But these lectures are no longer confined to cities and towns. They have spread into villages and thinly peopled districts, and the demand for public teachers, qualified to unfold the truths of natural science, is growing, and must of necessity grow, with the growth of population. The People's Colleges would go far to supply this increasing and important demand, and the trustees of the proposed institutions, have rightly argued that much advantage may arise to manufactures and the mechanical arts, by the diffusion of so much useful knowledge.

We give then, our most cordial assent and approval to the objects of this movement, in which the projectors seek to afford instruction to thousands, as readily as it is now afforded to tens, or to hundreds—where the agriculturist, the artisan and the mechanic, as well as the lawyer, the physician and the divine, may send his son with a perfect confidence that he will be qualified therein to earn his livelihood, more readily and more efficiently, than he would otherwise have been enabled to do.

There is another feature in the proposed institution, which seems to us of the deepest value and importance: It is that of uniting labor with study—science with industry,—to make the student, after a brief season of mental labor and instruction, competent to defray a large portion and ultimately the whole of his necessary expenses by the labor of his own hands. The immunity thus secured from dependence on others, and the knowledge that his studies may thus be prolonged for successive years, must be precious to every independent and high-minded student. Under other and less happy circumstances, labor is made to pay for the cost of living, why not in this, when equality and fraternity are ensured by the effort between the rich and the poor members of the same class? Let it be borne in mind too, as the projectors justly tell us, that the People's College does not propose to educate men out of the sphere of labor, but into it; that is to greater efficiency in, and truer appreciation of industry.

*International Journal.*

THE SOUL.—I take it to be true of the intellectual, as of the natural creation, that it profits not a man if he gain the whole world and lose his own soul. Let not, therefore, philosophy take up our life, so as not to leave us leisure to prepare for death. We may visit Athens, but we must dwell at Jerusalem; we may take some turns on Parnassus, but should more frequent Mount Calvary—and we must never so busy ourselves about the "many things," as to forget the "one thing needful"—the good part which shall not be taken away from us.—*Hon. Robert Boyle.*

He that knows not how to spend his time hath more business, care, grief, and anguish of mind, than he who is most busy in the world.—*Thoughts for the People.*



# JOURNAL OF EDUCATION,

Upper  Canada.

TORONTO: SEPTEMBER, 1854.

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

## EDUCATIONAL PROGRESS IN UPPER CANADA—1853.

Statistics are sober facts. Though often eloquent, they have none of the illusion of romance. They are the pulse of national health and progress. They indicate its prosperity or its decay; and for this reason they are zealously and carefully compiled, and, by statesmen and public men, as carefully and anxiously scanned. They severely test alike the elaborate theory and the most carefully digested scheme. Viewed in this light they are of the utmost importance in testing our educational progress.

Impressed with a conviction of the present, as well as prospective, value of minute and accurate statistics in regard to the yearly operations of our national system of schools, as a basis for future improvements, the head of the Educational Department for Upper Canada has officially collected, through the local school authorities, each year, a great variety of information relating to the working of every part of that system. This information has been embodied from time to time in his Annual Reports to the Governor General, and laid before the Legislature during each Session of Parliament.

The result of these extended and minute examinations and enquiries from year to year has been in every respect most cheering and gratifying. Not that our progress has been equally certain and satisfactory in every department, or every feature of our school system; but we are now in possession of a series of yearly observations and facts, in regard, not only to our successes, but to our failures; showing alike our educational enterprise, and our culpable negligence in the performance of a public and important duty;—not only that tens of thousands of children are being trained up to intelligence and virtue in our public schools, but that thousands more never visit a school at all,\* or, if they do, it is but transiently; that in our cities and towns, while every facility for education is being liberally provided by the public, numbers choose to grow up in ignorance and vice, without control or restraint, and in violation of the implied social compact between citizens and communities.

It is satisfactory to know, however, that at every test-point of our system, patriotism, and philanthropy unite to sustain, extend and perpetuate it; and were it not that selfishness and avarice too frequently influence some parents to sanction the absence of their children from school, on the slightest pretext or pressure of business—to starve their intellect so as to enrich their pocket—the reproach which now exists would cease for ever.

One or too striking facts have become apparent in compiling a somewhat novel Table for the Chief Superintendent's Annual Report for 1853. The table consists entirely of negatives. It is designed to show the number of children in each county, city, and town, who do not attend school, the per centage of the population who cannot read or write, the number of sections in which no rate was imposed by the trustees for the support of the school, and also those sections

in which no lectures were delivered during the year by local superintendents, as required by law.

It is a singular coincidence, as exhibited by these tables, that the facts which they reveal all bear a mutual relation to, and are the exponents of, each other. Thus, for instance, it appears, that in those counties in which a large per centage of the population cannot read and write, there is an equally large per centage of the children which do not attend school;—few rates are imposed and few lectures delivered, in this way perpetuating the very disgrace or misfortune which already exists in the locality. On the other hand, where the great majority of the people can read and write, there the absence from school is comparatively infrequent, larger rates are imposed, and more lectures are delivered by the local superintendents.

One thing is evident from this table of negatives, that those persons, who have never themselves enjoyed the advantages of education, are instinctively opposed to placing it within the reach of their children: thus proving that, although they may have acquired wealth and a degree of influence without the aid of education, they are nevertheless utterly unable to appreciate the value of that mental discipline which would doubtless fit their children for attaining to still higher positions of honour, benevolence and usefulness in their country.

The condensed statistics, which we give below, are taken from the proof-sheets of the Chief Superintendent's Annual Report, for 1853. They exhibit the following interesting facts and contrasts:—

In 1844, three years after the system was first organized, the number of common schools in operation in Upper Canada, was 2,610, (and many of them very inferior indeed,) while, in 1853, the number reported as in operation—many of which, are very superior, and all of them greatly improved in every essential particular—was 3,133, an advance of twenty per cent. The multiplication of schools however does not necessarily indicate an improvement. The policy of the Department has been rather to encourage an enlargement of the boundaries of existing sections than to multiply new and feeble ones. The result has been the extinction of many of the old schools, and the re-division of townships into more compact and stronger school sections, sustained at a less aggregate expense to the township at large. The increase in the number of good schools has therefore been about 1,000, and has taken place in new townships and in the hitherto unsettled parts of old townships.

In 1844, the number of pupils reported as attending the common schools in Upper Canada, out of a school population of 183,539, between the ages of 5 and 16 years, was 46,756; while in 1853, the number reported as attending school, out of a school population of 268,957 was 194,736; showing therefore that while the school population has not doubled, the school attendance has nearly quintupled that of 1844; or in other words: while in 1844 the school attendance was only one fourth that of the school population, it is now nearly three fourths that of the entire school population! Cheering facts certainly.

In 1844, the total amount available from all sources for the payment of teachers' salaries in Upper Canada, was £51,714 or \$206,866, while in 1853 it was \$524,156, or an increase of upwards of one hundred per cent. in nine years.

In 1850 (beyond which year our statistics on some of these points do not extend) the grand total available from all sources for teachers' salaries, the erection and repairs of school houses, and the purchase of school apparatus and requisites, amounted to upwards of \$400,000, while in three years it reached the noble sum of \$646,676, or upwards of half a million of dollars—more than three-fourths of which large sum was raised by the voluntary action of the people themselves, in their several localities. The additional amount reported as received and expended by grammar and other schools and colleges, was \$151,240, thus making it appear that \$797,916 were available for the purposes of promoting general education in Upper Canada during the year 1853. No doubt the current year will witness enterprise and zeal no less creditable to Upper Canada, and no less gratifying to every lover and promoter of his country's educational advancement.

\* The returns for the year 1853 reveal the fact that of the 268,957 children of school age in Upper Canada, only 194,736 are reported as attending the Common Schools, and about 7,758 the grammar and private schools, thus leaving about 66,463 children destitute of the blessings of education.

A GENERAL STATISTICAL ABSTRACT, exhibiting the comparative state and progress of Education in Upper Canada, as connected with Universities, Colleges, Academies, Grammar, Private, Common, Normal and Model Schools, during the years 1842 to 1853, inclusive. Compiled from returns in the Educational Department.

No.	SUBJECTS COMPARED.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.
1	Adult population of Upper Canada.....	486,055		...	*622,570	...	...	725,870	...	803,493	950,551	953,239	
2	Population between the ages of five and sixteen years.....	141,143		183,539	202,913	204,580	230,975	241,102	253,364	259,258	258,607	262,755	268,957
3	Colleges in operation .....	5		5	5	5	6	6	7	7	7	8	8
4	County Grammar Schools and Academies..	*25		*25	*30	*31	32	33	39	57	70	74	79
5	Private Schools reported .....	*44		*60	*65	*80	96	117	157	224	159	167	174
6	Normal and Model Schools for U. C.....	...		...	...	...	2	2	2	2	2	3	3
7	Total Common Schools in operation as reported .....	1,721		2,610	2,736	2,589	2,727	2,800	2,871	3,059	3,001	3,010	3,133
8	Grand Total Educational Establishments in operation in Upper Canada .....	1,795		2,700	2,836	2,705	2,863	2,958	3,076	3,240	3,239	3,258	3,397
9	Free Schools reported in operation.....	No Rpts.		No Rpts.	No Rpts.	No Rpts.	No Rpts.	No Rpts.	No Rpts.	252	855	901	1,052
10	Total Students attending Colleges and Universities .....	Do		Do	Do	Do	700	740	778	684	632	751	756
11	Total Students attending Academies and County Grammar Schools .....	Do		Do	Do	Do	1,000	1,115	1,120	2,070	2,800	3,194	3,986
12	Total Pupils attending Private Schools ...	Do		Do	Do	Do	1,831	2,345	3,648	4,663	3,948	5,133	5,822
13	Total Students and Pupils attending Normal and Model Schools for Upper Canada .....	Do		Do	Do	Do	...	258	400	370	356	645	743
14	Total Pupils attending the Common Schools of Upper Canada.....	65,978		96,756	110,002	101,912	124,829	130,739	138,465	151,891	168,159	179,587	194,736
15	Grand Total, Students and Pupils attending Universities, Colleges, Academies, Grammar, Private and Common Schools .....	65,978		96,756	110,002	101,912	131,360	135,295	144,406	159,678	175,895	189,310	203,993
16	Total Amount available for the Salaries of Common School Teachers in Upper Canada .....	£41,500		£51,714	£71,514	£87,906	£77,599	£86,069	£88,478	£88,429	£102,050	£113,991	£131,039
17	Total Amount levied or subscribed for the erection or repairs of School Houses ...	No Rpts.		No Rpts.	No Rpts.	No Rpts.	No Rpts.	No Rpts.	No Rpts.	£14,189	£19,334	£25,094	£30,630
18	Grand Total available for Teachers' Salaries and the erection and repairs of School Houses .....	Do		Do	Do	Do	Do	Do	Do	£102,610	£121,384	£139,085	£161,669
19	Amount received by other Educational Institutions .....	Do		Do	Do	Do	Do	Do	Do	...	£32,534	£36,989	£37,810
20	Grand Total available for Educational purposes in Upper Canada .....	Do		Do	Do	Do	Do	Do	Do	...	£154,218	£176,074	£199,479
21	Total Common School Teachers in Upper Canada .....	...		...	2,860	2,925	3,028	3,177	3,209	3,476	3,277	3,388	3,539
	Total Male do do.....	...		...	...	...	2,365	2,507	2,505	2,697	2,551	2,541	2,601
	Total Female do do.....	...		...	...	...	663	670	704	779	726	847	938
22	Average Number of Months each Common School has been kept open by a qualified Teacher .....	...		7½	8	8½	8½	9	9½	9½	9½	9½	10
23	Nett average attendance of Pupils at the Common Schools, during the summer of .....	No Rpts.		No Rpts.	No Rpts.	No Rpts.	No Rpts.	70,469	72,904	76,542	83,390	85,161	90,096
	Do Boys do.....	Do		Do	Do	Do	Do	38,539	39,382	41,784	44,647	45,409	46,668
	Do Girls do.....	Do		Do	Do	Do	Do	31,930	32,822	36,040	38,743	39,752	41,428
24	Nett Do Pupils during the winter of .....	Do		Do	Do	Do	Do	76,711	78,466	81,466	84,981	80,756	90,659
	Do Boys do.....	Do		Do	Do	Do	Do	45,429	46,402	48,303	49,060	49,867	52,252
	Do Girls do.....	Do		Do	Do	Do	Do	31,282	31,964	33,161	35,921	36,889	37,407

No Reports for this year were received, in consequence of a change in the School Law.

\* An Approximation only—no specific information having been received by the Department.

NOTE.—The Returns in the foregoing Table, up to the year 1847, are not very complete; but since that period they have been sufficiently so to establish a data by which to compare our yearly progress in Educational matters. The Returns are now pretty extensive, and embrace all Institutions of Learning from the Common School up to the University; but hitherto the sources of information regarding this latter class of Institutions have been rather private than official, which should not be the case. The Annual Report of a Department of Public Instruction should present, in one comprehensive tabular view, the actual state and progress of all our Educational Institutions—Primary, Intermediate and Superior.

STATEMENT showing the Number of Volumes issued from the Educational Department to Public Libraries in Upper Canada up to the end of August, 1854.

Number of Volumes sent out during the Months of	Subjects													Grand Totals				
	History	Zoology	Botany	Phenomena &c.	Physical Sciences	Geology, &c.	Natural Philosophy	Chemistry	Agricultural Chemistry	Practical Agriculture	Manufactures	Modern Literature	Ancient Literature		Voyages, &c.	Biography	Tales and Sketches	Practical Library
November	168	62	16	29	15	5	9	6	9	48	86	70	20	54	128	284	4	961
December	3,900	1,540	271	877	511	229	187	126	183	769	708	2,187	417	1,037	2,791	4,897	204	20,961
January	624	279	46	148	84	30	34	29	48	151	98	239	19	291	435	54	34	5,129
February	1,290	627	125	275	237	85	106	93	65	348	201	771	59	523	738	2,282	74	7,874
March	362	164	25	62	50	27	22	22	24	103	50	211	9	182	225	58	67	2,161
April	174	101	13	34	28	13	11	10	8	42	33	111	4	96	110	34	13	1,140
May	75	472	56	112	98	45	66	46	32	156	145	502	25	201	597	1,46	48	4,948
June	96	476	79	276	95	46	100	41	23	178	306	482	26	294	478	1,28	56	5,236
July	1,601	937	159	406	208	81	160	81	38	420	565	788	24	528	919	2,32	70	9,305
August	1,028	674	92	199	136	61	108	70	24	411	415	555	...	447	677	230	44	7,142
Total	11,080	5,232	882	2,413	1,412	622	801	518	454	2,614	2,557	5,996	603	3,798	7,096	16,251	612	62,866

Total number of volumes sent out from the latter end of November, 1853, to the end of August, 1854,—62,866.

## Miscellaneous.

## CHRIST BLESSING LITTLE CHILDREN.

BY MRS. L. H. SIGOURNEY.

It was a lonely village, girt with hills  
Beyond the banks of Jordan, where our Lord  
Turned from the city, to forego a while  
The toils and tumults of Jerusalem.  
Nature had quietly and quaintly wrought  
In that wild haunt. The gray, primeval rocks  
Made solemn contrast to the tender green  
That mantled timidly around their base,  
And to the slightly rooted shrubs, that sprang  
From creft and crevice.

There, a multitude

Followed his footsteps, eager to lay down  
The burdens of their mortal misery,  
And He, with touch divine, had healed them all.  
But then, another differing train drew near.  
Whose tread, gazelle-like, told no mournful tale  
Of paralytic lore,—and whose bright eyes  
Wide open, in their simple wonderment  
Revealed unbroken league with health and joy.  
Some had been wandering o'er the pasture fields  
With the young lambs, and in their tiny hands  
Were the blue flax-flower and the lily-buds,  
While through the open portals of their hearts,  
Sweet odours led sweet thoughts in tireless plays.  
Others, from shady lanes and cottage doors,  
The dark-eyed Jewish mothers, gathering, brought,  
Unto the feet of Christ.

"Ye may not press  
Upon the Master; he is wearied sore;  
Hence! Go your way."

So the disciples spake,—  
As with impatient gesture they repelled  
The approaching groups.

But Jesus, unto whom  
The smile of guileless trusting innocence  
Was dear, reproved their arrogance and said,  
"Suffer the little ones to come to me;  
Of such as these, my Father's kingdom is."  
With what high rapture beat the matron heart,  
When those fair infants in His sheltering arms  
Were fo'ed, and amid their lustrous curls  
His hand benignant laid.

Oh, blissful hour!  
None save a mother's thrilling love can know  
The tide of speechless ecstasy, when those,  
Whom she hath brought with pain into the world,  
Find refuge with the unforsaking Friend.

Like holiest dews upon the opening flower,  
The Saviour's blessing fell.

So sweet its tones  
Breathed on the ear, that men of pride and strife,  
The venal Scribe and boastful Pharisee,  
Started to feel a balm-drop in their souls  
Softening the adamant; while humble Faith  
Exulted, as, through parting clouds she saw  
The children's angels near the Father's throne.

**SALARIES AND SERVICES.**—Boards of directors should cease to estimate the value of an officer by what he will *fetch* in the clerk market. The value of a good and faithful servant is not appreciable in exact figures. Sterling honesty, sound ability, willing aptitude, and tried fidelity, are not convertible into any known species of currency. "You cannot price" them as you would a bale of cotton or a piece of calico. Rather give an officer whom you have known and trusted for years a trifle more to stay, than a stranger a trifle less to come. Rely upon it that by so doing you consult your own interest, far more work will be done (I speak as a practical man,) and better done, in a given time, by three willing hands than by four unwilling ones, whilst the same sum that would pay four badly would handsomely remunerate the three. To give to *all* in your employment high salaries is not to be expected; but to give to every officer in your service, directly or indirectly, the promise or the hope of increase according to his deserving is merely to adopt a wise and liberal policy that brings its own reward. A few well timed gifts by way of increase to the more meritorious of your

officers and clerks, distributed with a just discrimination and in a kindly spirit, will never jeopardise your rate of dividend. In their renewed exertions, quickened by invigorated hopes and hearty gratitude, these rewards will bring you cent. per cent. in mere vulgar profits. Continue such timely acknowledgments of merit with incidental promotions from the ranks to offices of trust and profit, and so keep open the door of advancement to the lowest clerk in your establishment, and you at once raise honest merit to a premium, and sink indolence, apathy, and incapacity to a hopeless discount.—*From Bullion's Management of Country Bank.*

**HOW A HOUSE IS MADE.**—While the speaker is bowing out the chaplain, the clerk removes the two folio prayer books, and places them in the drawer. Members who are present have the privilege of securing any particular seat for the night. On the table there are cards with the words "At prayers" printed, under which the member writes his name; and, having done this, he attaches the card to the back of the seat which he wishes to occupy. It will readily be supposed that the attendance at prayers will rise and fall according to the demand which may spring up for particular seats. Prayers being over, the doors are thrown open, and the public admitted. The Speaker, however, continues to sit at the clerk's table till such time as forty members are present. A triangular hat lies on the table before him; he takes it up, and using it in the same way as chairmen of public meetings use their fore finger when counting "hands," counts aloud those members who have been present at prayers, beginning with the Ministerial side (the right hand side) and taking any one who may be in the gallery first. In the meantime members are dropping in, and the Sergeant-at-Arms, and the other officers direct them towards the Opposition side of the house, that the Speaker may not be puzzled in his counting. If members fall short of the quorum, the Speaker waits patiently for more to come in; but if forty do not present themselves before the hand of the clock points to four, he rises and says, "The house is adjourned." If he arrives successfully at thirty-nine, he immediately pronounces "forty," himself counting for the fortieth, and proceeds to take possession of his proper chair or throne, and the house is said to be "made."

**"THE RULING PASSION STRONG IN DEATH."**—A late *Quarterly Review*, has a curious article on the dying moments of distinguished characters. The case of Cardinal Wolsey is well known. The morning before he died he asked Cavendish the hour, and was answered past eight. "Eight of the clock," replied Wolsey, "that cannot be—eight of the clock; nay, nay, it cannot be eight; for by eight of the clock shall you lose your master." The day he miscalculated—the hour came true. On the following morning as the clock struck eight his troubled spirit passed from life. Boerhave lay feeling his pulse till some new published work which he wished to read had arrived. He read it, and exclaiming that the business of life was passed, died. Miss Linley died singing, "I know that my Redeemer liveth." Napoleon fought some battle o'er again, and the last words he muttered were *tete d'armee*; Lord Tenterden, who passed straight from the judgment seat to his death-bed, fancied himself still presiding at trial, and expired with, *Gentlemen of the Jury, you will now consider of your verdict*; Dr. Adam, the author of "Roman Antiquities," imagined himself in school, distributing praise and censure among his pupils: *but it grows dark*, he said, *the boys may dismiss*; and instantly died. As an instance of extreme tenderness in death we may mention that Ludlow, the parliamentary general of horse, a man of iron nerves, and peculiarly hostile to all scenical displays of sentiment, mentions, in his Memoirs, with sympathising tenderness, the case of a cousin—that, when lying mortally wounded on the ground, and feeling his life to be rapidly welling away, intreated his relative to dismount 'and kiss him.' Everybody must remember the immortal scene on board the *Victory*, at 4 p. m., on October 21, 1805, and the farewell 'kiss me, Hardy!' of the mighty admiral. And here again, in the final valediction of the stoical Kant, we read another indication, speaking oracularly from dying lips of natures the sternest, that the last necessity—that call which survives all others in men of noble and impassioned hearts—is the necessity of love, is the call for some relenting caress, such as may stimulate for a moment some phantom image of female tenderness in an hour when the actual presence of females is impossible.

## THE BIBLE.

This is a remarkable book—remarkable for its adaptedness to the whole wants and conditions of man. Well may we ask concerning the book, "Whence is it?"

Concerning as it does so much that dives down into the very depths of the human heart, showing up its wickedness, and disclosing even its secret thoughts, we are involuntarily led to the conclusion that it was the production of a superior mind. Being then, so infinitely superior to all human intellect, we are led to seek for its conception

and authorship in the mind of that omniscient Being who knoweth the secret of all hearts. We cannot resist the conclusion that the Bible is of, and from God.

Being from God, we also know that this revelation was made to man for his present and eternal good, requiring on his part a reception of the truth it contains, and obedience to the requirements it enjoins.

Having answered the question "Whence is it?" we are also led to inquire "What is it?"

It is a book of precepts, obedience to which will secure to man that peace "which the world can neither give nor take away."

It is a book of promise, sweet indeed to the sorrowing and mourning, the penitent and the dying. It is the bread upon which the hungry may feed, and receive food and nourishment for his famished soul.

It is the blazing star of heaven, to illumine the dark and murky path of him who is seeking to enter wisdom's ways, which are ways of pleasantness, and whose paths are peace."

It is the chart which displays to the eye of the seeker the boundaries of the promised land, pointing out the shoals and quicksands in his passage to the desired haven.

It is the Book of books to the expiring saint; for he turns his dimming eyes to the glorious promises of its sacred pages, and feels that they are sure, for they are founded on the veracity of Jehovah.

### TEACH THE GREATEST NUMBER.

The extent to which a teacher may multiply his power, by acting on numbers at a time, is very great. In order to estimate it, we must consider carefully what it is, when carried to the greatest extent to which it is capable of been carried, under the most favourable circumstances. Now it is possible for a teacher to speak so as to be easily heard by three hundred persons, and three hundred pupils can be easily so seated as to see his illustrations or diagrams. Now suppose that three hundred pupils, all ignorant of the method of reducing fractions to a common denominator, and yet all old enough to learn, are collected in one room. Suppose they are all attentive and desirous of learning, it is very plain that the process may be explained to all at once, so that half an hour spent in that exercise would enable a very large proportion of them to understand the subject. So, if a teacher is explaining to a class in grammar the difference between a noun and a verb, the explanation would do as well for several hundred as for the dozen who constitute the class, if arrangements could only be made to have the hundreds hear it. Now, so far as we fall short of this full benefit, so far there is, of course, waste; and it is not difficult or impossible to make such arrangements as will avoid the waste, in this manner, of a large portion of every effort which the teacher makes.

Always bear in mind, then, when you are devoting your time to two or three individuals in a class, that you are losing a very large proportion of your labor. Your instructions are conducive to good effect only to the one-tenth or one-twentieth of the extent to which, under more favorable circumstances, they might be made available. And though you cannot always avoid this loss, you ought always to be aware of it, and so to shape your measures as to diminish it as much as possible.

—*Abbott's Teacher.*

### IMPORTANCE OF PRIMARY SCHOOLS.

Bishop Potter remarked, before the Pennsylvania Teachers' Association at Pittsburg, in August last, that there could be but one opinion with regard to Primary Schools—that they were the most important, both as regarded the intellectual and spiritual nature—most important because they were the only schools where all the children were taught, since a great many were never allowed to remain under the charge of the schoolmaster until they reached the higher branches. The early impressions for good or evil, the affections and remembrances forming the basis for the man, and the tastes for higher branches in culture either engendered or destroyed, all conspire to make the Primary Schools the most important of the series, and from this fact he argued the necessity for the best teachers in that department of every school.

He was of opinion that the teacher of a Primary School should have a heart, a loving heart, broad enough to recognize his duty to God, and the great importance of the work committed to his hands, and to take in the truth that each urchin from the alleys, garrets, and hovels, even though he might be ragged and dirty, is the tabernacle of an immortal soul. He said that now-a-days at the early age of twelve the boys of the land began to look into and cavil about the reason of things—would think for themselves about things *told* them by fathers, mothers, and teachers. It was not so in the infant schools—there the children were inquisitive, but not skeptical.

The speaker concluded by remarking that teachers of Primary Schools should have active minds and consciences, and a good elementary fund of knowledge that they must teach. He objected to their going through the routine of duties like a clock wound up to run its regular eight days and then stop. Teachers would of necessity partake of either the nature of torpedoes or magnets; they would draw the

children to them and after them, or they would repulse them. Teachers should never cease to learn, for they would never have any superfluous knowledge. Neither Professor Henry, of this country, nor Professor Faraday, of England—two of the most profound philosophers in the world—would find their great knowledge and researches useless, should they undertake the teaching of children.

### THE LONDON "INNS OF COURT."

Poets have talked much of the inspiration of the fields, woods and mountains; and doubtless they have ennobling influences; but lofty dreams may be dreamt within the sound of the disjointed and ghostly chimes of St. Clement's church—those bells which are popularly supposed to be perpetually announcing oranges and lemons, but which always seem to be trying to learn the old 104th psalm, and invariably breaking down in the attempt. Noble schemes of life have doubtless been shaped in Stationers' Hall-court and Paternoster-row, and great poems meditated in Monmouth Street and other solitudes of Seven Dials. Were it not for the hideous neighbourhood by which it is in-landed, I can conceive no town residence more delightful than Clement's Inn—that inn to which Master Justice Shallow belonged, and where he spent so merry a time. Old red-tiled houses, yet not too old for solidity and comfort; whispering trees, standing on green grassplots; picturesque gateways, ready to admit the visits of your friends, yet shutting out the noisy world, and giving you a sense of seclusion; gravel-walks for pacing up and down, while you listen to the exterior hum of life coming towards you from the Strand; these are the elements which make Clement's Inn, to my mind, a spot to be coveted. Then, for mysterious intertangles of paths, and for a sense of close seclusion, defended towards the main approach by massive gates, what can be more admirable than the Temple? No enchanted forest in Arios or Spencer could be more secret or labyrinthine; and the bright lawn of the gardens, locking out on the moving pageants of the river, with the meditative trees and cawing rooks that seem forever dreaming of past times, and the surrounding houses, substantial and grave, yet cheerful, make up, to my thinking, a quiet nest, more delightful for being in the heart of London's vitality. Gray's Inn is stately and majestic; but it wants the grace and brightness, the ever-renewing poetry of trees; its gardens being out of sight as one stands in either of the squares. Lincoln's Inn, in the gardens of which Mr. Bickersteth used to walk by favor of the benchers, is a beautiful retirement, rendered beautiful by the noble pile of stone building, and picturesque by the rich Elizabethan architecture of a new hall; and Inigo Jones' chapel, raised aloft upon arches, with the open crypt, upon a level with the street, wherein the benchers are interred, is as good as a bit out of the "Mysteries of Udolpho."—*Dickens' Household Words.*

### SUCCESSFUL MEN—THEIR ENERGY.

All men who have succeeded well in life have been men of high resolve and endurance. The famed William Pitt was in early life fond of gaming; the passion increased with his years; he knew that he must at once master the passion or the passion would master him. He made a firm resolve that he would never again play at a game of hazard. He could make such a resolution; he could keep it. His subsequent eminence was the fruit of that power. William Wilberforce in his earlier days, like most young men of his rank and age, loved the excitement of places of hazard. He was one night persuaded to keep the faro-bank. He saw the ruin of the vice of gaming as he never saw it before; he was appalled with what he beheld. Sitting amid gaming, ruin and despair, he took the resolution that he would never again enter a gaming house. He changed his company with the change of his conduct, and subsequently became one of the most distinguished Englishmen of his age.

Dr. Samuel Johnson was once requested to drink wine with a friend. The Dr. proposed tea. "But drink a *little* wine," said his host. "I cannot," was the reply. "I know abstinence—I know excess; but I know no medium. Long since, I resolved, as I could not drink a *little* wine, I would drink not at all." A man who could thus support his resolution by action, was a man of endurance, and that element is as well displayed in this incident as in the combination of his great work.

When Richard Brinsley Sheridan made his first speech in Parliament, it was regarded on all hands as a most mortifying failure. His friends urged him to abandon a Parliamentary career, and enter upon some field better suited to his ability. "No," said Sheridan—"no, it is in me, and it *shall* come out!" And it did, and he became one of the most splendid debaters in England.

Loyola, the founder of the order of Jesuits, the courtier, the man of gallantry and dissipation, obtained such mastery over himself by labor and endurance, that, to illustrate the fact, he stood several hours, apparently unmoved, in a pond of ice and muddy water up to his chin.

Perhaps no other nation in Europe, at that time, could have won the

battle of Waterloo except the British, because no other could have brought to that conflict that amount of endurance needed to win. For many hours that army stood manfully before the murderous fire of the French, column after column fell, while not a gun was discharged on their part. One sullen word of command ran along the line as thousands fell—"File up!" "File up!" "Not yet—not yet!" was the Iron Duke's reply to the earnest requests made to charge and fight the foe. At length the time of action came. The charge was given, and victory crowned the noble standard of England.

Men of genius without endurance cannot succeed. Men who start in one kind of business may find it impossible to continue therein all their days. Ill health may demand a change. New and wider fields of enterprise and success may be opened to them; new elements of character may be developed. Men may have a positive distaste for some pursuits, and success may demand a change. None of these cases fall within the general rule. Men who have rare talents, but if they "are everything by turns, and nothing long," they must not expect to prosper. No form of business is free from vexations; each man knows the spot on which his own harness chafes; but he cannot know how much his own neighbour suffers. It is said that a Yankee can splice a rope in many different ways; an English sailor knows but one method, but in that method he does his work well. Life is not long enough to allow any one to be really master of but one pursuit.

The history of eminent men in all professions and callings proves this. The great statesman, Daniel Webster, was a great lawyer. His boyhood was marked only by uncommon industry; as a speaker he did not excel in early life. With great deliberation he selected the law as his profession, nor could he be deterred from his chosen pursuit. While a poor student, not the tempting prize of fifteen hundred dollars a year, as Clerk of the Courts, then a large sum, gained with great difficulty for him by the zeal and influence of his father, nor could all the persuasions of the father turn him from the mark he had set before him; and his great eulogist, the Attorney General of Massachusetts, is another marked illustration of resolute endurance and indomitable industry—life-long—centering in one profession, making him one of the chief ornaments of that profession, if not its head, in the United States.

The late distinguished American Ambassador, at the Court of St. James, Hon. Abbot Lawrence, whose wealth is poured out for all benevolent purposes in donations large as the sea, could recall the time when he had his profession to select, and the first dollar of his splendid fortune to earn. He chose deliberately a calling; he pursued that occupation with integrity and endurance, through dark days and trying seasons, and the result is before the world. This case affords an apt illustration of the proverb of the wise man, that a man "diligent in his business shall stand before kings and not before mean men."

The late John Jacob Astor, as he left his native Germany, paused beneath a linden tree not far from the line that separated his native land from another, and made three resolutions, which he intended should guide him through life: "1. He would be honest. 2. He would be industrious. 3. He would never gamble." He was on foot; his wealth was in the small bundle that swung from the stick laid on his shoulder. The world was before him. He was able to carry them out. His success was the best comment on his endurance.

Stephen Girard, at the age of 40 years, was in quite moderate circumstances, being the captain of a small coasting vessel on the Delaware; and part owner of the same. No trait in his character was more marked than endurance, and this element gave him a fortune.—*Hunt's Merchants' Magazine.*

#### GUIDE-POSTS FOR BOYS.

Guide-posts are useful by the way-side to point out the right road; and if, at the same time, they warn us of paths in which there is danger, so much the better. Let the young attend to the hints now about to be given: they may keep them from many a wrong road.

1. *Never attempt to do anything that is not right.* Just so sure as you do, you will get into trouble.

2. *When you do attempt anything that is right, go through with it.* Be not easily discouraged. Yield not to sloth or fickleness.

3. *Do not waste your money.* Perhaps you have very little; then take the more care of it. A good book is one of the best things in the world. If you cannot buy as many as you need, borrow from others, and return them safe and clean. Never let a book lie where it may be injured.

4. *Beware of bad books.* There are many; they are of no use, but do great harm. Ask some one who is able to tell you of some of the best books. Never buy a book because it is cheap; some books are dear at any price.

5. *Keep out of bad company.* "The companion of fools shall be destroyed." Keep away from idlers, swearers, liars, and Sabbath-breakers. "One sinner destroyeth much good."

Wit without employment is a disease. "*Erugo animi ru'igo ingenii.*"

#### ANECDOTE OF PITT.

Mr. Pitt was a remarkably shy man. He was on terms of the greatest intimacy with Lord Camden, and being at his house on a morning visit, "Pitt," said his lordship, "my children have heard so much about you that they are extremely anxious to have a glimpse at the great man. They are just now at dinner in the next room; you will oblige me by going in with me for a moment."

"Oh, pray don't ask me; what would I say to them?"

"Give them, at least, the pleasure of seeing you."

And half led, half pushed into the room, he approached the little group, looking from their father to them, from them to their father, twirling his hat, without finding a single sentence at his disposal. So much for the domestic eloquence of an orator.—*Selected.*

**DON'T OVERTASK THE YOUNG BRAIN.**—Dr. Robertson says the minds of children ought to be little, if at all tasked, till the brain's development is nearly completed, or until the age of six or seven years. And will those years be wasted? or will the future man be more likely to be deficient in mental power and capability, than one who is differently treated? Those years will not be wasted. The great book of nature is open to the infant's and the child's prying investigation; and from nature's page may be learned more useful information than is contained in all the children's books that have ever been published. But even supposing those years to have been absolutely lost, which is anything but the case, will the child be eventually a loser thereby? We contend, with our author, that he will not. Task the mind during the earlier years, and you will not only expose the child to a greater risk of a disordered brain, not only, it may be, lay the foundation for a morbid excitability of brain, that may one day end in insanity, but you debilitate its bodily powers, and by so doing, to all intents and purposes, the mind will eventually be a loser in its powers and capacities.

### Educational Intelligence.

#### CANADA.

##### MONTHLY SUMMARY.

The Galt papers state that "The people of the village of Ayr, ever foremost in the path of progress, opened on Monday last, one of the best—if not the very best,—School-houses in any village of its size in the province. The front elevation is 78 feet long and 16 feet high, with a belfry. The school contains 3 rooms, each 32 by 24 feet and an arched lobby 10 feet wide and 20 feet high from the floor. An acre of ground is being enclosed for a play ground to be divided off in the centre, so that the boys will have one play-ground and the girls another, each fitted up for suitable games. Appreciating the great value and blessing of an universal Education, the people of Ayr, in addition to building a large handsome and commodious School-house, have opened wide its doors to all, by making the knowledge and instructions to be given within its walls *Free*—just as it should be—free as the air of Heaven. The teacher takes charge of the Ayr School on the 1st of January next. . . . The Niagara Mail states that "the examination of the County Grammar school under the management of the Rev. H. N. Philipps was held on Thursday 27th ult. The proficiency exhibited by the greater part of the Pupils bore satisfactory testimony both to their own application and diligence and also to the care and attention of their instructors." The Cobourg Sun states that Victoria College closed its summer session last week. The increasing attendance at the College has rendered it necessary to add to the number of instructors; the attendance this session having been much larger than at any previous one, and there being every reason to suppose that it will continue progressive. . . . In addition to the acts of noble generosity in behalf of Trinity College, Toronto, already noticed in this Journal,—We have great pleasure in stating that Robert Denison, Esq. has also founded an exhibition for Students in Divinity, or Arts, in Trinity College. The exhibition is of the annual value of £30, and is tenable for three years. . . . The exercises in the University College Toronto will be resumed on the 2nd of October.

##### COUNTY OF ELGIN TEACHERS' ASSOCIATION.

The members of this body met in session in the Court House, in this town, on the 7th inst. The introductory lecture was delivered by the President, on the "self improvement of teachers, in its relation to the rank of the profession." The aim of the lecturer appeared to be, to show, that improvement in a social, as well as in an intellectual and moral point of view, must be the teacher's own work; and that all that is desirable in this respect, is



quite attainable, and, to a great extent, in his own hands and under his own control. He insisted upon a high degree of attainment, as necessary to the teacher's efficiency, and an essential prerequisite to his elevation to that status in society to which his vocation justly entitles him. While inculcating the importance of self culture, he insisted upon the solemn duty of teachers to maintain a blameless walk and conversation; to cultivate a familiar acquaintance with the branches of Common School instruction, in order to teach them well; to educate their own minds, by entering on a systematic and well arranged plan of study; taking one at a time, and going through it in the most thorough and exact manner possible; to promote the interests of the profession, and to improve the art of teaching.—All those points were insisted upon at some length, and pressed home with a good deal of earnestness. The chair then submitted the question:—"Whether reading can be well taught without neglecting the thoughts." This question gave rise to an interesting discussion, which was carried on at considerable length, by the Rev. Mr. Fraser, the Rev. Mr. Caulfield, Messrs. Treble, Campbell, Potts, Howard and Munro. The discussion resulted in the unanimous adoption of the following resolution: "That in order to teach children to read with ease, elegance and expression: it is necessary that the subjects for exercise should be level with their comprehension, and calculated to interest them." The afternoon session was opened by a lecture from Mr. Treble on the "Utility of Teachers' Associations." He dwelt upon the responsibility the teacher incurred in engaging to impress upon the susceptible mind of the child, the features of intellectual and moral beauty. He drew attention to the fact, that we have no warrant to believe, that the impressions made in the schoolroom will be effaced in time or eternity, and inferred the duty of making due preparation for the proper discharge of the arduous and responsible duties that devolve upon us, as educators of the rising young; and pressed upon the attention of those present, the opportunities that teachers' Associations affords for mutual encouragement, and for diffusing more widely the mature dictates of experience. The Association then engaged in a discussion on the best method of teaching writing, which resulted in the adoption of the following resolution; "That the practice, which appears to prevail of making beginners commence with a small, instead of a free round text hand, militates against improvement, and should be discouraged." The Rev. Mr. Fraser, the Rev. Mr. Caulfield, Messrs. McLachlin, Treble, and Black, are engaged to lecture and to conduct discussions at the next meeting, which will take place in October next.—*Weekly Despatch.*

## BRITISH AND FOREIGN.

### MONTHLY SUMMARY.

At the recent prorogation of the Imperial Parliament, the speaker of the House of Commons thus announced to the Queen the passage of the Act relating to the University of Oxford:—"We have given the most attentive consideration to a measure for the good government and extension of the University of Oxford, by which certain oaths now required to be taken by students have been abrogated, provision made for the establishment of private halls, and enlarged powers given both to the University and to its colleges."... In the royal Speech from the throne Her Majesty thus graciously replies:—"The means you have adopted for the better government of the University of Oxford, and the improvement of its constitution, I trust will tend greatly to increase the usefulness and to extend the renown of this great seminary of learning."... Mr Hamilton has proposed in the House of Commons that all matriculations, degrees and certificates shall in future be free of stamp duty so far as regards the University of Dublin.—Similar concessions as regards Oxford and Cambridge are also proposed in other forms; and the Chancellor of the Exchequer has consented to the principle involved.... It is in agitation to establish a university in Wales, to accomplish which it is further proposed to unite and incorporate the College of St. David's at Lampeter, the Llandoverly Institution, the Brecon College and the various endowed Grammar Schools in the Principality, and that students from all the above shall be admissible for degrees in art and divinity. The idea has been mooted by the Anglo Welsh Clergymen—that is the clergymen employed in Wales where the English language is spoken and preached.... There are four state universities in Sardinia, with 3,000 pupils, and over 12,000 pupils in the secondary schools. That little kingdom is trying to keep up with the age.... A Cape Town correspondent of an English paper thus speaks of the recent elections at the Cape of Good Hope:—"In their respective addresses nearly all the members have spoken largely and well in favour of all kinds of improvements and reforms. Judging from present ap-

pearances, we are, ere long, to have breakwaters, docks, railroads, bridges and other public works for the advancement of commerce and agriculture, and for the development of the vast mineral wealth of this continent. As all are in favour of education, we may expect the establishment of colleges and schools on a scale never before witnessed at the Cape; and so far as the respective Christian churches are concerned, there is to be a more equal distribution of Government grants for educational and ecclesiastical purposes. Under our New Government we are to have no State Church, no sects, no parties, as such; but every man is to be regarded according to his moral and intellectual worth, and not according to his church, nation or color. The first Cape Parliament is to assemble at the close of the present month, and we shall see."

## UNITED STATES.

### MONTHLY SUMMARY

The Trustees of the People's College for the State of New-York recently met at Binghamton and organised the Board by the appointment of a President, Vice-President, Treasurer and Secretary. After the appointment of various committees, the Board adjourned to meet again at Elmira on the 22nd of November next.... The season of College Commencements has just closed. The interest usually excited on these occasions has been well sustained in most of the Colleges.... In an oration made at William's College, Massachusetts, Hon. Edward Everett speaking of Common Schools remarked "I would rather occupy the bleakest nook of the mountain that towers above us, with the wild wolf and rattlesnake for my nearest neighbours, with a village school, well kept, at the bottom of the hill, if I must bring up my children in lazy, pampered, self sufficient ignorance."... The effort determined upon a year or two since to raise a fund of \$50,000 to strengthen and improve Williams College, has succeeded so far that \$28,000 is subscribed, of which \$10,000 has been paid over to the college. Morris Ketchum of New York gave \$5,000, which, aside from Amos Lawrence's generous benefactions, is the largest contribution to the college from any single person. Had Amos Lawrence lived a week longer, probably the whole of the desired fund would have been made up long ere this.

## Literary and Scientific Intelligence.

### MONTHLY SUMMARY.

A Correspondent of the Arts Society Journal, suggests the erection of a cast-iron statue of Shakespeare one hundred feet in height! The interior to consist of three stories, on each of which, there would be an apartment eighty feet in circumference and fifteen feet high; that by an ingenious contrivance, light should be admitted at various places not visible from the outside; and the top room lighted by a roof of glass fixed in the head, and by the apertures of the eyes,—which would each be two feet wide.... The M.S. of Gray's *Elegy in a County Churchyard* was sold at auction in London last month for £130 sterling.... The glass of the Crystal Palace, when illuminated by the Sun, can be seen at a distance of twenty six miles.... The Rev. Dr. Livingston, the eminent African Missionary Traveller, supposed to have been lost, has at length reached the Portuguese Territory of Angola in Africa, Lat. 14° 10' S., and Long. 23° 35'. He had made his way up through the interior from the Cape of Good Hope. In the course of his travels he discovered a very large river, which he navigated in a canoe, from lat. 14°, to lat. 18°. He also found that Lake Ngami is situated two degrees westward of the place assigned to it in the map. The interior of Africa, will no longer be a *terra incognita* owing to Dr. Livingston's researches.... A guild of Literature and Art, projected by Sir E. Bulwer Lytton, has recently been established in England, the object of which is to encourage Life Insurance and other provident habits among authors and artists; to render such assistance to both as shall never compromise their independence, and prospectively to found a new institution, where honourable rest from arduous labour shall still be associated with the discharge of congenial duties.... A complete manuscript copy of the celebrated Penal Code, promulgated by Charles V. in 1532, has been discovered by Dr. Schletter of Leipsic, in a library of that City. As fragments of this Code only were known to exist its discovery is important, as, apart from its historical interest, the Code is the foundation of the criminal law in Germany.... A Mr. Merryweather, as stated by the *Journal de Quebec*, has been enabled to form a Barometer by means of the Horseleech. The simplest barometer has

hitherto been, a grain of the Wild Oats. This grain has the faculty, it would seem, in an extreme degree, of gathering the moisture of the air at its earliest approach, and being connected with an index by a delicate mechanism of thread, by its subtle contractility indicates upon a disc adapted for the purpose, the degrees by which the tone of the air is disturbed by any approach of rain. The Horseleech it seems has the power or the instinct of giving infallible indications of the approach of a tempest, and the physiologist we have named has contrived the machinery for exhibiting this not only to the eye but to the ear. It acts like that of the wild oat we first instanced, by a connecting thread. The leech, disturbed by the electrical state of the atmosphere, and following its instinct, ascends a glass tube which is provided in the water; in so doing, it moves a thread which is attached to the clapper of a bell, and indicates, (it does not appear, however, in any way to measure)—the change which has taken place in the state of the air. . . . Thomas Crofton Croker, died on the 8th of August, at his residence in Gloucester Road, Old Brompton, aged 57. He was a popular contributor to the lighter literature of England, and was in all respects an estimable gentleman. He was a native of Cork, and many of his writings related to Ireland. His last production was a letter to J. S. Redfield, of New York, in reference to the suppressed correspondence of Tom Moore with his music publisher. . . . St. Peter's Church, Rome, will accommodate 54,000 persons; Milan Cathedral, 37,000; St. Paul's, Rome, 32,000; St. Paul's, London, 25,000; St. Petronia, Bologna, 24,000; St. Sophia's, Constantinople, 25,000; Florence Cathedral, 24,000; Notre Dame, 21,000. . . . It is stated that Victor Hugo is a disheartened exile in the Island of Guernsey; Lamartine is nearly forgotten; Alexander Dumas is neglected; only Guizot, Villemain, Augustin, Thierry, and Victor Cousin remain, of first class French writers, and of these last, Guizot alone is active. Thiers is occupied in writing his book on Italy and the fine Arts in the Sixteenth Century, Villemain is completing the second volume of his "Souvenirs Contemporains." . . . Dr. Eichhorn of Cologne, author of a highly esteemed history of German law and other similar works, has just died. . . . The Chinese of the present day are said to have lost a curious secret. They knew formerly how to paint on their porcelain fishes, and other creatures in such a manner that these figures never appeared to the eye until the vases were filled with liquor. . . . Italian art has just sustained an irreparable loss by the death of Paolo Toschi, the engraver, a native of Parma, who died there at the age of little more than sixty. He was not merely a first rate artist, but was highly gifted in literary and other topics. His conversation like that of Rossini, is said to have been one of uninterrupted flow of wit and humor. . . . A long series of photographic impressions, taken last winter in Egypt, have just been presented to the American Institute, by an American, Mr. John Greene, who has traversed that country from Alexandria to the second cataracts of the Nile. These photographic plates are very interesting in a scientific point of view, presenting as they do numerous inscriptions and bas-reliefs taken from the sombre recesses and depths of the temples of ancient Egypt, where photography has hitherto been unable to operate, and which Mr. G. has now been enabled to lay before the members of the Institute by an ingenious method of his own invention. He took their impression by the application of pasteboard, which had been softened by soaking in water, to the sculptured surface of the stone, which, when dried in the sun, presented its exact counterpart, and thus he was enabled to reproduce by photography the inscriptions and bas-reliefs faithfully incrusting in the flexible pulp. Triumphs, processions, wars, sacrifices, are all reproduced with perfect fidelity and in exact order. It is understood that Messrs. Goupil & Co., will shortly publish about sixty of Mr. G.'s views, representing the most remarkable sites, landscapes and monuments in Upper Egypt. . . . The building for the Paris Universal Exhibition of 1855 is of stone externally, and the contract was taken by Messrs. Goldsmid & Co., at 11,327,000*f.* Mr. Viel is the architect. There will be two wings, which will cost 6,000,000*f.* more, and various temporary buildings. The main structure is a parallelogram in three spans about 820 feet long, and 354 feet broad. The width of the centre span is 157 feet, and the height in the centre 108 feet. The gallery will stand over the whole width of the side divisions, about 79 feet. . . . Recently as the work-men engaged in deepening the well of Sheriff Ansel Wright, on Maple Street, in Northampton, Massachusetts, discovered at the depth of seventeen feet from the surface of the ground, eight different kinds of wood—parts of the trunks and limbs of trees, and such kinds as never grow together. The following descriptions were found viz: hemlock, white pine, sycamore or buttonwood, maple, spruce, birch, black oak and alder,—all, of course, more or less decayed. There were also found in the same place, buds of hemlock and spruce, burrs

of witch-hazel, pig-nuts, which decomposed within about half an hour after exposure to the air, and one acorn, perfect. It is manifest from these specimens of draft-wood, that what are now the Northampton and Hadley meadows were once a great sheet of water, thus confirming the theory of Prof. Hitchcock.—It would seem that a depth of seventeen feet of earth could not be accumulated upon that locality, in less than a score of centuries. . . . Expensive experiments are going on by order of the English Government, to test the effect of shot made from antimony upon wooden as well as iron surfaces. As far as they have been tested, the destructive effects of these balls are more apparent than those arising from iron ones, for, as soon as the surface is struck, the metal, owing to its great brittleness, breaks, and the various particles consequently, become widely spread. The authorities seemed to be much pleased with the success which has attended these experiments; and it is said that an immediate supply of antimony balls will be despatched to the fleets in the Baltic and the Black seas.

#### MINERAL DISCOVERIES IN CANADA.

There has been much exploring done this season, on the north shore of Lake Superior and Lake Huron: and we understand that many valuable discoveries, in the way of copper and silver, have been made. Heretofore, explorers have confined themselves mostly to the shores of the Lakes; but this year, they have ventured further into the interior of the mineral regions, and have been well repaid for their trouble. Several very large and promising veins have been discovered in the region north of the Bruce Mine, and some new discoveries have been made a hundred miles or more east of that place. These localities on Lake Huron are well situated for mining, and we wish our neighbours every success in the business. On Lake Superior, a large native copper vein has been discovered on Michipocoten Island, and is now being opened by the Quebec Mining Company, and several other veins of like character have been discovered in that vicinity this season. This goes to contradict the usually received theory on the subject of copper mines on the "north shore." It has been supposed by geologists that copper would be found only in the shape of sulphurets, and that the native metal was confined only to the "south shore." It is not the first time, however, that geological theories, in regard to this region, have been disturbed by facts and discoveries.—*Lake Superior Journal.*

THE LAW OF COPYRIGHT IN ENGLAND.—The final decision of the highest judicial tribunal in England in the case of Jefferys vs. Boosey, is so important to American authors and publishers, that we reproduce an extended report of it in another column. A London firm, writing to a publishing house in this city says:—

"The question whether a foreigner can hold a copyright in this country or not is now definitely settled. You will see from perusal of the case that he cannot. It is competent now for any person in the country to print any American books—forthcoming ones, and all those which have, so to say, become vested property in this country. The consequence of the decision will be a general scramble; several of the cheap publishing houses having already intimated their intention of publishing all the works by Longfellow, Halleck, Bancroft, Prescott, Beecher Stowe, Hitchcock, &c."

It appears, however, that there is a way, after all, by which an American author may secure a copyright in England; Lord Cranworth having intimated that if a foreigner goes to England with a work, and the day after he arrives publishes the work in that country, he will be within the statute. No long residence, but a merely transient visit would seem from this dictum to be sufficient to enable a foreigner to obtain a copyright. This privilege of course can only be available in the case of future publications.—*N. Y. Commercial Advertiser.*

SCIENTIFIC OBSERVATIONS IN A COAL-PIT.—On Saturday, Professor Airy, the astronomer royal paid a visit to the colliery district of the Tyne in pursuit of curious and important astronomical observations. For that purpose he was taken by Mr. Mather, a scientific gentleman belonging to South Shields, down Horton pit, the deepest in the Tyne, 1,260 feet deep, to examine if it were possible to make arrangements in it for a series of delicate experiments and observations in reference to the pendulum, and the earth's action upon it there, simultaneously with similar ones on the surface, with a view to determine the weight of the earth and planets. Mr. Anderson and the other proprietors and officers of the mine gave every facility to the astronomer royal, and tendered not only the use of the mine, but their own personal services for every future occasion. Everything at present looks encouraging for these important scientific experiments.—*London Times.*

**DIGESTION OF FOOD.**—The *Scientific American* says that of all articles of food boiled rice is digested in the shortest time—an hour. As it contains eight-ninths nutritious matter, it is a valuable substance for diet. Tripe and pigs' feet are digested almost as rapidly. Apples, if sweet and ripe, are next in order. Venison is digested almost as soon as apples—Roasted potatoes are digested in half the time required by the same vegetables boiled, which occupy more than three hours and a half—more than beef or mutton. Bread occupies three hours and a quarter. Stewed oysters and boiled eggs are digested in three hours and a half—an hour more than is occupied by the same articles raw. Turkeys and geese are converted in two hours and a half, an hour and a half sooner than chickens. Roasted veal, pork and salted beef occupy five hours and a half—the longest of any article of food.

**THE IMMENSITY OF THE UNIVERSE.**—As a proof of what an immense book the heavens are, and also of the indefatigability of the student man in turning over its leaves, Doctor Nichol, in his work describing the magnitude of Lord Rosse's telescope, says that Lord Rosse has looked into space so tremendous, so inconceivable, that light which travels at the rate of 200,000 miles in one second, would require a period of 250,000,000 of solar years, each year containing about 32,000,000 of seconds, to pass the intervening gulph between this earth and the remotest point to which his telescope has reached! How utterly unable is the mind to grasp even a fraction of this immense period, to conceive the passing events of a hundred thousand years only is an impossibility, to say nothing of millions and hundreds of millions of years. The sun is ninety-five millions of miles from the earth, yet a ray of light will traverse that immense distance in 480 seconds, long as the distance may have seemed to be passed in so short a time, what comparison can the mind frame between it and that greater distance, which Doctor Nichol and Rosse demonstrate would require every second of that time to represent more than five hundred years! And recollect the study of astronomy is not only useful to excite the emotions of grandeur and sublimity at such discoveries, but it is the basis of navigation and of our note of time, and unites the strictness of mathematical reasoning, and the most certain calculations.

**ON THE PHYSICAL STRUCTURE OF THE WESTERN DISTRICT OF UPPER CANADA.**

BY W. E. LOGAN, F.R.S., AND DIRECTOR OF THE GEOLOGICAL SURVEY OF CANADA.

The Western District of Upper Canada has, at a short distance on the north-west side of it, the coal-field of Michigan, and at a somewhat greater on the south-east, what has been called the coal-field of Appalachia. The former, as has been ascertained by the investigations of the geologists of the United States, occupies the chief part of the interior of the southern peninsula of Michigan, and has a superficies of about 12,000 square miles, while the latter, extending in length from the north-eastern corner of Pennsylvania to Tennessee, and in breadth from the vicinity of Lake Erie to the sources of the Potomac, presents the greatest known carboniferous area on the face of the globe, its surface being equal to about 60,000 square miles. The rocks of the Michigan coal-field, where they approach nearest to Lake Saint Clair, and those of the Appalachian, where they do the same in regard to Lake Erie, exhibit an attitude so near to horizontality, that without accurate admeasurements, it would not be easy to detect their dip. Those between the coal-fields and the two Lakes equally do so, and those again between the Lakes themselves are, as a whole, flatter still. The Western District, thus flanked on both sides by coal measures, and showing no easily observed reason in the dip why they should not be carried across it, might induce those who had made no careful examination of the matter to entertain a hope that some outlying patch of such measures might yet be found in that part of Canada. The ascertained structure of the District, however, shows that such a hope would be ill founded; and I propose to place before the Institute an explanation of what that structure is, illustrated by a map and section. that part of the map representing a portion of the United States being copied from the works of American geologists.

The rocks comprehended in the section in descending order are—

1. Gneissoid, or Metamorphic series.
2. Huronian, or copper-bearing rocks, perhaps equivalent to the Cambrian of England.
3. Potsdam Sandstone.
4. Calciferous Sand-rock, Chazy, Birdseye, Black River, and Trenton Limestones.
5. Utica Slates.
6. Hudson River group.
7. Median Sandstones.

} Lower Silurian.

8. Clinton and Niagara Groups.
9. Gypsiferous Rocks, or Onondaga Salt group.
10. Corniferous limestone.\*
11. Hamilton group
12. Chemung and Portage groups.
13. Mountain or Carboniferous Limestone.
14. Coal measures.

} Upper Silurian.  
 } Devonian.  
 } Carboniferous.

It is not my intention to give any detailed description of these rocks, but for their mineral and fossil contents, as well as their respective thicknesses, refer to the various official reports presented to the government on the progress of the geological survey of the Province, and of those of the geologists of the United States; nor shall I allude to their geographical distribution in detail farther than as occasion may require, the map being sufficient to explain it.

Taking these rocks in their general groupings, it will be perceived by the map that the Lower Silurian series, by a change in the strike from north to north-west, sweeps round from Lake Ontario to Georgian Bay, and proceeds thence by the north side of the Manitoulin Islands, and the north shore of Lake Huron, to the northern peninsula of Michigan. The upper Silurian follows them. The Niagara Limestone at the base, aids in forming the neck of Land separating and holding up Lake Erie from Lake Ontario, and continues in a ridge along the Blue Mountains, and the promontory terminating at Cabot's Head, and Cape Hurd, of which promontory the chain of the Manitoulin Islands is only an interrupted prolongation. The Gypsiferous rocks succeed conformably, running from Grand Island by the Welland and Grand Rivers, to the River Sauguine, while the superimposed Corniferous Limestone, from Lake Erie on the one side and Lake Huron on the other, is projected forward into the Western District as far as the Township of Zone. The same formation, with a projected form in an opposite direction, comes up from Ohio by the upper end of Lake Erie, and is carried north-easterly as far as the eastern side of Chatham.—Between Zone and Chatham, the Hamilton group composed of black bituminous shales, constitutes a narrow band, which runs north-westward towards Lakes Huron and St. Clair, and south-westward to Lake Erie, gradually widening in both directions in the surface it occupies, and finally merging into two rings, or irregular circular belts, one of which is rudely concentric with the coal measures of Michigan, and the other with those of the Appalachian field—of which last, however, the map shows but a small portion. Within these two rings, thus united by the band across the Western District, and between them and the carboniferous centre, the Chemung and Portage groups occupy their place, in two broad and entirely separate zones, one of them shewing itself north-west of St. Clair, and the other south-east of Lake Erie.

To any one accustomed to consider the forms derived from the intersection of surfaces, who will carry in his mind that the various formations which have been given are nothing more than a set of thick, close-fitting and, conformable sheets, which are intersected by the general surface of the country, it will be at once apparent that the ascertained geographical distribution of the formations results from the fact that between the Michigan and Appalachian coal-fields there is a flat anticlinal arch, the axis of which runs with a gentle curve, from the upper extremity of Lake Ontario by London, Zone, and Malden, to the Maume River, at the upper end of Lake Erie, and that between Chatham and Zone there is in it a slight transverse depression. This anticlinal arch is represented in the section, the line of which runs in a north-west and south-east direction from the one coal-field to the other, a little south-west of the Hamilton Shales in Chatham. The section is given on a scale of one mile to an inch, both horizontally and vertically; for it is only by using the same scale for both measurements that a true idea can be at once conceived of the very small slope in a set of strata that is required to produce important effects in geographical distribution.

It will be seen by the section that between the highest formation in the Western District (the Hamilton group) and the Carboniferous series, the rocks that are wanting (the Chemung and Portage groups) have a thickness of about 2500 feet, and without a very extensive area of these, there can be no reasonable expectation of coal.

The position of the great Lakes of the St. Lawrence, and the distribution

\* What is called the Corniferous limestone, under No. 10, is intended to represent whatever there may be in Canada of those deposits which, in the New York series of rocks composed the Helderberg series, with the exclusion of the Onondaga Salt group; and it may be remarked, that the line of division between the Upper Silurian and Devonian rocks is given as merely approximative. The true position of this line seems as yet not quite certain, but it is supposed to be somewhere about the middle of that portion of the Helderberg series, which lies above the Onondaga Salt group.

of the rocks in connection with them, is one of the grandest and most beautiful instances to be met with, of the dependence of the geographical features of a country upon geological structure. Lake Ontario, Georgian Bay, with its continuance behind the Manitoulin Islands and Green Bay, in Wisconsin, are excavations in the same formation of the Lower Silurian series. Lake Erie, Lake St. Clair, Lake Huron, and Lake Michigan, are excavations in equivalent constituents of the Upper Silurian, while there runs a ridge separating these two sets of excavations from one another, which derives its main characteristic from the Niagara Limestone. The Chemung and Portage groups, which are composed chiefly of sandstone, have been strong enough to resist the denuding forces which have produced the excavations, and we find them forming equivalent limits to the Upper Silurian, or perhaps more correctly, Devonian Lakes. It is thus the distribution of these various rocks, which is again dependent in a great measure upon the anticlinal arch running between the two great coal-fields, that gives to a very large part of Upper Canada its present geographical form.

Let us suppose that there was the smallest possible patch of the Carboniferous series in the Western District. What would be the result? It would be surrounded, of course, by the Chemung and Portage groups. These would give around the Carboniferous centre, a broad ring of sandstone, which would reach as far as Malden to the south-westward, and London to the north-eastward, and the Western and London Districts, instead of being underlain chiefly by calcareous, would be so by silicious rocks. The structure in connection with the coal-patch being sinclinal instead of anticlinal, the projected forms of the Carboniferous Limestone would be turned in the opposite directions to those they now have, and in Canada, all the formations below would in succession be carried farther to the eastward. With the distribution of the rocks, the forms of the lakes, dependent on this distribution, would be altered. The sandstones surrounding the coal-patch would extend, with the exception of the coal-patch, across from the Michigan to the Appalachian coal-fields; and if like causes are to be supposed productive of like effects, one-half of Lake Erie and a part of Lake Huron would be obliterated, and the remaining portion modified in form. In short, the supposition of an acre of the true Carboniferous rocks existing in the Western District, requires as a consequence, the supposition of a very extensive change in Upper Canadian geography.

If it be supposed that the coal-patch might be present through the influence of a dislocation, one of the conditions of such a dislocation must necessarily be that it must produce a downthrow on one side or the other, of at least 2500 feet; and it would still be required that on the downthrow side, the wide zone of sandstone, and all the circumstances consequent on it, should follow the coal until interrupted by the fault. But if disturbances had occurred in this part of America of sufficient force to produce a dislocation of this order, it is probable that it would not be a solitary one. The strata of the district would have been tilted up to various high angles, and instead of its flat surface, dependent on the flatness of its rocks, the country would have presented a mountainous one.

Unless, therefore, workable coal seams are to be found in older rocks than those of the true carboniferous age which no ascertained facts either in the United States or in Canada, or any other part of America, authorize us to expect, it appears to be a necessary consequence of the structure of the Western District that none will be met with there. But though there are no true coal measures in the district, there are rocks which may readily be mistaken for such by observers, who unaware, when actual workable coal seams are not before the eye, how extensive an examination it may be expedient to make, and how many circumstances connected with geological structure it may be necessary to bring into harmony, before it is definitely pronounced whether a particular set of strata are likely to be associated with coal seams, are disposed to come to a hasty conclusion, founded upon the mere mineral resemblances. These rocks are the black bituminous shales of the Hamilton group. They are no doubt nearly identical in mineral character with similar shales frequently found interstratified with true coal measures. Like them, they in several places hold so much bituminous matter as to give a partially inflammable character to the rock, and to yield petroleum or mineral oil. Not only do they resemble them in mineral character, but also in some degree in respect to a portion of their fossil contents. Coal measures are strongly marked by their fossil plants, and in the Hamilton shales are found *Calamites*, a genus abundant in the Carboniferous rocks, though the species may perhaps be different. These *Calamites* in the Hamilton shales, having lost their interior by decay, are found compressed into flat stripes and converted into crystalline coal, as they generally are under similar conditions in true coal measures. The circumstances of the case, therefore, might occasionally deceive even practical observers, had they not other guides in the Crustacea and Mollusca of the formation, and a traced out and ascertained place for it in the order of superposition, in which by prior extended examinations its constituent strata had become known. It has been well ascertained by the geologists of the United States, that the place of these shales in Northern New York and Pennsylvania is about 2500 feet beneath the Carboniferous rocks; and before the institution of the state geological surveys, the formation had been very extensively and very expensively examined by boring, excavation, and surface explorations in search of coal seams, but of course without success; and it is with a view to aid in preventing a repetition of such useless expenditure in Canada that the present paper and its illustrations are submitted to the Canadian Institute.—*Canadian Journal*.

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All Candidates who purpose presenting themselves at the ensuing Examinations, are required to transmit to the Registrar, at his office in the Parliament Buildings, the necessary certificates, on or before Thursday, October 5th.

Information relative to the subjects of Examination, and other particulars, can be obtained on application to the vice-chancellor.

Senate Chamber, Parliament Buildings, Toronto, September 9th, 1854.

To be inserted by all the news papers of the city twice in each week up to November 2nd.

COMMITTEE ROOM, Toronto, September 4th, 1854.

THE COMMITTEE of EXAMINERS of CANDIDATES for MASTERSHIPS of COUNTY GRAMMAR SCHOOLS in Upper Canada, having met on the above date to make the preliminary arrangements requisite for carrying into effect the provisions of the GRAMMAR SCHOOL ACT, as set forth in the 2nd clause of the 11th Section, have decided on holding their EXAMINATIONS for the present, quarterly,—on the FIRST MONDAY of JANUARY, APRIL, JULY, and OCTOBER, respectively.

The first EXAMINATION will be held in the NORMAL SCHOOL BUILDINGS, on the first MONDAY in OCTOBER next, commencing at THREE o'clock, P.M. THOS. J. ROBERTSON, Head Master P. N. SCHOOL, U. C., Chairman.

N. B. All candidates are requested to send in their names to the Chairman of the Committee at least one week prior to the first day of examination.

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