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## THE

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## Articles: Origimal and Selected.

## SCHOOL APPARATUS AND SCHOOL LIBRARIES.

The inclination to improve the school is to be met with in more localities than one might suppose, while reading the reports of the educational policeman who is going around at present in some of the cities of the neighbouring republic armed with the search warant of the Forum; and the number of enquiries that have reached us, even from the country districts, about the necessary school apparatus, all but re-assures us that things are about to be as well as can be expected in this respect. To make a general answer we would give as a first piece of advice that the most necessary and the cheapest articles should be purchased first; and further quote the following article from Intelligence:-In many schools-notally in those of the rural districts-the necessary apparatus for illustrating the different branches of instruction, and libraxies for the self-improvement of the children, are wanting. When we consider that a small outlay of money amually will furnish the school all that is neeled in this direction, it is astonishing that boards of directors and of education are so slow in procowing these indispensable helps to the teachers, and the opportunity of being suitably instructed to the children. The youth of the province are the clearest treasures the people possess, and they are entitled to the best apparatus, appliances and books that it is possible for human efforts to make.

The various helps for teaching in common schools may be classified as fullows :-

1. Referbace Boons.-Under this head we may name a dictionary (an unabridged one for the teachers and more advanced pupils, and smaller ones, octavo size, "academic" or "high school," for the pupils), a geographical gazettecr, and, if possible, in encyclopedia. ('The last named need not be a voluminous work for country schools.)
2. Apparatus.-The means for instruction or illustration are so numerous and expensive to-day-many of them very costly and totally useless in village and country schools-that a close scrutiny and careful selection are necessary in order not to encourage extravagance.

For teaching recaling, a set of reading charts or a reading machine, is very helpful.

For arithmetical instruction, an abacus or counting frame, a set of arithmetical charts and of geometrical blocks, should be purchased.

In geography, a globe (at least six inches in diameter), a slated globe, a map of the county, a map of the state, a map of the United States, a map of the hemispheres, and a set of geographical charts for illustrating the elementary phases of the science, and in graded schools, maps of the other parts of the world and a map of the world (Mercator's projection) are desirable.

For hisforicul teaching, publishing houses have recently furnished some apparently valuable contrivances, which are interesting to the student of history in college or university only. The best historical charts in common schools are those which the pupils themselves prepare, under the direction of the teacher, as a review after a certain period of history has been mastered.

For illustrations in physics, the country school needs very little apparatus, unless the teacher is able to handle it successfully. The best or most useful apparatus in this branch is that which the teacher himself makes, or the teacher and his pupils manufacture themselves. (Air-pumps, electric machines and batteries, purchased at the instigation of an enthusiastic, competent teacher of physics, are, after his departure, often left to rust and decay in the dust of the garret or cellar, under his successor ; and this want of care has, in many instances, prevented school boards from making purchases in that line again.)

Some specimens of stuffed mammals and birds will be found very useful in teaching zoology. Reptiles, batrachians and fishes
may be brought into school alive for the purposes of illustration ; likewise molusks, insects, worms and lower animals. Great care should be taken by the teacher, in this matter, not to allow children to treat these amimals cruclly. Collecting butterties, beetles, etc., is one of the results which the study of nature produces upon children, thus keeping them out of mischief and vice.
For the study of botany, plants may be had during the greater part of the year. Teachers should inform themselves during what month, or even week of the month, the blossoming of the plants take place in each locality.

In geology, specimens are easily obtained; and it would be very beneticial if a collection of the metals and other materials used in our industries, the arts, and our household economy, could be obtained for the schools.

Cases and lockers should be provided, so that the books, specimens and apparatus can be safely kept, and that order and clemuliness may prevail everywhere.
3. Librames.-If our children were to learn to read and to master the four or five reading books of a series in school, only, and afterward they were to receive no further encouragement to read good books that will widen their circle of thought and cherish in them an ideal life, their reading would be of very little consequence. For, merely to be able to read without having a taste to read inculeated, seems like " love's labor lost." To create a love for reading, and, especially, for reading the best of literature, libraries are to be established in every school district of the State. Valuable as the country newspapers are, if the young were to gather no other information than what is contained in them, they might for their mental improvement, as well not read at all.
"The best is just good enough for the children," says the poet. In these district libraries none but books of unquestioned and unquestionable merit should find a place. Within the last ten years, most book houses have publisheel excellent books for young people, and to merely begin to print a list of suitable books here, would far exceed the space at my disposal. With the aid of the county superintendent and the teacher, the school board of every district may select from the various catalogues good books, suitable for every grade of children in school. Children who have not attained a certain proficiency in reading should not be made to read independently. Great. harm is also done by causing such young children to read by themselves; they get used to skimming over the pages hurriedly,
without taking in the sense of what they read. Such slip-shod reading is highly to he deprecated.

How to Use dine Labramr.-When the books are purehased, the first thing to do is to prepare a catalogne, i.e., the books should be numbered, and the number and title entered in a book. Rules for the use of the libnary should be adopted, and these, together with the name of the district, should be written on the cover, or by means of printed slips, pasted on it. The teacher should be the librarian, keep the book aceomet of the library, and watch carcfully that the proper books (i.e., for the age) be loaned to the children. The library should he open for the loaning and exchange of books only at certain hours in a given day of the week. The children should under no circumstances be permitted to take books from the shelves and to select books at any time. By such practice the very objects of a library would be defeated; children would become devourers of books, not careful readers. During the hours when books are returned, the librarian can at once notice whether any damage has been done and call attention to it, so that it may be repaired, or, in case of serious damage, the book can be replaced. Since parents may not always be cognizant of their children's taking books from the district library, it will be good practice to require parents to vouch for the children before the latter are allowed to take books from the library.

## THE TEACHER TAUGHT.

The teacher tanght-not by the normal school, nor the weekly meeting, nor the summer assembly, nor the national convention, but-in the school-reon itself, by the faithful and earnest doing of the daily task and the wise appropriation of wisdom's experimental hints. That is the way every teacher, who is properly constituted and evolved, gets tuat final and supreme training which is the secret of professional success. The teacher may come from the training school armed cap-a-pie with all the equipment of knowledge and method, but he will be as awkward and ineffective as David in the armor of Saul, until he has put off his profundities and his theories, and stooped to pick some of the smooth stones of wisdom from the brook of practical experience. That is the reason why school committees, in selecting teachers, give so much importance to the matter of previous experience. The crucial question always is, not how much does one know? but, how much of what one knows is he now capable of imparting to others?

We shall have to admit, then, that the best teaching for a teacher, that which consummates and crowns, and makes fruitful the whole educational process, is the practical experience of the school-room. Nothing can take the place of this or render it in any degree less valuable, less essential.

Such being the fact, it will be interesting, I trust, to study for a few moments this subject of self-instruction in school-room work. How is the teacher taught? What are the methods by which this reflex educational process is accomplished?

First, the teacher is directly taught by the pupil. What a debt of gratitude every instructor owes to his classes, for the discovery of new points of view, for fresh and whackneyed interpretations of truth, for keen, earnest questions that pierce to the very heart of a subject, for intuitive hints and suggestions, throwing their light far beyond the topic under discussion: I doubt if any thoroughly wide-awake and appreciative teacher ever had a pupil from whom he or she has not learned something of permanent value.

It may be that the lesson comes in the way of rebuke. Many a teacher has blushed with honest shame at the quiet, straightforward, naive criticism of a clear-cyed child. No one so quick, so sure to spy a fault, and, having spied it, to frankly point it out, as a school-boy or a school-girl. Respect the honest faces of children. It will not do to be anything but sincere and genuine before such batteries of imnocence and sincerity as these.

Again, the teacher's instruction from the pupil may come in the way of appeal. One of the greatest benefits of dealing with young people is the magnetic way they have of drawing a person out. Their needs, their demands, even their manifest failings make a certain helpful draft upon an adult, and especially upon one who stands to them in the relation of teacher. The lack in the pupil must sumehow be supplied by a greater sufficiency in the instructor; and this is a healthful invigorating demand. It puts new streugth into the helping mind, just as leading and guiding and lifting over hard places puts new strength into the helping hand. The teacher who has had no experience in the way of supplementing the needs and deficiencies of pupils, has lost or neglected one of the most valuable aids to sellf-development and equipment for his chosen work. The appeal of the student should be one of the teacher's most potent inspirations and incentives.

But, secondly, the teacher is taught in the regular routine of school-room work, by the discipline of mistakes. No worker of
any kind is worth much who has not made mistakes-and profited by them. It is the most wholesome kind of cliscipline. One never forgets the lesson of a mistake. It is like a nemonic burr, that sticks so tightly it would pain you to get it out. The first year or two of any teacher's experience is sure to be checkered by mistakes. But instead of being therefore a depressing period of life, as it too often seems to be, it ought to be a time of perpetual thanksgiving, for throurgout it all wisdom is conferring her most precious gifts upon the novitiate. For every perceived and acknowledged mistake you receive, as a voucher, one of the golden coins of experience-and more than that, fortune supplies you with a safety-vault in which to keep your wealth! For if you had learned these very lessons theoretically, you would be apt to forget some of them, but having learned them through the hard discipline of mistake, you will never forget one of them so long as you live. "Blessed be drudgery!" cries $7 W^{\prime}$ m. (. Gamett. "Blessed be mistakes !" we respond; for the soundest and sweetest fruit of experience is made up of amended mistalies.

But perhaps the most effective of all the agencies of selfdevelopment in practical school-room work is experiment. I fancy I see some conservative educator start at this statement, as if it were rank heresy to claim the right of experiment for the average teacher. But heresy is at the front nowadays, as one of the world-moving forces. It is right in touch with the spirit of the age. Why, then, should we not import a Iittle of this modern, vivifying force into education? I repeat my assumption, that the teacher is entitled to the right of experiment in school-room work. We have had too much cut-anddried instruction in elementary education. We have had too much subordination of the individual to prescriptive method. It is high time that the element of personality were taken into the account.

I assume, therefore, that the modern teacher has, or will presently have, the right to import his or her personality into school-room work and conduct classes in accordance with personal talents and aptitudes. This includes the necessity, to a certain extent, of experiment. This tentative process, however, need not exceed in any way prescribed educational principles and customs, so far as these are universally admitted to be beneticial. It may simply be applied to the best methods of imparting instruction entirely within the limits of these prescriptions, but with the element of the teacher's personal aptitudes and fitnesses taken into the account. It is in this
aljustment of personality to the needs of the school-romm that the teacher gains much of that higher self-teaching which is necessary to successful professional work. If teaching is a seience, then this is the true inductive method of pursuing it.

Such, then, are some of the means of school-rom culture for teachers. It is a sad mistake to think that when one enters upon the active work of teaching, the period of preparation for that work has passed. On the contrary: the most important stage of it has just begun. The school-room is a post graduate nomal couse, and, like all post graduate comses, it furnishes the most advanced and important and valuable instruction which is obtainable.

## FUitarial Mafes nint Camments.

Before another issue of the Recond has seen the light the June Examinations will be over, and from what we know of the schools in their more matured organization of the present year after so many years' experience of the present course of study, we are inclined to think that the record of the examination will be gratifying. The rontine of the examination and the mamer of receiving, distributing and returning the papers we are now so familiar with, that mistakes of any serious import can hardly arise, yet the greatest care should be taken to prevent even what may be called unimportant mistakes. The teacher has a responsibility which should not be overlooked. The discipline of the school is in his or her hands just as on ordinary days, and wrong doing should be frowned down with as much emphasis during examination week as on any other day of the year. We hope to be able to report in the most favourable terms of the issue of the first week in June. It is a memorable week for the pupils, and should be one of satisfaction to every teacher.
-Some grod things have been said at the late convocations of our colleges, and our readers will be interested in having a collection of them. Dr. Clark Mmray, Professor of Metaphysies, in addressing the graduates in Arts of MuGill University, spoke in lofty terms of the true ideals of education. Intellectual virtues, he said, passed over into the virtuc of moral life, the only way in which a man could be true to others was to be true to himself. Thus a graduate to be true to others and to uphold the honow of his degree must be true to himself and
realise the moral culture that his degree should bring. The Pactilty of Arts was the faculty of eulture, its very existence showed the value to be attached to enlture for its own sake. In the other Faculties scientific and literary studies were pursued for some extrinsic purpose, not only for intrinsic value. The man who only learned to apply a knowledge for an object was thereby committed to a cross utilitarianism. The studies of the other faculties formed intellectual departments for which the Faculty of Arts supplied a stepping stone later by broviding the professional students with preliminary personal culture. The immediate aim of an industrial training being the pursuit of wealth, there was a tendency to degrade man to this alone. So it was valuable to encomrage and maintain all institutions that remind us that man himself is greater than all his possessions, and that it is no use to gain everything if he lose possession of himself. This was the true end of all culture. Man was nothing till he learned this lesson. However imperfectly the Faculty of Arts might perform its vocation, that vocation was clear. It was net for the purpose of training men to produce here, but to obtain the moral and intellectual Faculties, to teach that the production of wealth must be subordinate to the supreme ideal of cultured manhood and woramhood. But of culture, as of all else, it must be said that it must not direetly be sought, but only by the way. There should be self-forgetting devotion, men should have an enthusiasm of hmmanity for a great ideal. As they travelled further in life they might be disheartened at times to find the glorious visions of their youth seem to fade away. "But never part with your faith: this forms the star of life, and now as of old the more men follow it, they will surely be brought to see the light that lightens every man that comes into the world."

- Principal Adams of Lemoxville, at the closing ceremonies of the institution over which he presides, referred to the satisfactory progress in the various departments for the year. It was satisfactory to note a considerable increase in the residential accommodation. This system was deservedly supported by the authorities of Lemoxville. It was hoped that the system and institution would receive greater support from the public. The Principal hoped some magician would arise capable and willing to exercise the enchanter's wand on behalf of the various departments of Bishop's College. It would not be needful to duplicate McGill ; slight variations in type might exist, and this might even be an advantage. The progress of the school under conditions of increased competition in Montreal
and elsewhere was held to be encouraging. Some words of encouragement and congratulation were then said more directly to the graduating class. The spirit of duty, of religion, and oi earnest service and true reverence, which should pervade all professions, should especially adorn the medical, which was one of high privilege and responsibility. No one endowed with the royal priesthood of Christianity could live for the enjoyment of the passing moment merely, to no profession was open a greater opportmity for the service of mankind. Nor had any profession a greater sphere for reverence. There was the reverence for what was above us. The great personal power who had revealed to us right and wrong and that all precious record of one sinless life. The sounder the body becomes the nobler instrument it iecomes for work and worship and the more becoming a habitation for the Divine indwelling. Reverence for those about us-true priests of humanity, medical men while they see much of the littleness and selfishness of human nature, see much of its greatness, its patience, its endurance, its self-sacrifice-also reverence for what is beneath us; for the wonders revealed in the microscope in the matter of germsthe battlefield of disease: these wonders lead us to reverence too. Welcome to your adult rank, God speed you in your life work, so responsible, so emobling, so far-reaching in its manifold issues.
-Dr. Trenholme, dean of the faculty of law in MeGill University, in his address said that during the year there had been no change in the stafl of the faculty. The staff that was nominated upon the reorganization of the faculty under Mr. McDonald's endowment remained the staff to-day, and the names of these gentlemen was sufficient guarantee not only to the generous bencfactors of the university, but to the public, that the course of law delivered in the faculty was as high and efficient as any at present in existence. He did not say this by way of boasting of the work of the faculty, but in justice to the gentleman who had put the faculty on a footing to discharge its duties towards the university and the public. The year had been one of hard work. During the course that the graduating class had gone through they had studied upwards of forty different branches or departments of law and had undergone that number of written examinations of from two to four hours' duration each. He hoped that the day was coming when the faculty would have a building of its own somewhat commensurate with the importance of the work it had to do, and that it would become what it ought to be, a legal
centre in this commmity and a centre of legal influence in the province. Although the faculty had done good work, it hoped to do better in the futme, and had resolved to extend the course to four years. Though they thought that this change should be made, there was no intention of doing it with undue haste. The faculty wished to wait until, among other things, a proposal had been discussed by the different faculties of introducing a six years' couse, partly in arts and partly in one of the other faculties, and a student would then receive both degrees upon graduating. The faculty of law gave its hearty sup)port to the proposal. Another improvement which the faculty had resolved upon was that a portion of the lectures next year should be delivered in French and the examination papers set in Frensh, so that the graduates should go forth with a knowledge of both languages, which was of the utmost importance. This was an epoch year in the history of the faculty, since it was the third year since the faculty was reorganized, and that day was to be presented the first batch of graduates who had been trained mider the reorganized faculty. In conclusion, he read the list of graduates and prize-wimmers.
—Dr. L. H. Mavidson, (L.C., in his address, after a few opening words expressive of the pleasure he felt in addressing the graduating class of 1893, congratulated them on having successfully passed another starge in their joumey towards the professional life. He said that convocation was not merely an occasion for compliments, but rather one of counsel and advice from Professurs as a body to those who had been under their instruction; that the graduating class had attamed the honorable position of Bachelors of Civil Law, and would shortly be seeking admission to the practice of the profession. It was well to have a clear perception of the character and origin of the law, in order that they might be inspired with a desire to fulfil the high duties in comection with its practice and application. "The science of law," he went on to say, "has been described as the perfection of reason, to which it always intends to conform, and that which is not reason is not law." And of it the immortal Hooker wrote: "Her seat is the bosom of God, her voice is the harmony of the work, all things in heaven and earth do her homage, the very least as fecling her care and the greatest as not cempt from her power." He then went on to enlarge yon the sacredness of the calling, saying that behind all acts of larliament moler anthority of the sovereign power of the state, there lies and must ever be those immutable principles of right and wrong which emanate from the Divine
mind itself; that, in so far as the laws which states and communities enact, and are in harmony with those principles, are they worthy of a place within this sublime science. To enforce and point his words, he then fuoted from the prophet, saying that all engaged in the administration of law must recognize their force,-" the Lord is our Judge, the Lord is our Law-giver, the Lord is our King." Natural law is but His will. The Law of Nations is but a system of rules deducible from reason and justice. Municipal or civil law, but a rule of civil conduct prescribed by the supreme power in the state, commanding what is right and forbidding what is wrong. The complex and ever-varying relations consequent in the highly developed state of socicty in which we live call for constant and ever-varying applications of these fundamental principles. He then urged most earnestly that all of those who pass nominally out of the category of students should recognize the divine source and origin of one law, saying that it would emnoble the profession in their eyes, and inspire them with high motives and desires. Law is not merely a science whose principles are to be studied and acquired, but whose principles are to be applied as men between God and man as between "man and man." In this comnection it will become your duty to continue the study of law in its several branches and to familiarize yourselves with the great works of famous men on the subject, among which the Bible is by no means the least important. As a leading American lawyer wrote: "The Bible forms a very natural introduction to the student's course, as being the foundation of the common law of every Christian nation." He further went on to say: "A thorongh knowledge of it will be of incalculable service to you in your practice at the Bar, for oll sreat lawyers have felt and recognized its power."
- Mr. Moss, one of the valedictorians, in speaking of a miversity education, said that it did not consist in the mere mastery of facts. They had dealt with facts to assist in the explanation of the various problems of life. The object of the university training was the development of thought, and if the maduates had learned to think, the facts would come afterwards. It was not the aim of the college to send out walking encyclopedias. The character of the students had been moulded during the seven years' contact with the carnest professors of the college. As they looked out on the work they saw certain conditions of life existing, and it was according to the times that they must govern themselves. The spirit of toleration was eminently characteristic of the age. There was a cry for a
moderin creed reflecting the thought of the age. Would it not be better for the ministers to mould that growth as much as possible? Among the other subjects for the graduates to take a stand upon were Church Union, the relation of the Church to labor, and the building up of a crreat Cimadian nationality.
-Prof. Nicholson, in addressing the students of applied science in McGill University, gave a few words of advice, warning and encouragement. He pointed out that those who had that day received their diplomas in the faculty of applied science were entering upon the practice of a profession which, in the arduousness of its successful prosecution, might compare with any other for which the university prepared students. He tonched upon the civilizing and humanizing nature of the engineering profession, and spoke of the present state and the future prospects of engineering as a profession, the qualifications necessary for its successful prosecution and the etiquette to be observed between professional brethren. Engineering skill, he said, had been one of the most potent factors in placing the Anglo-Saxon race in the fore front of nations. Up to the middle of the eighteenth century Britain depended for engineering upon foreigners; but now, instead of borrowing engineers from abroad, she sent them to all parts of the world. He mentioned some of the great engineering works achieved by AngloSaxons during the past half century, such as the underground railway of London, Eng., the Union or Central Pacific railway, the Northern Pacific railway, the Sonthern Pacific railway, the Canadian Pacifie Railway, the Clifton suspensson bridge, the Niagara suspension bridge, the Brooklyn bridge and the Forth bridge. He recommended the cultivation of a spirit of accuracy and self-reliance, and said that their condurt to the other members of the profession should be founded on the principle: "Act by your colleagues as you would have them act by you." Let, them ever remember that they were graduates of a grand miversity, and that their actions would reflect upon it either for honor or for dishonor.


## Current Euents.

-The experiment of school entertainments is realizing well in many of our villages, as in the case of Lachute, where over $\$ 60$ was raised by this means, lately; and Lemnoxville, where over $\$ 10$ was obtained. The money gain does not give, however, an estimate of the whole gain of these enterprises. With the money the equipment fund is of course augmented,
but through these meetings the public are brought directly into contact with school work, and it is just possible that in the near future it may lead to a regular practice of school visitation by the parents. The introduction of a public day in our larger schools may he necessary before the practice fully matures, but the time is coming when the parent shall know what the school is from his own inspection, and not form his opinion so readily as he does now from hearsay.
-Sir Willian Dawson's return from the south in an improved state of health has been greeted with the warmest congratulations on all sides, while at the Convocation meetings his reception was attended with ovation after ovation. In closing the proceedings of the Arts Convocation, Sir William reciprocated by warmly thanking those who had made such kind reference to himself and his work, and expressed his deep satisfaction at being restured once more to their midst. But the greatest satisfaction of all was to see that the prosperity of the University was not affected by the absence of any one man. The general faculty, he said, should have larger means, equipments, and more men. He also referred to the expectations held of the graduates who, by their character and attainments, should be an honor to the University.
-In comection with the retmon Principal Dawson, Mayor Desjardins said: "No words could be too strong to convey the esteem and appreciation in which Sir Willian Dawson was held by Montreal, and he congratulated the University upon this anspicious occasion, which sitw him once more anong them restored to healch. There was no doubt his name, as one of the greatest lenefactors of the University, would be handed down to posterity associated with the names of those nolle men whose generosity had been the means of placing AccGill in her present efficient position."
-At the twentieth Convocation of the Mentreal Wesleyan College, the Rev. Dr. Shaw reported that the college has at present an endowment of $\$ 50,000$. They desire to have it increased to $\$ 100,000$. Through the good offices of Mr. Harris. $\$ 17,000$ of this has already been raised.
-The Ace(till Nomal School has had in traning this year, besides the undergraduates in the academy classes or attending lectures in pedagogy, $\$ 8$ teachers, of whom three were men. In the Model School there were $3 \overline{50}$ pupils in attendance, of whon $20: 3$ were girls and 147 boys.
-Chameellor Heneker at the late Conrocation of the Medical Faculty of Bishop's College alluded to the parent: institution at:

Lemnoxville. It was a Church of England institution, but no attempt was made to interfere with the religion of the students. Many visitors had come to inspect their new building and all had admired it. The College Chapel, thongh as yet not quite finished, was the subject of much favoral)le notice on the part of strangers. It was constructed in the same style and compared favorably with the chapels of universities in England. He hoped to see a general board appointed to examine Canadian medical students. The degrees might still be presented by the particular college at which the students had studied, but a uniform scheme of this nature would be most advantageous. He felt sure it wonld result in the acceptance of a Canadian doctor, not only in every portion of the Dominion, but also throughout the world. The same scheme had been adopted in the case of clergymen of the Church of England, and he was confident it would soon be arrived at by medical examiners in Canada.
-The Dean of the Faculty of Medicine of McGill University has lately reported, in commection with the donations of $\$ 100,000$ from Sir Donald A. Smith and $\$ 60,000$ from Mris. Molson, that the Faculty was now preparing plans and otherwise engaged in arrangements for carrying out the designs of the generous benefactors.
-We regret to learn of the projected departure from our province of Principal Bamister, of Stanstead College, and lately Principal of St. Francis College. Principal Bannister intends going to the Pacific Coast for the benetit of Mrs. Bamnister's health. After faithful service of so many years, he deserves to enjoy a period of rest in the Far West, but we are sorry to part with him all the same.
-In the Faculty of Arts of JicGill, students who have hitherto been divided into "partial" or "occasional" students are to be henceforth classified under the on? designation of "partial students." The students in the faculty will thas be either "undergraduates " or "partial students." An alteration was made in the tables of fees, so that the full fee for an undergraduate will be $\$ 35$ per session; this sum includes the fees hitherto paid for the B.A. degree. The fee for partial students attending one class only will be $\$ 8$ per session, this fee including the use of the library; for each additional class will be 54 . For partial students who wish to use the gymmasium the extra fee will be St. This scale of fees applies to the Donalda Classes also, and will come into operation in September next. The optional "Miscellaneous"
fees for special classes and oljects remain as given in the callendar.
-'The Rev. Dr. Cornish, in his opening remarks at the Convocation of Congregational College, referred to the institution as having been sufficiently long established for it to have arrived at years of discretion. His own connection with the Faculty began in 1864, on its removal from Toronto to Montreal, he having, on the closing of Gorham College, Liverpool, N.S., been appointed to the Classical chair at Mectill, in 1857. He was glad to be able to congratulate the College and its friends on the endowment being within four or five thousind of the $\$ 50,000$ desired. He paid a tribute to the worth of the Rev. Dr. Mac Vicar, whose services were so appropriately recognized by the supporters of the College of which Dr. MacVicar is the principal, and spoke of the friends who had generonsly contributed to their own, the Congregational College.
-The group of buildings now in occupancy upon the University campus of the new University of Chicago are four: an administration and recitation building, known as Cobb Lecture Hall, and three dormitories, occupied by students of the divinity and graduate schools. Three alditional buildings in the neighborhood are leased by the University-two as dormitories, one for laboratories and lecture-rooms.
-Dartmonth College has just received the largest individual bequest, with but one exceptiom, in its history. It comes from the late Ralph Butterfield, M.I), of Kansas City, Mo. The bequest, amounting to about $\$ 180,000$, is for the purpose of maintaining a chair and professorship for the purposes of lectures, recitations, and general instruction in palieontology, archreology, ethology, and other kindred subjects, and for the erection of a building to cost not less than $\$ 30,000$ for keeping, preserving, and exhibiting specimens. Dr. Butterfield was born in Chelmsford, Mass., in 1S1S, and graduated from Dartmouth in 1839 .
-The ammal report of the Ninister of Education of Ontaxio shows that the total school population of the province in 1891 was 615,751 , a decrease of 2,000 for the year. There were 20,000 more boys than girls. The average attendance of rural pupils was 48 percent of the registered attendance, while in towns it was 61 , and in cities 57 . The number of teachers was $\$, 336$. The highest salary paid was $\$ 1,500$. There are now 5,786 schoolhouses in the province. Log schoolhouses are fast disappearing, there being only 619 against 1,466 in 1850. The cost of education per pupil was $\$ 834$, against $\$ 582$ in 1879 .

Ontario has 289 separate schools, with 36,168 pupils, and 639 teachers. The zimber of separate schools has advanced from 175 to 289 in fifteen years. The expenditure increased $\$ 163$,S81, and the number of teachers increased 305 during the same period.
-At the last meeting of the Montreal School Commissioners, the question regarding free scholars, asked at last meeting, was answered. It trunspired that there were 30 Govermment scholars in the High school who were all boys. 'They paid no fee but were charged $\$ 1.00$ a term for stationery. The Government paid $\$ 11.5^{5}$ for this, which with capitation fee of $\$ 4$ gives an average receipt of about $\$ 43.00$ each pupil. This was not sufficient and difference was charged to the city school tax. Commissioners' scholarships were awarded: 20 to boys and 20 to girls each year. They entitle the holder to free tuition. At present 42 boys and 50 girls receive these scholarships. Children of teachers are admitted free when attending schools to which their parents are attached.

- The report of the committee of the School Commissioners of Montreal appointed to enquire into the matter of examinations and promotions was presented. The views of teachers were that it was desirable that promotion be determined by the ordinary work of pupils each year, not by amual examinations. The only time that examinations would be used would be in the case of scholars passing from one school to the other-from the public school to the High School, or from the High School to a college, an examin tion would be necessary, but not when a pupil passed from grade to grade. Dr. Shaw said there was a growing dissatisfaction with examinations, but there were many objections to any other system. After considerable discussion, it was unanimously agreed to take no immediate action and hold themselves ready to have a conference with the teachers next session.
-The old pictorial spelling book is likely to be superseded by something still more practical. The new invention consists of a square block of wood upon which the word to be studied is written, and to which a complete miniature model of the object represented by the word is affixed. A tiny slice of bread in cardboard, for instance, and the letters $p-a-i-n$, the last three in some striking colour, would teach the pronumeiation of ain or pain. Is there not a suggestion here that might be of service to M. Gouin?
-A congress of primary teachers, meeting in Toulouse, has passed a resolution in favour of the suppression of the certificate
of primary studies. They urged that the examination is bad for the schools, in that it leads to forcing the stronger pupils and nerglectins the weaker ones, and bad for society in that it tends to swell the ranks of the declasses. But may there not be another explanation?
-It is sluwly being recognized that the teacher of school handicraft must be something more than a mere mechanic. In future all candidates for the toaching certificate must hold the diploma of the baccalaureat or brevet supervicur.
-A legacy of a thousand francs a year for twenty years has been left by a former sous-prefet of Avesnes, to be awarded each year to the most deserving lay primary teacher of the clistrict from the point of view of moral education. A most interesting experiment in this direction is that which has been carried on now for some fourteen years in the Orphelinat Prévost, at Cempuis (Oise). In this establishment, where boys and girls are educated together, offenders are sent to a class-room by themselves, where, after thinking over their offence, they are expected to write a detailed account of it, justifying their own action or criticising their master's, if they feel that they have been misunderstood or treated unfainly. A careful record of all short-comings is, moreover, kept in a "moral account-book," extracts from which are sent to the parents every two months. The method is said to have succeeded, but we wish it were possible to have facts and figures from the Director himself.
-In the last report of the McGill Board of Governors we are told that Mrs. J. H. R. Molson had donated $\$ 1,000$ towards paying for the sessional lectures in Chemistry. Sir Donald A. Smith was also mentioned in the report as having lindly offered to make provision for the salaries of sessional lecturers for 1893-94. The following appointments were made: Mr. J. L. Day, A.B., sessional lecturer in classics; Mr. W. J. Messenger, B.A., sessional lecturer in English language and literature; Mr. H. M. Tory, B.A., sessional lecturer in mathematics; Rev. J. I. Morin, M.A., sessional lecturer in French language and literature. Mr: N. N. Evans, M.A., Sc., was reappointed sessional lecturer in chemistry, under the gift of Mrs. J.H. R. Molson. Mr. Howard 'T. Barnes was appointed assistant in the chemical laboratory for 1893-94, in place of Mr. J. M. MacGregor, B.A., B.A. Sc.
-The Chicago Board of Education is making vigorous efforts to limit the scope of education in the public schools, under the pretence of abolishing what they classically call "fads." This war upon certain kinds of learning is itself a mischievous "fad."

Its capital stock consists largely of nicknames, and the reformers who are conducting the campaign of non-education think that any study in the school is quite sufficiently condemned when they choose to stigmatize it as a "fad." In the scornful vernacular of those critics modelling in clay is " mud pie making," and the satire is applauded ly it generation of fools. One of the most useful employments for children is the making of mud pies, and clay modelling is merely an advance from that to experimental and solid lessons that make abstract learning easier. The Board of Education met last night, and a committee appointed at a previous meeting brought in a report recommending that the following "fads" be abolished, mamely, clay modelling, German, physical culture, drawing, sewing, and singing. The report was referred to the committee of the whole, which will meet February 2 Brd. There are some Boards of Education that make me nerrous whenever they handle educational questions. They make me feel just as I would if Jack Hicks, who used to fiddle "hoe downs" for us on the frontier, should with profane fingers attempt to play the overture from Semiramide on Ole Bull's violin. His brother Joe used to rattle on the tambourine what passed with us for a Beethoven symphony, and he played it quite as intelligently as the Chicago lioard of Education plays on "fads."-Open Court.
-The Bishop of Ripon lately distributed to the students of the City of London College the prizes and certificates gained during the past session. The Lord Mayor presided. After distributing the prizes and certificates, the Bishop of Ripon gave an cloquent address to the students. H.e said that he might take for his text the thought of the duty and methods of study. A great deal of study might be put down to the laudable desire of improving oneself for the duty and work of life. Some one had said that the difference between man and the lower animals was that man could tell what o'clock it was. It was not every man who had a watch in his pocket, however, who could tell what were days in the march of progress, but the man who knew how to adjust his activity to the growing movements of the day. They must not, however, sink to the level of mere opportunists, but should also consider the moral and social interests and the well-being of the society in which their lot was cast. Study should help to the development of all one's best powers, but they should put the development of their faculties above the mere study of subjects. A headmaster, for whose memory he had the greatest veneration, had once selected as the four best books for study the Bible, Euclid,

Piato, and Shakspere ; and the longer he thought of that selection the more he saw that there was a fund of real wisdom in it. Euclid ment that no education was a good and solid one which iad not an element of scientific training in it. Far and above the grip of any particular scientific study was the study of the scientific method itself. Plato stood for philosophy, which would have its hold on men's minds as long as the world and men remained what they were. Shakspere represented imagination, which was most essential to successful study. The Bible mennt that they should cover all with a sense of religion.
-Rer. Dr. McGlym, formerly in charge of St. Stephen's Catholic church in this city, was a famous friend of the public schools; for political reasons he was suspended, but is now restored. He says concerning the late action of the Catholics in favor of the public schools: It is refreshing to know that Archbishop Satolli will not allow bishops to object to Catholic children being sent to public schools. He will excuse the people and priests from building parochial schools, even though they are ordered by a bishop who delights in telling Catholic people that unless they do not send their children to a parochial school they are sure of eternal dammation. "The public school is an American institution, and should be supported. I did not find anything in the theology I studied at liome which said I would have to sacrifice my patriotism for my religion. Religion does not require that. Patriotism is a Christian virtue. Yet, notwithstanding, you know how many of our archbishops and bishops in the name of sweet religion think it necessary to antagonize one of our most sacred and dearest institutionsthe public school."
-A few years ago the strong argument was urged in favor of manual training in school that it would keep the boys longer in school and that it would make more symmetrically developed men in an intellectual sense. We shall have to wait some years, probably, before we can determine by results the validity of the second argument, but are we not ready now or shall we not soon be ready to establish the truthfulness or falsity of the first? Does manual training keep the boys longer in school, and if so is it or is it not at the expense of the moral and intellectual education they ought to receive? It will be interesting to hear from those who have been observant and who know.
-There are 40,000 little children in London who go breakfastless to school every morning. This is the saddest feature
of the great unemployed problem which agitates the metropolis. The matter has been urgently brought before the School Board this week by delegates from the idle workmen, with a request. that the City should fill the stomachs as well as the brains of the little ones whose attendance it compels. The subject had already been semi-officially investigated, and the appalling figures, which are daily growing, were found to be substantially correct. It is also said that a wholesome porridge can be provided at a cost of only a halfpenny per child. It is argued that, unless such an expedient is adopted, the compulsory education law might as well be repealed, for hunger for knowledge and hunger for food can never co-exist in the same body, least of all in a child's.

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Dr. Birkett lately lectured before the Montreal Teachers' Association on the "Throat and Its Cure." The lecture was illustrated by various specimens, which were passed from hand to hand amongst the audience. Large diagrauns were placed upon the wall behind the platform-diagrams of the human throat and its parts. The lecturer dwelt on the importance of knowing something about the parts which enter into the formation of the throat. The human voice organ might be regarded as consisting of four parts: the voice box, the lungs, the windpipe, the resonators. These last included the upper part of the throat, the nasal organ, and the month. The voice box was the most prominent of the whole organ. It was most commonly called the Adam's apple. In it was contained the elements essential to the production of voice, namely, the vocal chords, or vitiatory element. The doctor went on to describe the vocal chords, which were two in number. When normal they were pearly whice in color, they were smooth surfaced, and were like elastic bands stretched between two points. They were capable of being separated and approximated. They could be made tense and relased. In the process of inspiration they separated; upon expiration they approached cach other. All their movements were under the control of the will. The entrance to the voice box was guarded by a little lid, whose function it was to prevent the intrusion of foreign bodies. How was roice produced? The blast of air was sent from the lungs by way of the windpipe to the vocal chords. The sound was produced by the vibration of the latier. The pitch of the note emitted was altered by the degree of tension of the chords;
its quality was changed by passing through the nose or through the variable positions of the mouth. Thence the doctor passed on to the practical part of his subject. The taking of breath demanded the direct attention of the speaker or singer at every moment. The accomplishment of this function with case was a matter of judgment and training. They must be quick to notice the occurrence of all pauses: they must even look out for them beforehand. Morcorer, they must be well acquainted with the capacity of their own chests. The artistic management of the breath was of special importance in music. In speaking the attention of the audience was not so much concentrated on sombl as on sense. But if a singer neglected a chance, he might have to squeeze all the air out of his chest before he could find another-or clse mar the melody by a gasp. Besides the evil might not be momentary if the chest was exhausted, for it must be replenished by a very long breath in order to prevent a repetition of the same trouble. The expulsion of the residual air from the chest demanded a considerable muscular effort. This museular effort increased up to the point where the lungs were emptied of all but their fixed air. In such a case a quavering sound would be produced, and the audience would know that the singer was straining himself. Such straining caused fatigue, and as a consequence of a single mistake the singer might not regain freedom of breath through a whole song. Such awkward management of the breath might be habitual with vocalists who had never had technical training. If so, they might exhaust their lungs unnecessarily through inexperience whenever they sang. Then the inevitable result would be a train of evil, such as a sense of fatigue which was easily induced, sore fecling about the throat, leading to husciness of voice and uncertainty of vocal production. Teachers were particularly liable to this hoarseness and huskiness. But it might, however, be met with in any one who used his or her voice, either for speaking or singing, in an unskilled mamer. Dr. Gre $\cdot$ ille Maclomald had noticed this in the case of many school teachers in London, and had in consequence given much attention to the matter. He found that the majority of schools were over-crowded, the rooms were smill, and the numbers of pupils greatly in excess of what they should be. The atmosphere soon became hot and dusty. The teacher breathes this vitiated atmosphere. Then the crowded room of noisy children and the racket on the London streets necessitated the teacher straining his or her voice in order to be heard. This thing, along with the bad air,
brought about the complaint. Dr. MacDonald had recommended that all teachers should undergo a course of training in the art of voice production. They should be taught to breathe so that their chest walls do all the heavy work, while their vocal organs do nothing more than the mere production of sound ; the mouth and lips bearing the onus of producing articulate speech. Therein lay the whole secret of practical elocution. At present, the average speaker, whether a member of Parliament, a clergyman, o1 a teacher, tried to enforce attention by sereaming with the vocal chords instead of speaking with the mouth or lips. The ultimate consequence was clergyman's sore throat or hoarseness. He then went on to say that he had visited the High School that morning and had been shown through three or four different rooms. Though these had been occupied by pupils for some hours he had found the air pure. Abnormal conditions of the upper part of the throat and nose might act detrimentally in the production of a cultured voice also. Enlarged tonsils, alteration in the shape of the uppor jaw and consequent malformation of the teeth. Impediment to the normal and natural way of always breathing with the mouth closed was also cletrimental. Mouth breathing had a most disastrous effect on the voice. Its effect in early childhood was irequently seen on the adult when the nasal passages are narrowed, the upperjaw V shaped and the hard palate very high. Narrowing of the nasal passages resulted often in impairing the quaiity of the voice, sometimes rendering its tone masal in character. The doctor then gave a few points regarding the hygiene of the vocal chords. "Never try to produce a vocal tone without having plenty of breath thoroughly under control. Hold the breath whes: inspired and only commence to expire on commencing to sing. For all purposes of practice it is especially advisable for the pupil to sing piano. Never use the voice when there is a sense of fatigue after using it a short while, as it indicates that the vocal organ or general health is disordered. Don't use the voice in the open air if the weather be cold or raw, nor in a room where the atmosphere is close or dusty. The roice should not be used even in conversation, when undue force is necessary in order to be heard. This applies to travelling in cars and such places, where the noise is considerable. Don't use the voice too long at a time. After continued singing be careful to prevent exposure of the throat externally or internally to the impression of cold air. As to dress: All articles of dress that prevented free breathing should be avoided. The improper use of wrapping up was
also alluded to by the doctor. Too much of it rendered the throat delicate. He advised plain diet, and said the use of tobacco and alcohol was to be avoided. In conclusion, Dr. Birkett announced his willingness to answer any questions that might be asked by the audience. Several gentlemen present availed themselves of the privilege. Of these one wished to know whether the doctor smoked. The latter answered that he did not sing or teach. Moreover he was not ambitious to become an eloquent speaker. Consequently, he felt himself privileged to enjoy a mild cigar.
-In connection with the late closing exercises of the Congregational College the following information was griven in reference to the early educational enterprises of that denomination. The first Congregational College may be said to have had its origin in 1839, when the Rev. Adam Lillie conducted a class of five students at Dundas, Ont., and in September, 1840, the Congregational Academy was formally opened at Toronto, and was under the charge of the Congregational Union of Upper Canada and Camada West. But at a meeting of the Congregational Union of Eastern Canada, embracing that part of Canada West east of Kingston, in 1841, it was decided to establish a Montreal institution. This was done, but in 1845, owing to the funds falling short, it was agreed to combine the eastern ind western institutions. The complete remoral from Toronto to Montreal, however, did not take place until 1864, sixty-four students having been received during the quarter-century there. In 1854 Gorham College, at Liverpool, N.S., founded in $18 \pm S$ by a bequest of Mr. James Gorham, was burnt down and three years later it was amalgamated with the Montreal institution, and in 1860 it took the name of "The Congregational College of B. N. A." It was just previous to this, about 1857, that Yrof. Cormish was appointed to the classical chair in McGill College, and he subsequently took up work in comnection with the Congregational institution. When the Toronto academy was removed to Montreal, in 1864, rooms were provided upon the completion of the enlargement of Zion Church, without rent for thirteen years, and from 1880 to 1884 Emmanuel Church was utilized for the purpose. The Rev. Dr. Lillie was assigned to the professorship of theology and church history, the Rev. Dr. Wilkes to that of homiletics and pastoral theology, and Prof. Cornish to that of Greek Testament exegesis. The two latter, in signifying their acceptance, stated that "they did not desire remmeration for their services." Dr. Lillie died in 1869, and he was succeeded as principal by the Rev. Dr.

Wilkes and several additions were made to the Faculty, including the Rev. Dr. Stevenson, who was appointed principal after the resignation of Dr. Wilkes in 1881. In this year Dr. Wilkes was presented with a purse of $\$ 8,084$ in commemoration of his jubilee as a minister of the Gospel. As long ago as $18 \pm 8$ Dr. Lillie had collected for a building fund, but it was not until $188 \pm$ that the present college building was completed and presented to the Congregational Union. The cost of the college building proper was $\$ 24,624$, Messrs. George Hague, Robert Anderson and the late J. S. MeLaughlan subscribing $\$ 5,000$ each. In 1S86, however, In. Stevenson removed to England and the college authorities had to look for another principal. The selection was finally made in the person of the Rev. Wm. M. Barbow, 1.D., who has filled that position up to the present time.

- MeGill University has hat many benefactors, from the time that the Hon. James Mcctill, who left, after his death in 1813, the estate of Burnside, containing forty-seven acres of land, with manor house and buildings, and also $\$ 10,000$ - the whole valued at $\$ 120,000$, to fomed "The Royal Institution for the Advancement of Learning." The value placed on the William Molson Hall, the property of Mr. Wm. Molson, is $\$ 27,500$, and the Peter Redpath Musenm, the gift of Mr. Peter Redpath, $\$ 100,000$, and also the new Relpath library building, which will cosit over $\$ 100,000$. Sir Donald A. Smith has given $\$ 150,000$ to endow the Donalda department for the higher education of woman; $\$ 50,000$ for the "Lennchoil Endowment" Faculty of Merlicine, and the $\$ 100,000$ for the chair of pathology and hygiene, amounced at yesterday's convocation. Besides this Sir Donald has subscribed $\$ 1,500$ to the Campbell memorial fume ; 51.20 amual exhibition to the Domalda Department; 54,000 for the payment of sessional lectures during the present session, besides many large subscriptions for current expenses and other objects. Besides the exhibitions and scholiuships presented, the endowments of medals and prizes in the various faculties, subseriptions for special oljects as well as donations in kind, the following berquests have been made to endow chairs: The Hon. John Dolson, Mr. Thomas Molson and Mr. William Molson, $S 20,000$ in 1550, to endow the Molson chair of English Language and Litcrature; Mr. Peter Relpath, $\$ 20,000$ in 1571 to cmlow the Peter Redpath chair of NFitumal Philosophy; Sir William Logan and Mr. Hart Logim, $\mathrm{S} 20,000$ in 1.571 to endow the Logan Chair of (ieology ; Miss Louisa Frothingham, $\$ 20,000$ in 1573 , to cndow the John

Frothingham Chair of Mental and Moral Philosophy; Miss Barbara Scott, $\$ 30,000$ in 1884, to endow the William Scott Chair of Civil Engineering; Major Hiram Mills, $\$ 42,000$ in 1882, to endow the Major Hiram Mills Chair of Classics; Mr. David J. Greenshields, $\$ 40,000$ in 1883, to endow the David J. Greenshields Chair of Chemistry and Mineralogy and the Faculties of Art and Applied Sieience; Mrs. Andrew Stuart, $\$ 25,000$, to endow the Gale Chair in the Faculty of Law in memory of her father, the late Hon. Mri. Justice Gale, and Mr: Walter Drake $\$ 10,000$ to endow a chair of physiology ; Mr. J. H. R. Molson subscribed $\$ 20,000$ to supplement the original endowment of the Molson chair of English language and literature, founded in 1856 by his father and uncles, and with the $\$ 60,000$ given by Mr. Molson lately, it is proposed to purchase land valued at about $\$ 25,000$ and to crect thereon a building with the remaining sum. In addition to this Mr. Molson has subscribed liberally to special oljects as well as for current expenses in the various years. It might be mentioned here that Mr. Peter Redpath has in addition to the bequests already credited to him provided $\$ 4,000$ a year for the maintenance of the Library building, and also $\$ 500$ for cataloguing. The magnificent gift by Mr. W. C. Mrelonald, of the engineering and physics building for the faculty of applied science, is fresh in the minds of all. These two buildings, which are the most complete recent acquisitions to the University, were erected at a cost of some $\$ 400,000$ and with , the equipment in the shape of testing machines and other apparatus necessary Mr. McDonald's outlay has been at least $\$ 1,000,000$. In addition to this, $\$ 100,000$ has been donated by private sulscription for machinery for the engineering building. Mr. Mclomald has also, with the sum of $\$ 25,000$, endowed the Mc] onald scholarships and exhibitions, ten in number, in the faculty of Arts, and has from time to time made various donations of lesser importance, including $\$ 1,000$ for the Campbell memorial fund for the Faculty of Medicine. In addition to $\$ 50,000$ to endow a chair of Physics, and 540,000 to endow a chair of electrical engineering. Mr. J. H. It. Molson, in addition to the bequests by him mentioned above, also gave the Mc'Tavish, strect property, valued at $\$ 42,500$, and the library site, valued at $\$ 27,290$. The late Mr. Thomas Workmam established the Workman workshops and equipments with a donation of $\$ 60,000$, besides an endowment donation of $\$ 27,000$. The above bequests and legacies when augmented by the munifient amual subscriptions for special objects and otherwise show that MeGill University
has never wanted for means to thoroughly carry on its work, when the need was made apparent.
-Last summer, eight boys, with a taste for natural history and some training in that line, made a very profitable and enjoyable use of a part of their vacation.

These boys, who were high school students, took a walking and collecting trip. In twelve days they traveled 160 miles, and came home with a new stock of health and a big load of collections. It was a very cheap trip, too, the total expenses being $\$ 9$ for each member of the party.

The expedition left home one morning about the middle of June. One of the boys supplied a strong horse, which was attached to a grocer's delivery wagon. A vehicle was needed. for their camp equipment and their collections. They had a complete camping outfit except a tent, which they had not been able to borrow; so they made up their minds that they would give farmers a chance to offer them the hospitality of their barns. The idea worked well, and every night they slept on the hay in one or another of the capacious barns that came in their way. Their wagon carried food supplies for two weeks.

Each boy had a valise and a roll of blanisets. Then there were botany cans, a collecting press and driers, geological hammers, a camera, and all the other apparatus the boys needed for such a tour. Before they left home they agreed upon their daily routine. They were to have cooked meals morning and night and a cold snack at noon. Four boys each day attended to the culinary deparment, two serving as cooks and the other two serving the meals. The next day the other half of the party took their turn at the cooking pot. Usually the commissary detail rode in the wagon while the others were busy with beetles, bugs, plants, and minerals.

The boys studied the various geolocrical formations. Some of the most interesting places risited were some slate quarries and mines, which are so rich in the beantiful crimson and green ores of gine, and other places where the young students were greatly interested in the finely exposed rock formations. Many specimens of everything that interested them were obtained and when they came home they emiched the cabinet of the high sehool and hat many things left to label and store away in their private collcetions as souvenirs of a very sensible and pleasant vacation jaunt.

The example of the eight boys may well be emulated ly students in many places who have a fondness for mature and a taste for collecting specimens.

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## THAT NEW SCHOLAR.

It was in the spring that the Williams family moved to NTLeaving the old home at Eastville had been hard for all of them, but Mary felt that hers was the greatest grief, for she parted from the "dearest teacher in the world," and from the boys and ginls with whom she had gone to school ever since that first proud morning when she left her babyhood behind, and started off with all the dignity becoming a six-year-old and a possessor of a slate and a First Reader.

Though she vowed she should never find another school like that, yet when on a certain May morning she started to school in $N$-_, it was with an unrecognized expectation down deep in her heart, that she would find that schools were about the same everywhere. But alas! The teacher, Miss Stone, did not look at all like her heart's admiration Miss Prince, for she surveyed the shrinking little girl critically, seemed to find her disappointing, and remarked to Mrs. Williams that she did not believe the child could keep up with that grade. Mary wilted visibly at finding herself at such a mental disadvantage. How she clung to her mother and dreaded to have her go! And what a sad teary face it was that was lifted for the good-bye kiss?

The school had already begun, so when the teacher ushered poor little Mary in she encountered the gaze of one hundred curious eyes. In fact, as she told her mother, it seemed as if the room were all elles. How relieved she was when she could sink into her seat and feel at last that the terrible gaze was withdrawn. After she had recovered a little from her fright and began to listen to the recitation, she found it was history. Now that was her favorite subject, and she brightened up as she began to yield to the interest of the recitation. She was horrified at hearing Miss Stone say, "That new girl may tell us the result of the battle of Lundy's Lane." It would not have been so. bad really, if the teacher had not called her "that new girl" but those true words brought a great sob of home-sickness into her tiroat. At the same instant fifty heads turned around and the one hundred curious eyes were focused upon one poor little frightened girl. She rose-she could think of nothing else to do-but-but-what was the answer?-why couldn't she think of it?-she knew it oncehow loud the clock ticked-no that was her heart thumping-oh, if those eyes would only turn away, perhaps she could think-a half hour seemed to pass-finally she stammered, "The result of the battle of Lundy's Lane was that the South gave up slavery," then she dropped cold and trembling into her seat. She knew that the fifty faces smiled-not fifty-one, for Miss Stone seemed to find her too hopelessly dull to smile at-and then she heard a giggle on the right and a snicker on the left. At recess time Mary went out with the
class-anything was better than the oppression of the schoolroombut no one spoke to her, though she saw the girls whisper tegether while they frequently glanced at her. They were really trying to urge each other to speak to her, but of course she did not know that. The terrible morning finally closed, but a certain sad little girl could hardly keep back the torrent of tears until she got within the door of her own dear home. Her mother kissed her and soothed her as only mothers can, and baci again little Mary trudged for the afternoon session of the inquisition. She was called upon in every recitation that day-sometimes she could blunder upon the right answer but oftener could not. The next day a girl spoke to her. The third day her new acquaintance asked her to come and play "I spy" with the girls, and-well, you know the rest. Mary found out that the owners of the hundred curious eyes were not horrid boys and girls after allshe became attached to them, and fond of her school life, but she was never heard to call Miss Stone " the dearest teacher in the world."

At the end of a year, Mr. Williams was sent by his firm to look after their interests in another city, and thither the family must move. When Mary was told they must leave $N$ - - , she said, " () must I go to a new school? Mamma, I can never go through that again. Whenever I have bad dreams, I always think I am going to a strange school and I wake up crying. Oh, I can't do it, mamma, truly I can't."

After they had moved, Mary purposely made herself very useful around the honse, fondly hoping that she might prove so necessary that she would not be sent to school. Whenever school was mentioned, she would burst into tears and say, "Oh, I can't go, I can't go." But her mother was too wise and prudent to fail to do what was best, so one morning after breakfast she remarked quietly, "You may put on your hat, Mary, for I am going over to school with you." Mary knew the tone-it was no use to argue or protest.

After the Principal had examined Mary, she said, "Now, come with me and I will give you a teacher whom you camot help loving." She stopped at the door of a room and satid, "Miss Lester, will you please step here a moment? I have brought you a new scholar, and I think you will like her." A pleasant voice said, "I know I shall," and a pair of kind gray cyes smiled down into Mary's uplifted blue ones. Then Miss Lester said, "For a day or two, you may feel lonesome and strange, but you must be brave and plucky and you will soon feel at home, I'm sure." Mary inwardly resolved that she wouldn't mind it a bit." Then Miss Lester added, "Now to-day I shall not call upon you to recite. You may just watch so as to learn our ways of doing things. Won't you come in a little while, Mrs. Williams, and see Mary's new school?" As they entered, two or three glanced up at Mary, but instantly looked down again, for Miss Lester had told them so often that it was unkind to stare at a new sehohar. Mary was so interested in watching Miss Lester and noting the new ways of doing things that she saw her mother rise to go but
felt no special concern. It was such a blessed relief to know that she would not be called upon to recite. It seemed only a litite while until the recess time came and Miss Lester came up with a curlyheaded girl saying, "Mary, I want to introduce Florence Wright to you and I hope you two will be good friends. Now, Florence, take Mary out to the play ground and introduce her to our girls and make der feel at home." Florence, proud of her trust, escorted Mary to the play ground and som they were surrounded by a group of girls to. whom the stramger was gravely introduced. One girl gave Mary half of a big red apple, another announced that she lived on the same strect and would call for her in the afternoon, while all insisted that she go with them for wild flowers on the next Saturday.

After recess, when the school had reassembled, a certain fair haired Alice came, slate in hand, and slipped into the seat with Mary, saying, "Miss Lester told me to come and sit with you while we worked examples, so you can see how we put them down. She said you may ask me about any thing you don't understand, and if I can't explain it, then yon are to ask her."

About noon, Mre. Williams came to the door to meet her weeping daughter, but to her surprise, a happy-faced firl came bounding up the steps and as she hugged her mother, she said, "Oh there never was such a nice school! I know all the girls-and Flossic is coming to call for me this afternoon-and may I go to the woods next Saturday? -and, oh, mamma, they didn't stare a bit, did you notice that?-and isn't Miss Lester lovely ?"
-The Ame of Questioning. - Have yon ever studied the Art of Questioning? It is one of the pedagogical Fine Arts. Do you know that the lesson of yesterday which you labored so hard to prepare was robbed of half its value because you asked questions so badly? It is sad that so much labor should yield so small a profit. Let us see why some questioning fails.
lst. The questions are too vague and indefinte. Pupils do not know what the teacher is trying to get at. After one has made two or three ineffectual attempts to follow, he gives up and waits for some one else to puzzle the thing out.

2nd. The questions are direct. Pupils grow tired of saying " yes" and "no."

3 rd . The questions lack continuity or sepuence; they are too haphazard. The scholar becomes tired of doubling on his tracks, and leaping ditches.
th. The questions are too simple. l?upils find them so easy that they require no thought and interest wancs.

5th. The questions are too hard and beyond the ability of the child. Ile finds he can not answer them and becomes too discomaiged to try:

6th. When the pupil's name is called defore the question is asked, how much thinking do the other pupils do?
-There is something in the following as a hint to our teachers in view of the coming examination. The pupil does not always know with confidence that a sentence begins with a capital and ends with a ful stop; and it is sometimes painful to note their eccentricities in the use of capital letters.

Capital is from the Latin adjective capitalis, relating to the head, hence chief or pre-eminent; and several English uses of the word correspond to this meaning. Our capital letters indicate the prominence or leadership of words distinguished by them. They are now used almost exclusively as initial letters; but the oldest Greek manuscripts known and most Latin manuscripts to the ninth century are written wholly in capitals and commonly without any punctuation or spaces between words. In other old writings and prints capitals are much more used with small letters than at present; as, "Many a Noble Genius is lost for Wrant of Education, which would then be Much More Liberal." This usage, so far as it distinguishes the noun, still prevails in German orthography. In this country there has been of late years a sharp reaction from the former redundancy, and the paucity of capitals in some prints, notably certain newspaper and book catalogues, seriously defaces typography and occasionally misleads the reader. The stone church, Cleveland, may mean any church of that material in the city; but the Stone Church designates a particular one. We trust the following rules and exceptions offer the right and safe medium between extremes. Examples are not given in all cases, because many are easily found by the student.

## Rules.

1. The first word of a sentence or a line of poetry begins with a capital.
2. Capitalize also the first word of an expression standing for a sentence.

Four golden rules: When you consent, consent cheerfully. When you refuse, refuse finally. Often command. Never scold.-Abbott.

Education is: 1. Growth. 2. Training. 3. Information. [If the figures are placed in parentheses capitals after them are not used, as "Education is (1) growth, (2) training, (3) information. But the numbers are not necessary, unless paragraphs follow relating to the several particulars and numbered accordingly.]
" Himself his own dark jail."
2. In preambles and resolutions the next word after, "Whereas" or "Resolved" begins with a small letter.
3. When a word is divided at the end of a line of poetry, the part of it carried to the next line begins with a small letter.

> "There first for thee my passion grew,
> Sweet, sweet Matilda Potingen!
> Thou wast the daughter of my tu-
> tor, law professor at the U.
> niversity of Göttingen."

In many old hymm and prayer-books poctic lines considered virtually a part of the line next preceding begin with a small letter.
II. Direct questions and direct quotations with formal introductions begin with capitals.

1. A quotation informally used as part of a longer sentence does not take the initial capital.

A good hint for historical teaching is that "it is not of so much importance to know where Marcellus died, as why it was unworthy of his daty that he died there."-Montaigne.
III. Title-pages of books, chapter-headings, and title-heads of essays or other articles, are commonly in capitals.

1. Heads in capitals and small letters are more common in the newspapers than in magazines or reviews, and are rarely seen in books. When so written or printed, or when a title of any kind containing several words is cited, all those words should be capitalized which are inflected, as nouns, pronouns, adjectives, participles, verbs, and adverbs. The first word of a sub-title following a title and colon should be capitalized, as Richter's "Levana: The Doctrine of Education"; but Rousseau's "Emile, or Treatise on Education."
2. Signs, display lines in placards, bulletins, circulars, and advertisements, and the principal lines of obituary and other monuments, are usually in capitals. Copied inscriptions are sometimes printed in capital letters.

I found an altar with this inscription, TO THE UNKNOWN GOD.-Paul.
3. A writer need not write entire words in capitals. Three strokes under them indicate that they are to be read or printed as capitals.
IV. In letters, the greeting or salutation should begin with a capital, also any noun in it, but not an adjective, unless it is made a noun. The complimentary close has only an initial capital, unless more than one line is taken for it.

Sir, Dear Sir, My Dear, My Dear Sir (Friend, Wife, etc.)
Yours truly. Truly yours.
Respectfully and truly.
Yours.
V. Names applied to God, Christ, the Holy Spirit, the Bible, its great divisions and its books, are capitalized.

1. Heaven and Providence take the capital only as synonyms for God.
2. "King of kings and Lord of lords" is so written because the second noun in each pair is a common noun.
3. Sometimes a designation of God appears wholly in capitals, as in the Bible JAH, JEHOVAH, I AN THAT I AN.
4. Pronouns referring to God, Christ, or the Holy Spirit should be capitalized only when they are used without the antecedent expressed.
"In Him we live and move and have our being."
"Jesus, my Lord, to thee I cry; Unless thiou help me I must die."
5. Neanly all derivatives from the sacred names of Hebrew or Christian religion are also capitalized. The Century Dictionary capitalizes all ordinary direct derivatives from Christ and Christian except christen, unchristian, and christmas as a name of Christmas holly. Divine is not ustally capitalized unless as a noun or title, the Divine, the Divine Being, St. Joln the Divine ; and dominical takes the small letter.
6. The sacred books of other religions are capitalized, but not generic names, as gods, divinities, and the like.
7. The books are quite uniform in requiring devil, as a personal designation for Satan, to be written with a capital ; but custon seldom follows the books in this. It always begins in the Bible with a small letter.

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[All books for review and exchanges are to be directed to Dr. J. M. Harper, Box 405, Quebec, P.Q., and not to Montreal.]

Expermental Chemistry, bf John C.astell-Evans, of the Technical College, Finsbury, London, and published by Thomas Murby, 3 Ludgate Circus Buildings, London. This is a revised edition of a work which has deservedly become popular. Including, as it does, the principles of Qualitative and Quantitative Analysis, it also gives a series of experiments and problems for the laboratory and class-room. As the author says, the book is intended to help students to attain a real knowledge of scientific chemistry, and not merely to prepare for an examination. The book in every sense is a trustworthy one, written with an eye to the true method of acquiring knowledge, and written by a man who thoroughly understands his subject.

Business Correspondence and Manual of Dictation, by Mr. William Brown, Instructor in Stenography, New York, and published by the Excelsior Publishing House of that city. This is a practical compendium, designed for the use of teachers and students of stenography and type-writing. The contents in themselves will encourage many to purchase the book, containing, as it does, a collection of selected letters, representing actual correspondence in banking, insurance, railroad, and mercantile business; a chapter on punctuation, spelling and use of capital letters, together with a complete spelling list of 25,000 words. It contains also special exercises for dictation, carefully graded, comprising selections from choice literature, transcripts of court testimony, address to jury, judge's charge and sentence ; architect's specifications; copies of legal papers; bankers' weekly financial circulars; railroad lease, first mortgage, copy of bond, contracts, prospectus, notices, etc. Altogether it cannot but prove a useful volume.

