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The Educational Journal.

Consolidating "THE EDUCATIONAL WEEKLY" and "THE CANADA SCHOOL JOURNAL."

VOL. I.

TORONTO, APRIL 15TH, 1887.

No. 1.

The Educational Journal.

Published Semi-monthly.

A JOURNAL DEVOTED TO LITERATURE, SCIENCE, ART, AND THE
ADVANCEMENT OF THE TEACHING PROFESSION IN CANADA.

J. E. WELLS, M.A. Editor.
H. HOUGH, M.A., Manager Educational Dept.

Terms:—One dollar and fifty cents per annum. Clubs of three, \$4.25; clubs of five, \$6.75. Larger clubs, in associations, sent through association officials, \$1.25 each.

New subscriptions may begin at any time. Payment, when by mail, should be made by post-office order or registered letter. Money sent in unregistered letters will be at the risk of the senders.

The date at the right of the name on the address-label shows to what date the subscription is paid. The change of this date to a later one is a receipt for remittance.

THE EDUCATIONAL JOURNAL will not be sent to any person after the expiration of the time for which payment has been made.

Renewals of all subscriptions should be made promptly.

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Rates of advertising will be sent on application.

Business communications should be addressed to the publishers; those relating to matter for insertion in the paper, to the editor. These distinct matters should always be treated on separate sheets of paper.

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PUBLISHERS' ANNOUNCEMENT.

THE Grip Printing and Publishing Company, of Toronto, beg leave to announce to the subscribers of the two journals named below, and to all members of the teaching profession, and all interested in the work of education in Canada, that they have purchased the *Canada School Journal*, the oldest educational paper in the Dominion, from its late proprietor and publisher, J. E. Wells, M.A, and have consolidated it with the *Educational Weekly*, which they established in 1885. From this date the consolidated paper, which will then be the only educational newspaper in Ontario, will be known as THE EDUCATIONAL JOURNAL.

THE EDUCATIONAL JOURNAL will be published semi-monthly, viz., on the 1st and 15th of each month (with the customary intermission, probably, during the summer holidays), of the size and general style of the present issue. The intention is that THE EDUCATIONAL JOURNAL shall preserve and combine the best and strongest qualities of both its predecessors, and shall add to them from time to time such new and improved features as cannot fail to make it even more valuable to educators than either of the journals it supersedes and to all whose merits it is the legitimate heir. The distinctive characters of these two journals are too well known to most of the teachers of Canada to require special reference. When to the admirable qualities which gained for the *Educational Weekly* a position in the foremost rank of educational journals in America, are added those eminently practical features which have won for the *Canada School Journal*, under its late management, so many warm expressions of approval from all quarters, it will be seen that the consolidated paper will possess unequalled facilities for meeting the tastes and wants of its patrons of every class.

As a proof of their intention and ability to meet the high expectations that will naturally be formed, the publishers have great pleasure in announcing that they have been fortunate in securing the services of J. E. WELLS, M.A., late editor and proprietor of the *Canada School Journal*, for the editorial chair of the EDUCA-

TIONAL JOURNAL. For the information of those of our readers who may not be familiar with the facts we may state that Mr. WELLS is a Canadian by birth and education, and has had exceptional opportunities for acquiring the training and experience necessary for the successful editorial management of an educational paper. Born and educated in the maritime provinces; having had twenty years' personal experience in teaching, during which he passed through all the grades of the profession from that of the district school to a professor's chair, and, finally, the principalship in Woodstock College; having added to this several years' experience as a journalistic writer, he brings to the work a variety of qualifications not often found in combination. We mention these facts as a guarantee that teachers of every grade need not fear lack of knowledge, sympathy, or appreciation, in the column of the EDUCATIONAL JOURNAL.

The publishers deem it unnecessary to attempt to enumerate in advance the specialties which will characterize the JOURNAL. They prefer to leave these to be developed from month to month. They may, however, intimate that, in response to the wishes of subscribers, they propose making pictorial illustration a prominent feature amongst the improvements to be immediately introduced. As for the rest, suffice it to say that it is the resolve of all concerned that the EDUCATIONAL JOURNAL shall be thoroughly wide-awake and progressive, and that it shall stand second to no other educational paper published.

A word as to the subscription price. This has been fixed, after the most careful inquiry and calculation, at the lowest figure at which the paper can be reasonably expected to repay the cost of publication. The publishers believe that the time has come for the establishment of an educational paper on a permanent business basis. That point has never yet, they are assured, been reached by any educational periodical in Canada. It is impossible that such a journal should be continuously issued at a loss to the publishers. The teachers of Canada do not wish or expect that. The publishers may

state frankly that, as the result of close calculation, they cannot hope that the EDUCATIONAL JOURNAL, issued as they intend it shall be issued, and at the rates named in their advertising notices, will do more, for some time to come at least, than pay its way. When the size and style of this JOURNAL are compared with those of other periodicals, as, for instance, the numerous monthlies containing much less than half the amount of reading matter, whose price is almost invariably one dollar, it will be seen that the EDUCATIONAL JOURNAL will be really a low-priced paper.

All advance subscriptions to the *School Journal*, paid before April 1st, will entitle the subscribers to the EDUCATIONAL JOURNAL for the unexpired period of subscription, and all who have paid in advance for the *Educational Weekly* up to date will be credited with an extension of time calculated on the basis of reduced rate.

The foregoing announcements are made with a degree of gratification which we feel assured will be widely shared. To students, teachers, professors and principals; to parents, trustees, and inspectors; to all Canadians who take an intelligent and patriotic interest in the great work of national and universal education, the EDUCATIONAL JOURNAL is sent forth on its mission, with confident hope of a generous reception and a liberal support, by

THE PUBLISHERS.

Editorial Notes.

SEE Publishers' Special Notice at the head of the editorial page in this issue.

WANTED a hundred teachers of skill and experience to volunteer short, practical articles, explaining and illustrating tried methods of teaching and government, for the department of Sch Room Methods in the EDUCATIONAL JOURNAL.

THE EDUCATIONAL JOURNAL gives greeting to all the exchanges of its predecessors, the *Educational Weekly* and the *Canada School Journal*, and begs leave to remind them that as it now represents both those journals, duplicate copies of exchanges are no longer necessary.

As stated on advertising pages, the next issue of the EDUCATIONAL JOURNAL—that for May 1st—will be a special Arbor Day number. A very large edition, illustrated, will be sent out. Inspectors, secretaries of committees, teachers and any other friends will confer a favor by sending lists of names and addresses of possible subscribers to whom they would like sample copies sent.

CORRESPONDENTS will kindly note the request in the advertising notices, that all communications on matters of business be addressed to the Publishers, and those concerning editorial matters to the Editor. If both are in the same envelope, let them be on separate sheets. This will save the office much trouble.

IT will confer a favor on the EDUCATIONAL JOURNAL, as well as be interesting and helpful to teachers, if the chairman or secretary of each Teachers' Institute will kindly have a brief report of the proceedings prepared and forwarded for publication. Please condense carefully, and omit details of matters of business and routine.

THE proposed removal of the site of Upper Canada College, coupled with its conversion into a purely residential school, must bring the question of another collegiate institute for the city to the fore. Such an institution in the western part of the city is indispensable for the accommodation of the citizens, and no time should be lost in establishing it. It should be ready for opening at the commencement of the school year in September, even if temporary accommodation should have to be secured.

CIRCULAR No. 6 of the Education Department announces that the Minister has again made arrangements with Mr. H.B. Spotton, M.A., to take charge of a summer class in botany. The opening lecture will be delivered in the public hall of the Education Department on Tuesday, July 19th, at 2 p.m. The principal object of the course will be to obtain a practical knowledge of our common flowering plants and vascular cryptogams. To this end, the afternoons will be entirely devoted to field-work, for which the parks and suburbs of the city afford excellent facilities. Mr. Spotton will accompany the students in their excursions, and personally direct the course of the field-work. The mornings will be spent in the lecture room, and the work there each day will be based chiefly upon the field-work of the previous afternoon.

A NEW method for facilitating the study of drawing by teachers is announced by the Minister of Education. Instead of the classes formerly taught at the Department it is proposed to give a grant to each Inspectoral Division in which a class is formed for instruction in elementary drawing. The conditions on which such classes may be formed are:—1. The class must consist of at least ten persons holding a public school teacher's certificate. 2. The teacher in charge must possess a legal certificate to teach drawing; or be approved of by the Education Department. 3. At least 30 lessons of two hours each must be given. 4. Teachers who attend this course will be allowed to write at the Departmental Examination in Drawing in April, 1888. 5. The Primary Drawing Course only shall be taught. 6. A grant of \$20 will be made for each class of 10 pupils, but only one class will be paid for in any Inspectoral Division.

THE proposal of the Whitby board of trustees for the establishment of a Provincial board of high school trustees, is an excellent one. The time has come when these boards should be something more than mere committees for carrying out the instructions of the Education Department. The genius of our institutions favors the principle of local development, and local development on broad and intelligent principles needs the light and stimulus to be gained in an annual general conference. But why not enlarge the idea so as to take in all, trustees, whether of high, public, or separate schools? The latter boards need to be enlightened and aided by comparison of views, and to be brought under the influence of enlarged ideas, still more than the former. The Provincial Institute or Association of School Trustees could have its subsections, just as the Provincial Teachers' Association has. Such an annual meeting would give a powerful impetus to the movement of public education.

THERE seems, so far as we have been able to observe, a pretty general consensus of opinion amongst Canadian teachers, that once in two weeks is about as often as they can find time to "read, mark and inwardly digest" the contents of an educational paper of the size of this journal. Some who have more leisure would, no doubt, prefer the weekly visits to which the subscribers of the *Educational Weekly* have become accustomed. But the majority, we have every reason to believe, will approve of the bi-monthly of enlarged size, greater variety of contents, and reduced price. A good educational paper is a *sine qua non* to a live teacher. We hope to make the EDUCATIONAL JOURNAL absolutely indispensable to every Canadian teacher who has any true ambition or interest in his profession. At the same time no teacher can be a man or woman of a single paper, more than of a single book, without becoming narrow-minded, and we are glad that the new arrangement will not interfere with, but rather encourage, the reading of other periodicals and general literature.

THE amusing extract in another column, from Mark Twain's article in the April *Century*, is full of suggestion for teachers. The examination craze has run its course, and the abuse of a method which is, in its proper use, excellent and indispensable, is being rapidly corrected. The ridiculous results of that abuse, so well set forth by the humorist, will help on the reform. Another valuable hint conveyed to the wide-awake mind, is the importance of encouraging and, so far as possible, compelling, exactness of thought and expression on the part of pupils. There can be no clear expression by word or pen without clear thinking. The necessity for exact expression is the best incentive and aid to exact thought. One of the first, and in the case of many children, one of the most difficult steps in the educational process, is to correct the tendency to haziness of ideas, and to get him fully possessed of the notion that everything in the

world of matter or of mind is exactly something, and not a misty, indefinite, evasive shadow of something which is forever flickering on the border-land of exact thought, but never coming quite within its range.

THE election of members of the Senate by the Convocation of Toronto University takes place on the 4th of May. Four candidates have been legally nominated, viz.: William Hodgson Ellis, M.A., M.B.; John Galbraith, M.A., C.E.; William Houston, M.A.; William Oldright, M.A., M.D., to supply the places of the three retiring members, who are the three gentlemen last named. Mr. Houston is the only candidate who has, so far as we are aware, issued an address explanatory of his views. Mr. Houston does so in a lengthy paper in the last number of *The Varsity*. In this paper he gives an account of the reforms he has advocated, some of which are already secured, and of others which he is prepared to advocate. Some of these are of special importance and may be discussed hereafter. We have now space only to say that amongst the changes advocated are the doing away with all the premiums now put on specialization; increased attention to the cultivation of science and of English in the secondary schools; and the making of English, including old English texts, compulsory on all students of the University during the greater part of their university course, whether general or special.

A CORRESPONDENT of an American paper suggests that the schools be opened four hours in the morning for one set of children, and four hours in the afternoon for another set, and adds: "Teachers should not object to working eight hours a day." We have all heard such opinions expressed in our own country. Their unreasonableness is admirably shewn by a lady correspondent, who says in reply:—"Progressive and earnest teachers already work more than eight hours a day. The writer forgot that teaching is a profession. It is not to take so many stitches or drive so many nails. Neither is it to open the desk at nine and lock it at three, with no further thought of work for that day. It is to stay and work with dull pupils; to take exercise books home for correction; to review the day's achievements and plan the morrow's; to take a peep into educational papers, when time allows, and see what others are doing in one's own line of work; to lie awake at night wondering how to reach the better nature of some wayward child, or the intelligence of some backward scholar. For the grammar teacher it is much weary labor out of school hours upon composition books, etc. For the primary teacher it is the constant study of the greatest of modern problems, how to train the young mind and shape the growing character. To exact from the teacher eight hours a day of class-room work would be equivalent to requiring of the lawyer that he plead eight hours a day in court. The lawyer must have time allowed him to read his books, work up his cases and prepare his pleas. So must the teacher."

Notes on Third Class Literature.

UNTHOUGHTFULNESS—DR. ARNOLD.

BY WILLIAM BURNS, B.A., FIRST PROV. A. (ENG.),
ST. CATHARINES' COLLEGIATE INSTITUTE.

BEFORE commenting on the style of this piece, let us notice the accuracy of the train of thought pursued in it, and its exact suitability to the audience to whom it was addressed. Dr. Arnold was endeavoring to make clear to his audience of students the fact that many things, not in themselves absolutely wrong, become wrong or unthoughtful acts when they prevent the doing of acts of more importance, or more imperative as duties. He directs his arguments specially against the waste of mental energy in reading works of fiction, by those whose whole time and thought should be devoted to brain-work of more practical utility. He carries his audience with him by placing the facts, unconsciously to them, before their minds, and thus constituting his hearers their own judges.

1. Many men are foolish in worldly matters, and still more in spiritual ones.

2. Ignorance is not innocence, and he who does not strive for earthly knowledge will be likely to neglect to attain the heavenly.

3. Knowledge, whether human or divine, should be valued for its own sake, not merely for its rewards—its attainment should be raised to the high standard of a Christian duty.

4. This standard of knowledge is specially applicable to our mental recreations, where every amusement that is not moral and instructive, should be specially avoided, as being unthoughtful use of our mental powers.

5. Hence, evidently, whatever hinders our moral and spiritual improvement is not merely "unthoughtfulness" but positive sin.

Any similar abstract of this piece will show the logical course of Dr. Arnold's reasoning, and the accuracy of his style of writing and thought. We may notice also the verbal excellencies of the piece; thus his terms, "prudent, sensible, thoughtful and wise," are not mere synonyms, but form a climax. "Innocence and ignorance," "savage and madman," "idleness and ignorance," "manly and Christian," all give excellent examples of antithetical ideas. To comprehend such a phrase as "spiritually fools," we must remember that Dr. Arnold uses the word fool, as it is used in our Bible, as it was used in middle English—to denote one who has the power of thought but does not use this gift of God; not as the word is often used in modern English, to denote one without the ability to think. His comparison of the mind to the digestive organs deserves notice as a carefully sustained metaphor or series of metaphors, showing most pointedly the fact that the mind as well as the body suffers from unsuitable and undigested food.

The student will do well to read in connection with this piece, "Dr. Arnold's Life" and "Tom Brown at Rugby," and he will see there that the preacher did not merely "preach" these words but carried the practice of the ideas here given into his daily life and work. The debt of gratitude that higher English education owes to Dr. Arnold is so great that it becomes impossible to reckon it; his influence extends from Rugby to all the grammar schools of England, thence to the universities of the land, and at last, through the work done by those trained up in his ideas of manly Christianity, to all the world. He showed the possibility of combining cheap learning with true humility of mind; religious feeling with manly duty; and abolished from our schools the notion that to become

more Christian is to become less manly and independent. His influence was the stone thrown into the then stagnant waters of intellectual life; the movement thus caused has spread in ever widening circles, and will never cease its onward progress. Let every teacher and every student take the teachings of this piece to heart, and remember that "dissipated" reading can do nothing but injure him, morally and intellectually, producing habits of inattention, of careless study, of want of concentration of thought, in addition to the positive evils it works in waste of time and energy. The result will be, if such a style of reading be indulged in to excess, to render all the powers of the mind enfeebled or utterly useless. Such a reader becomes mentally as truly dissipated a being as the one who indulges in any excess of bodily appetite becomes physically worthless.

The words worthy of comment are:—Chapel-principle, solace, philosophy, contingent, distilling, curiosity, gorged, downright, reflection, prevalence, positive sin. From carefully studying the context of these words any intelligent reader will get the best idea of their precise force; as each is used with its most appropriate meaning, and conveys the exact expression of the idea intended to be conveyed to the reader.

Current Thought.

AN enthusiastic teacher can rouse a lethargic class or room in a few moments, and a great exertion to overcome personal languor for a little while can make the whole day a success in lessons.—*Ex.*

MOST teachers do not read enough. They do not realize how much help they could get from reading a few good books. They worry along through an entire term with a few vexatious questions of teaching or school management when a few hours reading might clear up all difficulties. Teachers frequently lose positions, or are unable to get any except the most unsatisfactory ones when, by the careful study of two or three books, they could so improve themselves as to be able to secure good positions. Economy in preparation is extravagance in results both in financial and educational points of view.—*Iowa Teacher.*

THERE is probably nothing which more determines the deportment and general spirit of a school than the bearing of the teacher, as seen by the pupils from day to day. Decorous teacher, decorous pupils; careless and untidy teacher, indifferent and unseemly pupils. If the teacher is industrious and honest in his work, the pupils will be apt to have the same spirit. If the teacher be reckless and indolent, the pupils may seem to be industrious, but it will be in the wrong direction. If a teacher, careless of bodily posture, allows himself to lounge, prop himself up on his chair, sit on top of desks, etc., the pupils will be very likely to imitate his example. If the teacher is orderly and careful to respect the laws of the school, the pupils are apt to be orderly and respectful of rules, and so on.—*Student.*

WITHOUT unremitting labor, success in life, whatever our occupation, is impossible. A fortune is not made without toil, and money unearned comes to few. The habitual loiterer never brings anything to pass. The young men whom you see lounging about waiting for the weather to change before they go to work, break down before they begin—get stuck before they start. Ability and willing-

ness to labor are the two great conditions of success. It is useless to work an electrical machine in a vacuum, but the air may be full of electricity, and still you can draw no spark until you turn the machine. The beautiful statue may exist in the artist's brain, and it may also be said in a certain sense to exist in the marble block that stands before him, but he must bring both his brains and his hands to bear upon the marble, and work hard and long, to produce any satisfactory practical result.—*Pennsylvania School Journal*.

"LEARN to do by doing," does not mean, as it is so often interpreted to mean, that one is to learn to do by doing in distinction from thinking, but merely that when "thought" has been the pioneer, "doing" is to make the settlement and preëempt the territory. It is not for a moment, as is sometimes implied, that we are to do before we think, for nothing could be more vicious in philosophy or life; but that a thing is not known until action has interpreted into the very fibre of our being the thought in its ideality. It were as reasonable for a child to be taught music without ever having the tone or chord as a mental process in advance of the vocalization, as to have action precede thought. The mind must always give the keynote, the chord, to the hand and eye as well as to the voice. It is, however, as impossible to be able to do anything without ever doing it, or the preliminary things upon which it depends, by the mere idealization of how it ought to be done, as it is to hold an audience with the music of the mind unexpressed in voice or instrument.

There is no difference among educators about the value of doing when once they understand each other as to its relation to thinking. The hand and head, as well as the hand and eye, or eye and mind, must be wedded,—affectionately, indissolubly, wedded,—working for a common purpose with a unanimity that knows no disloyalty.—*Journal of Education*.

Special Paper.

SYMPATHY AS AN ELEMENT OF POWER IN THE TEACHER.

CARLYLE'S words of Sir Walter Scott have always had a charm for me, and frequent meditation upon them but increases this feeling. "And, then, with such a sunny current of true humour and humanity, a free, joyful sympathy with so many things; what of fire he had, all lying so beautifully latent, as radical latent heat, as fruitful internal warmth of life; a most robust, healthy man." "A free, joyful sympathy with so many things!"—like his use of the word sympathy in the sense which permits joy in it, and not the restricted sense of commiseration with others in grief.

Sympathy gives power over others, gives new interest in life through the wonderful insight which it permits into nature and humanity. Wherever it is found in a marked degree, there do we witness its unmeasured influence.

We scarcely need another to point out how essential it is to oratory. Who is it that moves men to action? Not the man of cool, clear intellect, who, being on the height, forgets that he was ever in the valley, and makes those on a lower intellectual plane intensely conscious of a separating distance. There may be a certain kind of admiration tendered him, but he will never be a leader. That can never be until through some subtle power he makes those whom he would lead conscious that he has thought something of their thought, felt something of their feeling, struggled and overcome the difficulties with which they are now contending. He must not only be possessed with the truth of what he teaches, but he must make his hearers feel that he

believes that they can be led to accept the same truth and be moved by the same motive power. Look over the world's great preachers, either of this century or of earlier centuries, you will not find one who has exerted that wonderful heart power which men of the coolest intellect must admire, who has not possessed sympathy in an eminent degree. So true is this that there are those of whom we say that we do not admire its excess, while the truth is that there is in them no excess, but they, seeing the power it gives, have counterfeited and exaggerated the original. Look over your favorite authors, those whom you would really love independent of any verdict of the world of taste in literary matters. Some of them come right into your heart of hearts to talk with you. The gentle Elia seems almost to take your hand, as it were, and sit beside you chatting until you look where he looks and see what he sees. Robert Burns loves you despite your frailties, which he so well knows, because they are of his own nature, until you have something of his deep, generous sympathy with humanity.

Instances might be multiplied, but it is needless, for we all know that the poet must "attune his ear to nature's harmonies" before he can set them to music; that one cannot interpret the heart of man except by the key which his own nature has given him; that he can only read the lessons from the life of the race by the experiences of his own life.

We talk about the "magnetism" of certain great political leaders; and this quality is deemed of such importance that in looking over available candidates, its possession is given considerable weight in determining the scales in favor of one man, and its absence stands seriously in the way of the nomination of another candidate. Now, the most certain element of this as yet not completely analyzed magnetism is sympathy. It, of course, is not the sympathy which comes from the special knowledge of each man's particular affairs, but the fellow-feeling of joy or sorrow that comes from a knowledge of the varied conditions of the race, and a heart touched by these conditions.

But if we look over every field of human labor we shall find no place where there is greater need for the potent influence of sympathy than in the school-room. Nor is there any time of the pupil's life of which we can affirm that the necessity for sympathy has ceased. It is almost the breath of intellectual life to the very little children. And if the teacher is so unfortunate as to have grown old in heart, she cannot accomplish the highest results in the primary department, even if she has a good deal of the wisdom which comes from maturity of intellect. The little ones have, many of them, come from homes where the mother's very existence has been so bound up in theirs that she has had a laugh for their most childish sport, or a tear for even imaginary woes.

If the teacher is lacking in loving sympathy, the removal from home to the school-room will be too much like taking the tender house-plant and placing it out in the cold winter air. On the other hand, if a child has come from one of the unhappy homes where children receive little care, our sympathy will be like the blessed sunshine to the plant which has scarcely felt its genial influence.

I think one makes a better teacher of the little ones by knowing something of dolls and having an appreciation of their beauty. It is not beneath your dignity to have some knowledge of boys' sports. At any rate, to rejoice at their success in harmless games and to feel with them in their defeat, will make them believe that you "really are of some account," and give them more confidence in your ability in other matters. Don't let them see that things which seem to them of great moment are of trivial import to you. The child's nature is to throw off grief, but while it lasts it is very sincere, and you must enter into the sorrow. Indeed, if you have a womanly heart this is not difficult for you. If you put your mind into such close sympathy with the little learner that you feel the effort he is making, by some subtle effect which I cannot fully explain, you carry him to at least a degree of success. Whereas if you repel him by fear, or are indifferent or pre-occupied, you lessen materially the chances of his success. Sympathy on the part of the instructor is more needed by some pupils than by others. I know little girls

whose progress has been very marked, who owe much to the kind sympathy that they have received from their teachers; little girls whose natures are so sensitive that the lack of sympathy would make them draw back into themselves the very qualities of mind and heart which render them so attractive.

As the pupils grow a little older we must not let sympathy die out. I think it may be true that it is easier to cherish this feeling for the very little ones, and again for the oldest pupils; because out of sixty there are scarcely six of the six and seven-year-old pupils without something winning about them; and the older pupils are growing into something of intellectual companionship with us, where sympathy becomes easier. But if it is not easy to feel it towards the boy and girl of twelve, thirteen, and fourteen, there is special need why teachers should cultivate the feeling. The girls will be growing away from dolls and little dishes; we must have some influence in determining what they shall grow towards, and how can we have that unless we set our minds somewhat in accord with theirs. The boy is getting "too big" for many of his early sports, "too big" for his boyish costume; we must see to it that he does not grow "too big" for his teacher. Such boys can be made the most loyal of friends if only convinced that you are honestly interested in them and in their amusements; while their scorn for "a woman who smiles all the time and doesn't mean anything by it," is delightful in its genuineness. Again, their desire to get away from the teacher who wants to work them up to as high a standing as pupils in a corresponding grade, but in her heart of hearts admits that she "hates boys," is only equalled by the desire she would have to get away from them—if she did not get a good salary for staying. If you believe them very disagreeable animals at this age, they will try to realize your expectations, and I can not say but that I sympathize with them in the desire. This is a period of life when they have naturally a tendency towards adventure. You can enter into that feeling and lead them to the reading of works of some of the world's great travellers. They have a taste for the daring, the heroic, and they can be led (*I speak from experience*) to the most eager devouring of history.

When the pupils are growing older a sympathy on the part of the teacher, which leads towards the taking of an interest in every matter of moment to the pupil, leads to a companionship perfectly consistent with discipline in the highest sense of that term. This companionship brings its own reward. Indeed, the freshness of young life with its faith and courage is to us the fountain of youth. College honors have more than once been laid by their winners at the feet of high-school teachers, because the sympathy which bound teacher and pupil together had been so perfect that separation did not, in any degree, weaken the sense that the rejoicing of the teacher-friend would be almost the echo of the victor's rejoicing.

In the darkest hour of loneliness, when the dread visitor's presence was still felt in the household, the faithful teacher has gone to her pupil, and the low-spoken, "I knew you would come," has told the whole history of the relations that have existed.

Without at all weakening character, this sympathy will give the teacher a power over the minds and hearts of her pupils which will enable her to guide their intellectual and moral development.

But not alone in the school-room is sympathy an element of power in the teacher. Wherever teacher meets teacher to discuss questions connected with the interests of the schools, is its subtle influence felt. The county institute instructor who can make his audience feel that there is not a teacher there honestly trying to do his duty, however humble his position, with whom he does not sympathize in his endeavors and in his trials, can leave a thought in more than one mind which will result in action. And, after all, are we so very far advanced that we can only reach our brothers and sisters by the finger-tips instead of with a helping hand?

If the intellect is growing stronger and the heart warmer to impart to others something of this strength, something of this warmth, is our most precious privilege.—*Margaret W. Sutherland, in the Ohio Educational Monthly*.

School-Room Methods.

AN EXERCISE IN COMPOSITION.

LANGUAGE IS GIVEN TO US THAT WE MAY CONCEAL OUR THOUGHTS.

I. Examine the subject carefully, and give your opinion as to the correctness of the statement.

II. If language is the medium by which we express our thoughts, is it contradictory or not, to say that language enables us to conceal thought?

III. Which in your estimation requires the greater command of language, to express thought well, or to conceal thought?

IV. Illustrate your opinion.

V. Mention some instances in which you think it might be desirable to conceal your true opinion of a subject.

VI. Under such circumstances, would the person who possesses only a moderate command of language be likely to tell too much or too little?

VII. Is it to be inferred that the fluent writer or speaker would be likely to prevaricate, or would he merely couch his language in such terms as not to reveal what would be harmful to any one, or be in any way objectionable?

VIII. What does Matthew Arnold mean when he says, "Read between the lines?"

IX. Has this injunction any bearing upon the subject of our lesson? If so, please illustrate?

X. After answering the above questions, please paraphrase the subject, embodying all that has been suggested by the questions.

NOTE.—[The above exercise is best adapted to advanced classes in composition. It is valuable in bringing out the thought of the pupil as well as in putting his thoughts into well constructed sentences. The teacher must be extremely careful not to criticise the first efforts of the pupil in this line of composition, however crude they may be, for the style differs essentially from that of narration or description, and many students are extremely sensitive in giving expression to their own conceptions of a subject that involves thought or opinion well-weighed.]—*S. H. Thompson, in Educational News.*

WHAT IS PROFITABLE WORK FOR THE PRIMARY SCHOOLS?

Teachers who have more than one grade to teach find the need of quiet, busy work, which shall be useful, practical and entertaining. They want work that will so occupy the mind that there will be no disposition to play, to be indolent or troublesome. The following contains some suggestions:—

Cut from the daily, weekly, monthly papers, and old magazines, suitable notices and advertisements that contain useful words for spelling. To make durable, paste them on cards or stiff card-board, and distribute to the children to copy. Suitable advertising cards may also be used. Bill-heads of different kinds of business may be collected for copying; thus business forms are learned, together with spelling and penmanship. Correct forms of notes, bills, receipts and letters, when not obtainable in print, may be written upon smooth card-board. Little items of information may often be culled from papers and old magazines. These may also be pasted upon card-board for copying. Bits of poetry, "Golden Thoughts" from the *Journal*, and wise sayings of great men may be used in the same way.

Outline drawings, so simple that children could copy, are often found in papers. These the children could copy, and write simple sentences about the drawings.

The children may write lists of actions that are being performed around them; as, John is reading, Mary is cleaning her slate, My teacher is walking, &c. They may also write lists of objects in the room, naming to what kingdom they belong, of what material made, of what use as a whole, or as to their parts.

Furnish rules and let the children measure slates, desks and books; and if able to multiply, they can find the square contents of each. They may draw lines a certain number of inches, also squares, and divide into smaller squares, triangles, rhombi, &c.

Get many varieties of leaves, trace the shapes on card-board, cut out and draw in veins. Write

names of leaves and their parts upon the traced leaves, and give to children to trace on slates or paper; draw veins, and write the names as in copy. In this way all the parts of the leaf may be learned, also the names of the principal trees, as well as garden and house plants.

This employment will keep them quietly busy and be pleasantly instructive. The doing impresses the memory better than anything else.—*Anna Johnson in New York School Journal.*

TAXES.

In teaching taxes let us begin with the general term revenue and show that (1) it means sums of money gathered into the public treasury for public uses, and (2) it includes two general classes of taxes, direct and indirect, illustrating and defining these two terms. Having done so much, we are ready to proceed with the special subject, direct taxes; or, as usually mentioned, taxes. These having been carefully defined we go on to the sub-division, poll and property taxes, and who are liable to payment of each. In connection with property-tax is the classification of property into real and personal estate. After this general work follows the specific work of taxation, which may be divided into the parts or steps, appropriation, assessment and collection. Under the work of appropriation we need to show how the estimates are made up, by whom it is done, under a town or under a city government, how the appropriations are voted in towns, when and where voted, and for what purposes. Of course customs and laws vary, but the teacher must acquaint himself with the laws and usages of his state, that he may do his work intelligently.

The assessment consists of two steps, the taking of an inventory and an apportionment of the taxes. The inventory shows each person's property, all the taxable property in town and the number of taxable polls. The teacher will show how this is taken and when. This done the work of apportionment is in order, which we will illustrate, by giving the method according to the laws of Maine.

(1). Take one sixth of the entire tax to be raised.

(2). Divide this by the number of polls and the quotient, if \$3 or less, is the rate of poll tax; if more than \$3, then take \$3 as the rate.

(3). Multiply the rate of poll tax by the number of polls.

(4). Subtract the poll tax from the entire tax for the property tax.

(5). Divide the property tax by the total taxable property for the rate per cent. of taxation.

(6). Multiply each person's real and personal estate separately by the rate of property tax.

(7). Add together the tax on real and personal estate and the poll tax.

Next give the learner examples, including the various items of tax to be raised, the resources of the town, and the taxable property of a dozen or more persons, some of whom shall be non-resident and others non-voting as females. After the working of the example is performed and verified, have a sheet of paper ruled in the form of a collector's book or tax-list, and all the items properly entered. This done the work will mean something tangible and definite to the learner.

Now let the teacher take his pupils through the final step of the work, the collection, in connection with which it would be well to explain how money is properly drawn from the treasury. To complete the work, show what officers have anything to do with taxes, how they are chosen and paid and what are their several duties. In teaching taxes, much will depend on the teacher's intelligence and industry in preparing for his work, as so little is given on the subject, even in the best arithmetics. But let us be sure that it is done in a manner that shall be logical and complete.—*New York School Journal.*

THERE is a time in every man's education when he arrives at the conviction that envy is ignorance; that imitation is suicide; that he must take himself for better or for worse, as his portion; that, though the wide universe is full of good, no kernel of nourishing corn can come to him but through his toil bestowed on that plot of ground which is given him to till.—*Ralph Waldo Emerson.*

For Friday Afternoon.

HIGH-TOP BOOTS.

You'd better not call me Captain boots,
I've grown too big for that;
It is time that I played with girls no more,
And I think that I'll drop the cat.
Old hen, if you snap your spurs at me,
You will have to stand a fight with three—
A couple of boots and a man, do you see?
Ho! pretty good boots! Ho! high-top boots,
Ho! gentleman's boots for me.

Stand out of the way, I'm going to walk,
I'll tread on somebody soon,
Oh! how they do squeak! Yes, how they talk!
I think it as good as a tune,
They tie themselves without any strings,
They match like a pair of angel's wings,
New leather! I hope you smell the things,
Ho! pretty good boots! Ho! high-top boots,
Ho! gentleman's boots for me.

I wish it was Sunday to go to church,
I wish it was Monday to play,
I wish it was Tuesday to ride my horse,
I wish it was every day.
I will wear them to bed, for Uncle Jim
Might fill them with water up to the brim,
As once I filled his boots for him.
Ho! pretty good boots! Ho! high-top boots,
Ho! gentleman's boots for me.

They're temperance boots, for I wore them first
To the Band of Hope last night,
And they squeaked so loud that the chairman said
That he thought they must be tight;
But they're temperance boots and would just as soon
Think of walking straight up to the moon
As of walking into a drink saloon.
Ho! pretty good boots! Ho! high-top boots,
Ho! teetotal boots for me. —*Treasure Trove.*

THE SLAVE'S DREAM.

BESIDE the ungathered rice he lay,
His sickle in his hand;
His breast was bare, his matted hair,
Was buried in the sand.
Again, in the mist and shadow of sleep,
He saw his Native Land.

Wide through the landscape of his dreams,
The lordly Niger flowed;
Beneath the palm-trees on the plain
Once more a king he strode;
And heard the tinkling caravans
Descend the mountain road.

He saw once more his dark-eyed queen
Among her children stand;
They clasped his neck, they kissed his cheek,
They held him by the hand!
A tear burst from the sleeper's lids
And fell into the sand.

And then at furious speed he rode
Along the Niger's bank;
His bride-reins were golden chains,
And, with a martial clank,
At each leap he could feel his scabbard of steel
Smiting his stallion's flank.

Before him, like a blood-red flag,
The bright flamingoes flew;
From morn till night he followed their flight,
O'er plains where the tamarind grew,
Till he saw the roofs of Caffre's huts,
And the ocean rose to view.

At night he heard the lion roar,
And the hyæna scream,
And the river-horse, as he crushed the reeds
Beside some hidden stream;
And it passed, like a glorious roll of drums,
Through the triumph of his dreams.

The forests, with their myriad tongues,
Shouted of liberty;
And the blast of the desert cried aloud,
With a voice so wild and free,
That he started in his sleep and smiled
At their tempestuous glee.

He did not feel the driver's whip,
Nor the burning heat of day;
For death had illumined the Land of Sleep,
And his lifeless body lay
A worn-out fetter, that the soul
Had broken and thrown away!

—*H. W. Longfellow.*

Literature and Science.

TORONTO SCHOOL OF PRACTICAL SCIENCE.

THE following statement of the objects for which the School of Practical Science in connection with Toronto University was formed, and the work it is doing, is of special interest just now, in connection with the advance that is being made all along the line in the higher grades of our educational work. We condense from a thoughtful and apparently well-informed article in the *Globe*:

The School of Practical Science has been in operation for nine years. The object which the Legislature had in view in sanctioning its establishment, would perhaps have been better expressed by the name "School of Applied Science." This object was to afford the means of teaching the application of science to certain branches of industry; in particular engineering, mining, manufactures, and medicine. As it was impossible to say beforehand to what extent the new institution would be found to meet the wants of the country,

THE FIRST STEPS

were taken with caution and with a due regard for economy; for this reason, arrangements were made with the University College, by which it was provided that the Professors of University College should admit students of the school to their lectures on the same footing as students of University College; and on the other hand, that laboratory and lecture-room accommodation in the school should be given to the Science Professors in University College. In accordance with this arrangement, the Professor of mineralogy and geology was established in the basement; the ground floor was placed at the disposal of the Professor of chemistry, and the second floor was given up to the Professor of biology, leaving only the first floor for the Departments of Engineering and Applied Chemistry, in which are enrolled all the regular students of the school.

By this arrangement the college was supplied with laboratories, and the school with teachers at the same expenditure that one alone would have required; and at first, while the students of the school were few, no inconvenience was felt. Now, however, with fifty regular students and a hundred special students,

THE LIMITED SPACE

at the disposal of the school is very seriously felt, and additional lecture-rooms and other accommodations are very urgently needed. Indeed, it is only by appropriating the rooms originally set apart as a library and as a board room that the students in engineering have been accommodated with space for their drawing tables. One small lecture-room has been shared by the Professors of engineering, geology, biology, and applied chemistry, to the extreme inconvenience of all concerned, and in the laboratory of applied chemistry, four students have been allotted to the space designed for one. In the same spirit of economy, most wise in the experimental stage of the undertaking, only two instructors were originally appointed, one in engineering and one in applied chemistry. As the number of students increased, it was found necessary to give each of these instructors an assistant, who shares with the Professor the duty of superintending the practical work of the students in the drafting-room and laboratory. But in the

DEPARTMENT OF ENGINEERING

the assistance thus afforded to the Professor, although indispensable, is quite inadequate on account of the great range of subjects that he is required to teach. In consequence of this, not only is the strength of the Professor over-taxed, but, with all the will in the world, he is prevented by the mere limitations of space and time from doing full justice to his work. At the best he can only deliver one set of lectures to each year on each subject. All flexibility of the course, all adjustment of instruction to the individual needs of the more advanced students is out of the question.

THE NUMBER OF STUDENTS

in engineering from all parts of the province, and even from beyond its boundaries, who have come to seek at the school a training in the scientific

basis of their profession, is all that can be expected. Several students are pursuing the regular course in analytical and applied chemistry, and as the demand for such chemists increases the number of students will surely increase with it. About eighty medical students are now attending the school as special students in chemistry, and the feeling appears to be growing among those interested in medical education, that greater use should be made in the future of the facilities afforded by the school for medical students to acquire there their preliminary scientific training in physics, in chemistry, and in biology. So far then the School of Practical Science has had

A HEALTHY DEVELOPMENT.

But here, as elsewhere, growth is life, and stagnation is decay. Either the school must continue to advance, or it must fall back in the race, and further advance is impossible without increased resources. What the school needs immediately are an additional instructor in engineering, and increased accommodation. If the school has shown itself deserving of the public support, these wants should be supplied. If it has not done so, there is no more to be said.

MECHANICAL AND SCIENTIFIC PROGRESS.

THERE is something in the catalogue of mechanical devices which almost affects the mind with fatigue. Fifty years ago the ordinary citizen picked up his idea of all that was going on in the world from a sorely-taxed news-sheet; and a very blurred idea he managed to get at the best. Poor folk were obliged to do without the luxury of news, and they were as much circumscribed mentally as though they had been cattle; we remember a village where even in 1852 the common people did not know who the Duke of Wellington was. No such thing as a newspaper had been seen there within the memory of man; only one or two of the natives had seen a railway engine, and nobody in the whole village row had been known to visit a town. But nowadays the villager has his high-class news-sheet; and he is very much discontented indeed if he does not see the latest intelligence from America, India, Australia, China — everywhere. An American statesman's conversation of Monday evening is reported accurately in the London journals on Tuesday morning; a speech of Mr. Gladstone's delivered at midnight on one day is summarized in New York and San Francisco the next day; the result of a race run at Epsom is known in Bombay within forty minutes. We use no paradox when we say that every man in the civilized world now lives next door to everybody else; oceans are merely convenient pathways, howling deserts are merely handy places for planting telegraph poles and swinging wires along which thoughts travel between country and country with the velocity of lightning. We see that the world with its swarming populations is growing more and more like some great organism whereof the nerve-centres are subtly, delicately, connected by sensitive nerve-tissues. Even now using a lady's thimble, two pieces of metal, and a little acid, we can speak to a friend across the Atlantic Gulf, and, before ten years are over, a gentleman in London will doubtless be able to sit in his office and hear the actual tones of some speaker in New York. So much has the magic half-century brought about; and one sovereign has presided over the eager, ingenious, restless population whose interacting energies and competitions have brought about these results which beggar language when we try to describe them fitly. If we think of the scientific knowledge possessed by the most intelligent men when the Queen ascended the throne, we can hardly refrain from smiling, for it seems as though we were studying the mental endowment of a race of children. The science of electricity was in its infancy; the laws of force were misunderstood; men did not know what heat really was. They knew next to nothing of the history of the globe, and they accounted for the existence of varying species of plants and animals by means of the most infantine hypotheses. A complete revolution — vital and all-embracing — has altered our modes of thought, so that the man of 1887 can scarcely bring himself to conceive the state of mind which contented the man of 1837. We have dark doubts now, perplexing

misgivings, weary uncertainties, painful consciousness of limited powers; but along with these weaknesses we have our share of certainties. Are we happier? Nay, not in mind. A quiet melancholy marks the words of all the men who have thought most deeply and learned most. The wise no longer cry out or complain — they accept life and fate with calm sadness, and perhaps with prayerful resignation. We have learned to know how little we can know, and we see with composure that even the miracles already achieved by the restless mind of man are as nothing. When we think of what was known and done in past times, we may, in a momentary flush of pride, imagine ourselves to be Titans; but, when we come to measure our achievements aright, and compare our triumphs with the works of the power that suffers our existence, then with humility we own ourselves to be pigmies. Perhaps the very best and healthiest outcome of Victorian science is the modesty which has possessed the souls of those who have the greatest knowledge and the greatest strength. — *Good Words*.

A FALSE IMPRESSION.

"It is a singular fact," says the *Atlanta Constitution*, "that almost without exception, the most successful literary men have always been those who did very little reading." The assurance of the French writer, referred to anonymously in support of this too comprehensive assertion, who says, "I never read anything but my own works," renders his opinion of little value. The sole other evidence cited of the "singular fact" is the alleged custom of Dickens of reading "David Copperfield" and "Pickwick" for his own amusement. Dickens had little opportunity to form a taste for reading, and unless certain authorities have misquoted him he read his own works many, many times with the laborious intent of adapting them for his famous public readings, putting more time and labour upon this task, as he asserts, than upon the original creation. Dickens's novels are unique and admirable, but he was not a great literary man. From a purely literary point of view the works of Macaulay are perhaps the most valuable production in our language. A master of style, a fountain of pure English, an impartial and accurate writer of history, the "prince of critics," he never wrote a sentence which was not clear or used a word which did not signify what he wished. These qualities, with regard to which he is unsurpassed, if not peerless, were the consequence of extensive reading and observation. His reading was universal; and the knowledge which made the persons and events of many nations and periods as familiar to him as were the topics of his own time and country, has a value which cannot be too highly estimated. As a student at Cambridge; in the House of Commons; in the civil service; as an essayist, historian, and critic; as a member of the Supreme Council in India, where he produced his famous "Code" of Indian law, his genius was adequate to all demands. The salient features of Goethe's career throughout a long life, during which he accomplished prodigious results, was a constant striving to attain to the fullest development of his faculties and to promote the culture of the Fatherland. Early in life he made an assiduous study of Moliere, Corneille, and Shakespeare. He derived his first inspiration of art from Lessing's "Laocoon," a classic warmly welcomed by the most active minds of the age. Macaulay says that the reading of the little book just mentioned formed an epoch in his mental history, and that he had learned more from it about art than he had ever learned elsewhere. Goethe's accomplishments were many and varied. Versed in drawing, music, and natural science; a lawyer, poet, dramatist, and writer of philosophic prose, he was active at the council board, in the military train of his prince, in the direction of the theatre of Weimar, and was, withal, a wise philanthropist. His genius and its fruits are perhaps best characterized by Mme. de Staël's words, "He represents in himself alone the whole of German literature." The knowledge of Macaulay and Goethe was cyclopædic; both produced models of literary work; both, beside acquiring enduring fame by the pen, were ennobled by their governments. Prescott is perhaps the most eminent of American historians. This writer spent ten laborious years in collating and digesting authorities. — *Ex.*

Hints and Helps.

QUESTIONING.

A GOOD teacher must be a good questioner. But it is a great mistake to suppose that all instruction proceeds by questioning. It is no less a mistake to think that any kind of questioning will do. Unless something has first been put into the pupil's mind, to be pumped out, questioning is pumping out of a dry cistern. The only thing the pump does well under such circumstances is to wheeze. All that any possible teacher can do, whether in the Banner school or in Timbuctoo, may be reduced to three kinds of effort: 1. To give the pupil material, of one kind or another, to work upon. 2. To direct him what to do with this material, after he has it well in hand. 3. To test him to see whether he has the necessary material or any part of it, or to see whether directions given have been complied with. Thus, the giving of material is illustrated by assigning a number of words to be learned as to spelling, pronunciation, meaning, use, derivation, synonyms, etc.; the directions would include telling what was to be done with the words, where to look for information concerning them, what principles to apply to them, and what results to bring to the class; the testing process includes the spelling of the words, the syllabing, using in sentences, and other similar things the pupils are required to do with them in recitation and in preparation.

Very little can be done at giving materials for work by questioning, unless, perhaps, the instructions take the form of development lessons. A sharp-shot question is often of use to wake up inattentive pupils, when work is being given. It sometimes becomes necessary to thrust a stick into the bee-hive in order to rouse the workers into activity. Questions answer excellently for this purpose. The attention may be directed here or there by questioning, but sometimes direct statement is a better means. In all development lessons, questioning must remain the chief instrumentality.

But it is in the capacity of test that questioning becomes most valuable. Testing is by no means confined to pumping out what has already been pumped in. Indeed, those teachers who are mainly engaged in pumping the little pitchers full and then pumping them empty again, miss the best part of the teacher's vocation. They should test to see what the pupil knows and what he needs to know; to find out how he has reached his results and whether they are permanent enough to pass for the genuine gold of knowledge or only for the fool's gold of verbal information.

The first requisite to good questioning, as to other good qualities of instruction, is the substantial working knowledge of the subject taught. If the teacher is sailing through fog-banks in the subject, he will lose himself and his class. There are scores of questions asked classes in school no less nonsensical than to ask some one, Who was the father of Noah's children? To ask, What does the book say about this subject? or What is another quality of the object? or Is the object hard or soft? is like shutting one's eyes and spinning round on his heel to shoot at a flock of blackbirds. Questions must be plain, pointed and direct. There is no recipe, like a housewife's directions for making batter-cakes, for making questions worth one hundred per cent. of good sense and efficiency. But the first condition of all is that the teacher shall know his subject. Next he must go over each lesson and see that he is able to let light shine through every point of it and how he can make his questions and directions plain. Let him put himself in the children's place and see how it must appear to them. This is the other hemisphere of plain questioning. If the teacher is clear how the subject must appear to the child, he needs no batter-cake recipes. They would only fetter him.—*Indiana School Journal.*

HOW FAR SHALL I HELP THE PUPIL?

It is always a very difficult question for the teacher to settle, "How far shall I help the pupil, and how far shall the pupil be required to help himself?"

But it is a very great evil if the pupils acquire

the habit of running to the teacher as soon as a slight difficulty presents itself, to request him to remove it. Some teachers, when this happens, will send the scholar to his seat with a reproof, while others, with a mistaken kindness, will answer the question or solve the problem themselves, as the shortest way of getting rid of it.

Both these courses are generally wrong. The inquirer should never be frowned upon; this may discourage him. He should not be relieved from labour, as this will diminish his self-reliance without enlightening him, for whatever is done for a scholar without his having studied closely upon it himself, makes but a feeble impression upon him, and is soon forgotten.

The true way is, neither discourage inquiry nor answer the question. Converse with the scholar a little as to the principles involved in the question; refer him to principles which he has before learned and now lost sight of; perhaps call his attention to some rule or explanation before given to the class; go just so far as to enlighten him a little, and put him on the scent, then leave him to achieve the victory himself. There is a great satisfaction in discovering a difficult thing for one's self, and the teacher does the scholar a lasting injury who takes this pleasure from him.

The teacher should be simply suggestive, but should never take the glory of a victory from the scholar by doing his work for him, at least not until he has given it a thorough trial himself.—*D. B. Page, in Intelligence.*

DON'T FORGET:

1. To have a pleasant word for the children in the morning.
2. To praise as well as to condemn and criticise.
3. To keep your temper during the day.
4. To look neat and tidy in dress, and clean in personal appearance.
5. To keep your own desk in order.
6. To speak in a quiet, firm voice, and on a moderate pitch.
7. To dismiss promptly at the close of the session.
8. To have a programme of exercises for each day, and follow it, but not too slavishly.
9. To change your rules, if circumstances have changed.
10. To laugh sometimes in school.
11. To be in every respect the lady and the gentleman.
12. To live before your pupils a life worthy of emulation.—*"Waumbuck" in American Teacher.*

TO DEVELOP THE EARNEST AND PERSISTENT ATTENTION OF EVERY PUPIL IN THE CLASS.

IT IS A mistake of many teachers that they allow themselves to be deceived by holding the attention of a few favored pupils while perhaps the majority of the class have no especial interest and bestow no attention upon the class discussions and class criticisms. It is the business of the teacher so to vary and energize every recitation that the novelty and vivacity of the exercise shall win and hold the persistent attention of the most stupid and mischievous. Unless this is accomplished, the recitation is bestowed in its influence almost entirely where it is least needed, and utterly fails of reaching those who most need its inspiration and controlling power. I do not know that any specific directions can be given that can be successfully followed by any teacher in any two successive recitations, and much less so given as to make every teacher a success in this most difficult part of his labor, namely, to secure the attention of the backward pupils, and of the most vivacious, during the entire recitation. Possibly a few suggestions can be given which may be made available by different teachers in using different methods of reaching this difficulty.

First: The teacher should avoid favoritism and having it understood or even suspected that he has one or more pet pupils.

Second: No teacher will pursue such a course of neglect or captiousness with any pupil that he or she may think that the teacher is not entirely friendly and sympathetic with that pupil.

Third: The teacher will not demand or expect "perfect lessons" of any member of his class, nor expect or demand equal results from equal time and effort, but he must be satisfied and gratified

with the fact that the backward pupil has done just as well as he could.

Fourth: The teacher must avoid every form of reward which will encourage one or more pupils while it discourages the rest of the class.

Fifth: The teacher must be better prepared on the lesson of the class in every direction than is possible for any or every pupil.

Sixth: The teacher should so manage his class, that every pupil will feel it a privilege to be called upon in the recitation and will feel in a measure neglected if he is not favored with some opportunity to take an active part in the recitation.—*Pres. Holbrook in Normal Exponent.*

THE OBDURATE PUPIL.

ONE often hears orators tell how, in every audience they stand before, there is a certain obdurate unresponsive face that defies all efforts of their eloquence. With a genuine orator the reduction of this incorrigible is the task of the occasion. However much the rest of the audience may laugh or weep under the spell of the speaker, if this one does not yield, success is not complete. Accordingly every effort is aimed at this particular mark, and no relaxation is indulged in until at last the immovable one is moved.

So in a recitation, however responsive and enthusiastic the majority of the class may be, if there is one who does not enjoy the work, the whole skill and energy of the true teacher will be concentrated on this one, not openly, not professedly, not boastingly, but patiently, persistently, quietly. The victory will come at last and the joy will be greater than his who has conquered a city.

The first condition for success in such a case is not to worry. Does a hunter fume and fret because the game requires hot pursuit? That there is game is a delight. To capture it, even at the risk of life, is a necessity of his existence.

Such a pupil is game. Let the teacher rejoice at getting on its track, delight in its pursuit, and never "call off" until—the game is bagged.—*Ex.*

EARLY RISING.

MORE nonsense is talked about getting up early than probably any other subject. The proper time to get up is when the sleeper is rested—neither before nor after.

There is no more virtue in the air between six and eight, than between eight and ten a.m. Of course if anyone goes to bed at half-past nine at night he does not want to rise so late as half-past nine the next day. Eight hours sleep is as a rule, sufficient even for the hardest worker.

If people went to bed shortly after sun-set, they would naturally get up early, but it is a great question whether they would feel any better for the feat of commencing the toil of day before, as Lamb says, the world is really warmed.

Wise people tell us so much sleep before midnight is worth double the quantity afterward; yet this maxim is merely due to the fact that, to the ordinary man, sitting up to twelve, means over fatigue needing, consequently, more rest next day.

The safest sleeping rules are to leave the bedroom window open two inches at the top in mild weather, for the purpose of ventilation, and to get up as soon as the first good wake comes.

After from six to eight hours rest the average man and woman becomes restless. The brain regains its energy, sleep is broken and for all practical purposes the night's rest is over. This is the time to rise, and for a man to take, if he can stand it, a cold bath, commencing the work of the world again with the finest and healthiest stimulant which he can enjoy.—*Ex.*

EDWARD EVERETT HALE, in his excellent little book, "How to Do It," discusses the matter of reading. The substance of what he says may be given in the form of the following ten rules:

1. Don't try to read everything.
2. Read two books on the same subject, one solid, one for pleasure.
3. Don't read a book for the sake of saying I have read it.
4. Review what you read.
5. Read with a pencil in hand.
6. Use a blank book.
7. Condense whatever you copy.
8. Read less and remember it.
9. One hour for light reading should have one hour for solid reading.
10. Whatever reading you do, do it regularly.

TORONTO, APRIL 15TH, 1887.

SPECIAL NOTICE.

A considerable number of subscribers are on the lists for both the "Educational Weekly" and the "Canada School Journal." Their accounts with the two papers will be combined, and a proper date ascertained by an average of the credits in the two cases. A subscriber found to be a dollar behind for one paper and a dollar in advance for the other, would thus be held as being paid to date. And a subscriber found to be a dollar in advance on both of the papers, would receive a credit on the new paper as being two dollars in advance. And so on in the various cases. The two papers and all their interests having come under one proprietorship, this is the only rule which can be applied.

Subscribers for the "Canada School Journal," paid in advance, will receive the new paper for the term for which they are so paid in advance. Subscribers for the "Educational Weekly," paid in advance at the rate of two dollars a year, will receive the new paper for a computed term one-fourth longer than the balance of time for which they are so paid.

Subscribers for either paper alone, who may be in arrears, will be required to pay up their liabilities to date, and to pay in advance for the new paper for whatever term they order it. By no other method can we introduce the cash system. And for the introduction and maintenance of that system—the only safeguard to the success and efficiency of such a publication—we ask the assistance of all our friends of the teaching profession.

THE PUBLISHERS.

Editorial.

TO OUR READERS.

THE readers of the *Canada School Journal* and the *Educational Weekly* will be surprised this week by the appearance of a new face in place of the familiar features of their old friends.

We bespeak for the new comer a kindly greeting, even though he comes to announce that they shall see their old acquaintances no more, and to offer himself as a substitute for both. It is confidently hoped that the substitute will prove neither unacceptable nor unworthy, but will make good his claim as the inheritor of all that was most stimulating and helpful in either of his predecessors.

It must have been evident for some time past to the readers of both journals, that there was really no difference in principle, or method, or aim, broad enough to warrant their continued separate existence. As the publishers observe in their announcement in another column, experience has proved that it is not at all possible for both to be maintained with any good degree of vigor and efficiency without actual loss. The union now effected will bring strength, stability, and it is confidently believed, permanence.

To the former patrons of the *School Journal* the editor may be permitted to say, while thanking them for many kindnesses during the past few months, that it shall be his aim to maintain, and, so far as it may be in his power, improve upon those practical features of the *Journal* which have elicited so many warm expressions of approval from teachers of every grade. To his new friends, the subscribers to the *Educational Weekly*, he can only say that he will do his best to keep the consolidated paper up to the high standard that his able predecessors in the conduct of that journal have set up. To all the friends and contributors of both he appeals for a continuance of that sympathy and support with-

out which he cannot hope for any real and lasting success in his arduous and responsible work. It will be of no small advantage to him in the prosecution of that work, that under the arrangement now effected he is set free from the necessity of attending to a multiplicity of business details, which have hitherto made large draughts upon his time and energies, and will thus be enabled to concentrate his attention more fully upon the proper work of the editorial department.

As for the rest, the *Educational Journal* must be left to speak for itself. We have been asked why the enterprise of publishers in the flourishing city of Toronto should not furnish for the teaching profession in Canada an educational paper equal to the best published in the United States or elsewhere. We reply that we know nothing to prevent. The publishers of the paper now submitted to the profession can and will do so, if the teachers of Canada and others interested will but support their own paper, as the patrons of the American state educational papers support theirs. The Grip Printing and Publishing Company and the late publisher of the *School Journal* take up the gauntlet. Their answer to the challenge is THE EDUCATIONAL JOURNAL. Now let the teachers of Canada do their part and see whether we shall not do ours.

THE SCRIPTURE SELECTIONS.

A CORRESPONDENT asks us to give an account of the origin of the book of Scripture selections sanctioned by the Department of Education for use in the Public Schools of Ontario. The movement which resulted in the production and authorization of the book began in the ecclesiastical bodies, such as the Anglican and Presbyterian Synods, and the Methodist Conferences, some of which appointed committees to ascertain the best means of securing a more extended use of the Bible in the schools. A joint deputation, made up of the members of these committees, with others, waited upon the members of the Ontario Government and urged such a change in the law as would make the reading of the Scriptures virtually compulsory upon teachers. It was not deemed advisable to do this without prescribing the selections from Scripture to be used, and the Minister of Education submitted to the members of the joint deputation above referred to several matters for their consideration, amongst them these two: (1) the propriety of making a selection of Scripture lessons, and (2) the propriety of appointing a joint sub-committee to prepare such a book, if one were deemed necessary.

The General Committee approved of a book of selections and instructed a sub-committee to revise a draft which had been submitted for the General Committee's approval. The revising sub-committee was made up of the following gentlemen:—Rev. Provost Body and Rev. Archdeacon Boddy, representing the Anglican Church; Rev. Principal Caven and Rev. John Laing, representing the Presbyterian Church;

Rev. A. Sutherland and Rev. E. H. Dewart, representing the Methodist Church; Rev. John Burton, representing the Congregational denomination. The Book of Selections approved of by this sub-committee is the one authorized by the Education Department for use in schools.

In connection with this matter it is worthy of note that a new edition of the Selections has been announced. The original edition is in large type and somewhat costly form; the new one will be sold at a low price so as to make it suitable for being placed in the hands of all pupils able to read it. A report has been circulated, also, to the effect that the Minister of Education has asked the original revisers to go over the text again, and suggest improvements wherever they see a chance to do so.

With respect to the state of the law governing the use of the book, it may be well to call attention to a recent statement made by the Minister of Education in Parliament. In answer to a question he explained that "the object of the action of the Government was to have the Bible read more generally and more systematically," and added that "where the trustees of a school shall prefer that the reading shall be from the Bible itself, instead of from the Book of Selections, or where trustees prefer to have passages read which are not in the Book of Selections, the Government have no desire to interfere, and do not propose to interfere, so long as the Bible or its contents are read daily and systematically." Lastly the Minister announced that "if the text of the regulation requires any modification in order to admit of this course the modification will be made."

The foregoing statement, which has been carefully prepared, is, we believe, historically accurate. It will be seen that the choice between (1) reading from the Book of Selections, (2) reading the selected passages from the Bible direct, and (3) reading from the Bible at the teacher's discretion without reference to the Selections, is left virtually to local option. This is no doubt as it should be. So far there seems now little room for complaint.

There are, of course, many of those whose reverence for the Bible is of the highest, who regard its compulsory prescription in any form by State authority as wrong in principle, an overstepping by Government of the legitimate limits of civil authority, and so a violation of the fundamental principles of religious liberty, as inculcated in the New Testament itself. But that larger question need not be raised in this connexion.

THE UNIVERSITY OF TORONTO AND TEACHERS' EXAMINATIONS.

THE last few weeks have been prolific of educational movements. The limits of our time and space prevent us from giving in this issue details of the important bills now passing through the Legislature in reference to University-Federation, Upper Canada College, and the projected McMaster University, or comments upon them. But we must not omit to note the

fact that a statute was passed by the Senate of the University of Toronto at its last meeting, the provisions of which have an interest for all public school teachers. Last year the senate provided for the admission of second class teachers to the standing of matriculated students in all the university subjects covered by their departmental certificates. The statute above referred to extends similar recognition to first class teachers, whose certificates will hereafter be accepted as equivalent to the passing of the first year examination in all the subjects covered by them. It provides also that the holders of first A and first B certificates will, on taking the remaining examinations of the first year, be entitled to exercise the usual option allowed to honor men in the subjects covered by their certificates.

At the same meeting the senate completed an arrangement with the Department under which the latter accepts for the departmental second class examinations all the matriculation papers set by the university examiners in Mathematics, Latin, English, French, German, Physics, Biology, and Chemistry. In order to make such an arrangement possible some alterations had to be made in the science part of the course, the work in Chemistry being reduced for second class, and elementary Zoology being introduced along with a less amount of Botany than there is on the present course.

The scheme is a move in the right direction, and as it will not come into force till the examinations in June, 1888, all who are interested in its operation will have ample time to make themselves acquainted with its details. We hope to be able to give in the next number of the JOURNAL a fuller exposition of it from the pen of Mr. William Houston, M.A., who has taken an active part, as a member of the Senate, in promoting the new departure.

TORONTO AND QUEEN'S.

OUR attention has been called to the following statements contained in the concluding paragraphs of the petition of the Queen's University Endowment Association, quoted in the *Educational Weekly* for March 31st.

"That since the first establishment of University College, Toronto, the total number of students who have graduated in arts (B.A. and M.A.) is 909, and that since the first establishment of Queen's University the total number of students who have graduated in arts (B.A. and M.A.) is 498; that according to the calendars for the present session, issued by the authorities of both institutions, the total number of graduates of all kinds from first to last, is as follows, viz.:—Graduated at University College, Toronto, total, 1,041; graduated at Queen's University, Kingston, total 887."

Our correspondent claims that in the light of the statistics of the University of Toronto and University College laid before the Legislature by the Minister of Education, the above statements are inaccurate and misleading. The comparison is, he maintains, "fallacious, unjust and untrue." "It is fallacious, because it compares Queen's University, not with the University of Toronto,

but only with its Arts faculty. It is both fallacious and unjust because it compares the work done by Queen's University for 46 years, from its founding in 1841, with that done by University College, from its founding in 1853, *i.e.*, only 34 years. Add the expected increase at the present rate of yearly growth of University College for another 12 years, and Queen's will look rather small in comparison."

After referring further to what he supposes "must be an accidental misprint," but which "is a very unfortunate one in such a document," viz., the giving of 1,041, instead of 1,401, as the total number of University College graduates, our correspondent points out that in the carefully guarded statement of the Report of the Council of University College relative to its statistics, no student or graduate is included who has not passed through successive years of the College course as an undergraduate, or has been a student availing himself of the College work and in actual attendance on the lectures, and that if the whole number of graduates of the University of Toronto were counted, as they ought to be in such a comparison, instead of amounting to no more than 1,041, they number in all 2,215. "The fact is" he adds, "that such statistics, even if accurately given, are utterly misleading, unless accompanied with other important facts. But to be correct even in their numbers the Queen's petitioners should have said:—In 34 years the University of Toronto has conferred 2,215 degrees; whereas in 46 years Queen's University has conferred only 887."

Contributor's Department.

THE OTHER SIDE.

IN glancing over the pages of school journals, and of books written specially for the instruction of teachers, one is often amused to observe the amount of *exhortation*—editorial, inspectorial, visitorial. The greater part of this kind of literature is created by earnest minds who have the highest interests of our race at heart, whose lofty ideals deserve by all means to be clothed with action and to become living realities in our daily life. It is evident from the Spartan tone of much of this writing that the difficulty of a teacher's work is not underestimated nor the importance of it under-valued. That is encouraging to most minds, and decidedly stimulating even to the most sluggish. The only question of moment is whether it does not overshoot the mark at times and urge young and sanguine teachers to useless martyrdom. In our own country it sometimes looks as though there were a widespread conspiracy to lead the brightest and best teachers to premature graves. The amount, variety, and thoroughness of scholarship required by our present standards demand years and years of steady application and patient industry and are certainly out of all proportion to the pecuniary rewards that await the most successful candidates. Hence arises the dearth of experienced men and women in our profession. What becomes of all the old teachers, trained by practical work and matured by time and study to do their work with the highest efficiency? Where are the thousands of trained teachers we have been turning out from our

Normal Schools for the past quarter of a century? The reports of the Education Department furnish no information, except a vague hint of the vast numbers who have "retired from the profession" each succeeding year. The hard, bare fact is that the work of the average teacher is severe and requires robust energy; the salary is meagre and less than can be earned in other walks of life where the mental and physical strain is less and the comfort and permanency measurably greater. A teacher who has attained the first class qualifications after perhaps five or seven years' hard work finds himself with less prospect of financial success than the three-months' graduate of a commercial college, or the three years' graduate of a medical school.

The people of Ontario pay far better for having their quarrels settled than they do for the education of their children. On a railway train a rather intelligent barber overheard a group of young teachers speaking of their salaries, \$400, \$500, and one \$600, a year. He turned in honest surprise and said, "Why I make over \$1,200 a year out of my shaving parlor, clear of expenses." A negro slave who ran away from the South before the war, retired from the barbering business in one of our small towns on an income sufficient to keep him very comfortably for the rest of his life, notwithstanding one or two losses, and the disadvantage of not being able to read or write. During the same period the salary of the Principal of the public schools rose from \$400 to \$800. When will he be able to retire? If we follow those who "retire from the profession" we rarely find them returning to it, and then only temporarily after some unusual reverse. It is perhaps some encouragement to know that a large proportion of the most successful men financially in the Dominion were for a longer or shorter time teachers, and that their training as teachers enabled them to succeed *after* they "retired from the profession"—though not while they were in it.

Does it pay to spend many thousands of dollars annually in training teachers, and then allow them to drop off the roll for the want of proper remuneration? Does it pay this Province to spend so much in securing young recruits—the very flower of our youth certainly—and take no pains to retain them in the service beyond three or five years? It does not pay; the policy is short-sighted; it is a half-hearted policy, and our schools will never equal the ordinary schools of Germany till this plan is abandoned.

Returning to our point of departure, might it not be well for journalists, inspectors, and visitors to devote a few exhortations to trustees, councils, ministers of education, *et al?* If they could be brought to realize the extreme unwisdom of maintaining an army of raw recruits whose average term of service is only five or six years, a great step would be gained towards making the teaching profession more than a mere stepping-stone to something—*by no means higher or nobler than teaching*—but something which gives greater permanency and better security of sufficient provision for old age. Will not some independent school visitor begin a short course of lectures on the "Duties and Responsibilities of School Authorities" with special reference to the Salary Question? Advance the salaries; the standards of qualification have led the way already.

TIMON OF ROUHU.

Educational Notes and News.

ALBERT CO. (N.B.) TEACHERS' INSTITUTE.

AN exhibit of school work will be held in connection with the next annual meeting of the Institute at Riverside in October, 1887. Prizes are offered to pupils showing best work in following standards:—

Standard III.—Drawing, Printscript, Outline Map of N.B.

Standard IV.—Composition, Printing of any kind, Completed Map of N.B.

Standard V.—Specimens of Arithmetical work, Printing of any kind, Map of Albert County.

Standard VI.—Drawing or specimens of arithmetical work, printing of any kind, map of North America.

Standard VII.—Drawing or composition, specimens of ordinary business forms, map of England.

Standard VIII.—Drawing or Grammar (parsing and analysis), book keeping, industrial map of N.B.

THE LAST BEQUEST TO HARVARD.

HARVARD UNIVERSITY, that first plant of New England's intellectuality, has just received a bequest which ought to go far to place her in the very front rank of scientific institutions in the world. When it is considered with how insignificant a sum of money Harvard was founded; how small were the means of the man whose liberality gave it his name, the recent donations to this now famous university must seem immense. But now we do matters on a different scale from the old days; all expenditures are increased, and the domain of science has been so widely extended as to embrace everything covered by human knowledge. This being so, the bequest of \$230,000 by a friend of Harvard, which is to be specially applied only to the purposes of astronomical discovery, although large and liberal, is not out of proportion to the requirements of the time. It is intended by this special bequest that the interest of the sum given shall be so applied for the purpose of special astronomical investigations at such an elevation as to be free, as far as practicable, from the impediments in actual observation which occur in observatories now existing, owing to their atmospheric influences. A circular has just been issued by the Harvard Observatory, by which the purposes of the bequest are set forth and suggestions given as to the best method of their accomplishment. It is thought by the faculty of the university that a location in the southern hemisphere is to be preferred, and this idea, no doubt, will be adopted. This bequest should place Harvard in the very front rank of the scientific institutions of the world.—*Brooklyn Eagle.*

KINDERGARTENERS.

THE Primary Teachers' Institute held its fifth annual meeting recently in the Chapel of the Broadway Tabernacle, New York. Over four hundred teachers of the primary classes in the public schools were present, to get the benefit of the ideas and experience of some noted kindergarten instructors. Ralph Wells, President of the New York Sunday-school Union, presided. William D. Porter gave a poetical recitation, Mrs. S. W. Clark showed what an interesting and powerful aid to instruction the blackboard might be made, and Mrs. Frank Foxcroft told how children's meetings should be conducted.

At the afternoon session Miss Jenny B. Merrill, Superintendent of Methods in the Normal College, spoke of the good results of kindergarten teaching. It implanted a love of nature and of labour, and recognized and developed the individuality of the child. Miss Merrill illustrated her remarks with specimens of the children's work in sewing, clay modeling, and many other departments. Mrs. W. F. Crafts gave a review of Scripture lessons she intends to use in her class during the ensuing quarter. She showed how freshness and interest might be evolved out of these old but ever-beautiful stories. In connection with lessons about the birth of Christ in the manger and the selling of Joseph into Egypt by his brethren Mrs. Crafts exhibited a genuine swaddling cloth such as Christ was wrapped

in, and a many-coloured coat like that which excited the envy of Joseph's brethren. The last feature of the programme was an explanation by Hope Ledyard of the way in which she taught children to sing by descriptive gesture and anecdote.

STRATFORD is going to build a new \$10,000 ward school.

OF the 537 students enrolled at Berlin University, 149 are Americans.

MCGILL University has enrolled in its faculty of Arts this session 156 men and 78 women.

THE South Essex teachers' convention will be held at Kingsville on the 5th and 6th of May.

PROVISION has been made to have vocal music taught in all the departments of the Stratford public school.

THE North Hastings Teachers' Association holds its semi-annual convention in the Madoc Model School on May 5th and 6th.

MR. WM. DEWAR, B.A., a former pupil of the Owen Sound High School, has been appointed Master of Science in the Collegiate Institute of Perth.

DR. JOHN HERALD, M.A., of Kingston, for some years headmaster of the Dundas high school, has been appointed a member of the Council of Queen's university, Kingston.

THE West Kent Teachers' Association will hold its next session in Chatham, on the 28th and 29th of this month. Dr. McLellan, D.T.I., will be present; and deliver addresses.

THE Belmont school board has purchased a site for the new school from D. McKellar, the price being \$600, and the building will be erected immediately at a probable cost of \$4,000.

MR. HENRY F. GADSBY, an old Stratford boy, has been selected from amongst the honor undergraduates at Toronto university, as assistant head master of the Listowel high school.

THERE are about seventeen million children of school age in the United States. Only seven million attend school. Where are the other ten million?—*Our Country and Village Schools.*

THE next meeting of the West Middlesex Teachers' Association will be held in the basement of the Front Street Methodist Church, in London, on Thursday and Friday, 27th and 28th inst.

THE second annual meeting of the Algoma Teachers' Association is to be held at Little Current on the 10th and 11th of March, and promises to be the best yet held as the programme is well filled.

QUEEN'S University, Kingston, has been established over forty years. It is self-governing, its Council being elected by graduates. This session 178 men and 13 women are enrolled in the faculty of Arts.

FOREST Street school, Chatham, is to have an addition of a shed for the children to play in in wet weather. The School Board has granted \$250 towards its erection, and the balance (about \$350) will be raised by the teachers and pupils of the school.

THE total amount of salaries paid to the nine teachers in the Toronto Collegiate Institute is \$14,100. The amounts to individuals range from \$2,400 to the principal down to \$650 to the junior lady assistant.

A CLAUSE has been inserted in the Minister of Education's Bill giving to the trustees of public schools in cities and towns the same powers as to refractory pupils as are now possessed by trustees in rural districts.

AT a meeting of the Board of Education of New Brunswick, a week or two since, it was decided to recommend to the trustees throughout the Province the holding of an arbor day some time in May or June, in celebration of Her Majesty's jubilee.

A NEW college for the higher education of women is to be built almost immediately in Montreal. It is the result of a bequest of nearly \$400,000 by the

late Mr. Donald Ross of that city. Toronto will need to look to its laurels if it does not wish to be left behind in the race.

MISS MAY B. BALD, B.A., assistant teacher in the Essex Centre high school, and a late graduate of Toronto University, has been appointed to the teaching staff of the Brantford Collegiate Institute, in succession to Mr. E. H. Simon, who takes a position in the civil service.

A NEW central school at St. Catharines is talked of, as the present one is very much crowded and its sanitation imperfect. The question of cost is the main difficulty. However, the School Board has \$37,000 in realizable assets, which could be utilized in part for that purpose.

THE London West School Board has for some time past paid the teachers of the primary class \$50 a year more salary than any of the other assistants. The all-important fact that the youngest pupils need the most skilful teachers is making slow progress.—*Acton Free Press.*

THE Bowmanville Board of Education has decided to advise the ratepayers to pass a by-law to raise \$7,000 for erecting a new and separate high school building, \$1,500 for improving the South Ward school-house, and \$1,500 for putting in proper repair the present Union School building.

THERE are five young women enrolled in the law department of Michigan University this year. One is a young girl from the Sandwich Islands, the granddaughter of a missionary of the Congregational Church. Her father is a prominent lawyer on the islands, and has taught her much law. She intends to practice at her home.

THE Ryerson Memorial Committee is making another effort to increase the amount contributed to the statue fund. The amount collected, including interest, is \$4,425. The committee asks that \$3,200 more be subscribed, which would make a sum equal to the cost of the statue to the Hon. George Brown in the Queen's Park.

THE Woodstock Public School Board has considered favorably a recommendation to introduce the Kindergarten system. A sanitary convention will be held in that town on the 17th and 18th of May. It is intended to secure for the teachers of the country a holiday on the latter date, when subjects of importance to the profession will be discussed.

MR. C. DONOVAN, M.A., Government Inspector, in his recent visit to St. Thomas separate school reported that he found the school in a very satisfactory state, the improvement since his last visit being phenomenal. The children were well advanced in their studies, and, taken all in all, the school was second to none in the province, the staff of teachers being an especially proficient one.

GARFIELD UNIVERSITY will soon be established at Wichita, Kansas. The building and grounds will cost \$200,000, of which the town gives \$100,000 in order to have the university located there. This is a sample of Western liberality, and shows that the people of Wichita possess the characteristic "push" of the West. The University will be under the management of the Disciples of Christ.

THE bill to enable the School Board for London, (Eng.), to provide for superannuation allowances for its officers and servants, includes in its provisions (1) the staff employed in the head offices of the Board and in the offices of any of its divisions; (2) inspectors, correspondents, superintendents, visitors, school keepers, and all the other officials in permanent appointments; and (3) teachers of all descriptions except pupil teachers and candidates.

THERE is to be a national educational exposition in Chicago next July, 7th to 16th. Three large halls have already been engaged. The exhibits will include school work of all kinds, school furniture and apparatus of every kind, school supplies, text-books, models and plans of schoolhouses, schemes for ventilation, etc., etc. The exhibits of work will show what is done in Kindergarten, manual training, and all other kinds of special and general schools.

At the E. Middlesex Teachers' Convention Mr. J. N. E. Brown took up the occupation of recesses in stormy weather; he had his pupils go through calisthenic exercises, and described some quiet games that the children can play in the school room. Where singing is practised the pupils like to form into little groups, and sing over school songs. Besides this some intellectual games he had found to interest the pupils, such as the arithmetical one known as Muzz Fuzz.

At a recent meeting of the Toronto Collegiate Institute Board Mr. Houston said that there were now four training schools for high school teachers, viz., in Hamilton, Kingston, Guelph and Strathroy, and that another was needed. He suggested that Toronto might as well have it as some other place. Principal McMurphy opposed the idea, because it would devolve two weeks' extra labor upon himself and disturb the other teachers in their work. The matter was referred to the committee on school management.

INSPECTOR SEATH suggests to the Board of Port Hope High School the advisability of having the school raised to the rank of a collegiate institute. In his report he says:—"There are several collegiate institutes that are not a whit better than the Port Hope High School, if indeed they are as good, and a readjustment of the staff, with the required equipment, is all that would be necessary. The advantages of the status would more than counterbalance the increased expenditure on capital and current accounts."

THE St. Catharines Collegiate Institute has had in operation for some months a very fine gymnasium, supplied with the usual accessories of trapeze, horizontal bars, ladders, ropes, boxing gloves, dumb bells, swinging clubs, etc. The apartment is spacious and well lighted and ventilated, and is probably one of the best of its kind attached to any collegiate institute in the country. This school is also supplied with a number of valuable books which will be added to from time to time, until a good library is established. Not very long ago a reading room was fitted up, and is supplied with newspapers and magazines. This is also a valuable accessory to students, and is much appreciated.—*St. Catharines Journal*.

At the late meeting of the "Royal Canadian Society of Musicians," the Holt system of teaching to sing was recommended for adoption in schools, and a committee appointed to press the matter upon the attention of the Minister. If the merits of the Holt system are based upon its success in the Toronto Normal School, where it has been tried for years, it is difficult to see upon what ground its recommendation is based, for there it has been a failure so far as making music-readers is concerned. Whatever that motley patch-work known as the "Holt System" may do in the hands of its author in Boston, the results attending its use in Ontario have been discouraging in the extreme, as most teachers who are graduated from the Toronto Normal School testify.—*Stratford Beacon*.

THE Civil Service Commissioners have made a curious discovery. It is that the candidate who successfully passes his examination is not always the person who, under the same name, enters upon the clerkship which the "pass" secures. In future, therefore, it is said, all candidates for the Civil Service will have to send in their photographs, so that these may be compared with the persons who claim the clerkships. It is notorious that Civil Service examinations are not the only ones in which this trick is played. It is said to be well known at the Scotch universities; where, however, there is more risk of its being found out. In the medical preliminary examinations, where thousands of candidates enter, it must be comparatively easy, and probably it is not unknown in some of the London University examinations.—*The Schoolmaster*.

At a recent meeting of the corporation of the University of Trinity College, several important changes were made in the curriculum. On the recommendation of the executive committee the new optional subjects of physics, chemistry and botany were added to the subjects of the matriculation examination, and a number of changes were made in certain by-laws affecting the studies of art students, the effect of which is to render it no

longer compulsory on students to take up the department of Greek, and to make in lieu thereof certain substitutions—namely, for matriculation, any two of the departments, French, German, Divinity, Physics, Chemistry, or Botany, provided that French or German must be taken, and in the remainder of the arts course, French and German.

THE report of the Minister of Education, in the Ontario Legislature, calls attention to the average attendance of scholars, and suggests to inspectors and trustees the possibility of securing more popular attendance at the schools. It also calls the attention of the trustees to the compulsory clauses of the school acts, which require their immediate attention. There is still, the Minister regrets, some negligence in regard to the subject of musical education in the public schools. A considerable decrease in the number of log school houses and an increase in the number of more modern structures is reported. A steady increase in the number of separate school teachers and pupils has taken place during the past ten years. Arbor day last year was almost unanimously observed, and the Minister reports that provision is made in the new regulations for an annual Arbor day in the Province.

THE London *Schoolmaster* tells of a school at Steelton, Pa., three miles from Harrisburgh, with a population of 8,000, of whom 3,500 are employed in the works of the Pennsylvania Steel Co. The company has built and presented to the town a \$100,000 school-house, and it requires all its employes to send their children to school under penalty of losing their positions. Unnecessary absence from school is reported at the head office of the company by the teachers, and the father is notified to appear at the office and explain. Any constable or policeman may receive a fee of 25 cents on presenting at the office of the company a certificate of a teacher that he has brought in a truant. Under these circumstances, it is not strange that the attendance is uniformly maintained at high-water mark. It may be added that there has been no strike among the employes in the last twenty years.

At a recent meeting of the Whitby School Board, Mr. Dow presented a report from the Committee on School Management stating that Mr. Woodhouse had placed in their hands his resignation, to take effect Oct. 1st, and recommended its acceptance while at the same time bearing testimony to the proficiency of Mr. Woodhouse's work in the school during the past thirty years; stating that owing to the illness of Mr. Woodhouse the committee had been obliged to engage the services of Miss Glendinning for the present and temporarily appoint Miss Borrowman principal of Dufferin street school; recommending that the salary of Mr. Brown, of the Model school, be increased from \$800 to \$900 in keeping with the growth of the institution's revenues and attendance; and finally recommending that the Principal of the Collegiate Institute be authorized to secure a deposit of \$2 from each pupil using the chemical apparatus of the Institute, to pay damages in case of breakage.

IN order that the new buildings to be erected in the Queen's park for Victoria College may be as perfect and complete as possible, the chairman of the Plan Committee, Mr. John N. Lake, left Monday evening on the C. P. R. for an extended tour through the Eastern States, intending to visit the principal new educational buildings. This is the second visit he has made amongst our American cousins, without expense to the funds of the College, in the past month. The limit placed on the cost of the building by the Board of Regents is \$150,000, which does not include the fitting up of the grounds or the furnishing of the building. It is estimated \$200,000 will cover all the outlay. It is expected Toronto will furnish the sum, leaving the endowment to the country.—*Exchange*.

CHATSWORTH school section until last summer comprised concession one in Holland and concessions one and two in Sullivan, three miles long. The school house is located on the Garafraxa Road, which forms the town line and was half way from each end of the section. Last summer a new section was formed which took away a mile of the south side of Chatsworth section, thus leaving the

school house one half mile from the southern boundary and a mile and a half from the northern boundary. Enlargement having become necessary it has been decided, after considerable discussion, to abandon the old site and erect a fine new building at the northern end of the village, in a position central to the whole school district. The new building is to be 60x42, two stories high, and planned to accommodate four teachers, though it is expected that but three will be employed in the immediate future, which will be an addition of one to the present staff, consisting of Mr. W. A. Ferguson and Miss Little, who have charge of one hundred and ninety-three resident children.—*Com*.

BIRMINGHAM appears to have awakened to a consciousness of the fact that it would like a university of its own. Liverpool and Manchester have one, and Leeds is on the way to get one; and why should the hardware capital be without one? "We form the centre of a population larger than that of Wales, and nearly as large as that of Scotland; yet our youths have to go elsewhere for their degrees, and often for their training in science, medicine, and the arts." Here is a distinct grievance, and the people of Birmingham do well to formulate it. To be sure, they already have a Mason's College, a Queen's College, and a Midland Institute—all doing excellent work of a kind and all deserving of support. But these do not, separately or together, supply exactly what Birmingham wants. It is suggested that they should be "co-ordinated"; but it is recognized, also, that even when amalgamated they would form only the foundation of a university. The fact is the Midland metropolis aims high. It flatters itself that it is well supplied so far as primary and secondary education go, but it desires the higher education as well—not, necessarily because it is enamoured of it *per se*, but because a grasp of it "means bread at its very doors, without having to go for it to Germany, to Scotland, or to London."—*The Schoolmaster*.

THE Minister of Education's bill to amend the Public School's Act does away with the declaration of office, hitherto required from school trustees; provides that where, for a full year, a section does not elect a school board and provide school accommodation the section shall be dissolved; authorizes the inspector to call a first meeting of the school board of a new section; provides that in unorganized districts the secretary-treasurers of three sections may be a court of revision for the correction of the school assessment rolls, and proposes an increase of the school tax on unoccupied lands; provides for the first meeting of a school board where a new city, town or village is incorporated; enacts that boards of school trustees shall hold their first meeting on the third Wednesday in January and boards of education on the first Wednesday in February; provides for a course of instruction and training for children between the ages of three and five years according to the methods practised in Kindergarten schools; enlarges the powers of trustees in respect of the sale and purchase of school sites; provides that where school boards refuse to make necessary school accommodation, municipal councils, at the request of the inspector, may undertake the work; enacts regulations to prevent a spread of contagious diseases, and in various other respects improves and simplifies the law.

A MAN who is unable to see more than one side of a question is in danger of becoming a fanatic or a fool, and there is not much to choose between them. Some teachers are so painfully grammatical that you can almost hear the creaking of the grammar-machine in them. The conversation of such people is about as graceful as the gait of a man with a wooden leg.—*Angell*.

THE teacher who limits her work to her classroom and the curriculum placed before her, curtails her usefulness and has a poor conception of the worth and extent of her position. If she does not feel this thought so deeply that it is almost a burden, "I will endeavor to make this boy become a good man, this girl a good woman," she may well doubt the voice that called her to her profession, and should give place to others with the burden on their hearts.—*Ex*.

Mathematics.

ALGEBRA SOLUTIONS.

(See page 1002, Ed. Weekly.)

$$1. \frac{(12x+1)^{\frac{1}{2}} + (12x)^{\frac{1}{2}}}{(12x+1)^{\frac{1}{2}} - (12x)^{\frac{1}{2}}} = \frac{18}{1}$$

$$\text{or } \frac{2(12x+1)^{\frac{1}{2}}}{2(12x)^{\frac{1}{2}}} = \frac{19}{17}$$

$$\text{or } \frac{(12x+1)^{\frac{1}{2}}}{(12x)^{\frac{1}{2}}} = \frac{19}{17}$$

$$\text{or } \frac{12x+1}{12x} = \frac{361}{289}$$

$$\therefore x = \frac{289}{864}$$

2. $x^n - a^n = (x+a)Q+R$. Let $x = -a$ and substitute $R=0$ if n be even, and $2a^n$ if n be odd.

3. This is symmetrical with respect to a, b, c . The expression vanishes if $a = 0$, $\therefore a$ is a factor, and also b and c .

The expression is of the fourth degree,
 \therefore it must have a fourth linear factor.

This factor must be symmetrical with respect to a, b, c ,
 \therefore it must be $a+b+c$.

\therefore expression = $mabc(a+b+c)$.

To determine m let $a=b=c=1$.

$\therefore m=12$,

\therefore Factors are $12abc(a+b+c)$. Ans.

$$4. -\frac{(2a+b)^2b}{a^2+b^2} \text{ should be } -\frac{(2a+b)^2b^2}{a^2+b^2},$$

$$\text{answer} = \frac{a^2 + 4ab + b^2}{a^2 - 4ab - b^2}$$

$$5. (101293)^2 = (101290 + 3)^2 = (101290)^2 + 2 \times 101290 \times 3 + 3^2.$$

$$6. \frac{a^2}{x^2 - yz} = \frac{b^2}{y^2 - xz} = \frac{c^2}{z^2 - xy} =$$

$$\frac{a^2 + b^2 + c^2}{x^2 + y^2 + z^2 - xy - yz - xz}$$

$$\text{again, } \frac{a^2}{x^2 - yz} = \frac{a^2x}{x^3 - xyz} = \frac{b^2y}{y^3 - xyz} = \frac{c^2z}{z^3 - xyz} =$$

$$\frac{a^2x + b^2y + c^2z}{(x+y+z)(x^2 + y^2 + z^2 - xy - yz - xz)}$$

$$\therefore \frac{a^2 + b^2 + c^2}{x^2 + y^2 + z^2 - xy - yz - xz} =$$

$$\frac{a^2x + b^2y + c^2z}{(x+y+z)(x^2 + y^2 + z^2 - xy - yz - xz)}$$

$$\therefore a^2x + b^2y + c^2z = (a^2 + b^2 + c^2)(x+y+z).$$

$$7. \frac{x^3 + y^3}{x^3 - y^3} = \frac{(x+y)^3 - 3xy(x+y)}{(x-y)^3 + 3xy(x-y)} = \frac{m^3 - 3xym}{n^3 + 3xyn}$$

Find the value of x and y from given conditions and substitute.

$$8. \frac{x+4}{x-4} + \frac{x+9}{x-9} = \frac{x-4}{x+4} + \frac{x-9}{x+9}$$

$$1 + \frac{8}{x-4} + 1 + \frac{18}{x-9} = 1 - \frac{8}{x+4} + 1 - \frac{18}{x+9}$$

$$\frac{8}{x-4} + \frac{8}{x+4} = \frac{18}{x-9} - \frac{18}{x+9}$$

From this $x = \pm 6$.

$$9. (0.03375) \text{ should be } (0.03375)^{\frac{1}{2}}$$

Multiplying the numerator and denominator by $(100)^{\frac{1}{2}}$ the fraction becomes

$$\frac{(5.12)^{\frac{1}{2}} + (0.03375)^{\frac{1}{2}}}{(80)^{\frac{1}{2}} - (0.01)^{\frac{1}{2}}} = \frac{(512)^{\frac{1}{2}} + (3.375)^{\frac{1}{2}}}{(8000)^{\frac{1}{2}} - (1)^{\frac{1}{2}}}$$

$$\frac{8 + 1.5}{20 - 1} = \frac{9.5}{19} = 0.5.$$

10. Since the n th term = $\frac{3n-1}{6}$ the first term is

found by putting 1 for n , and \therefore first term = $\frac{1}{3}$. Hence the sum of n terms =

$$(a+d) \frac{n}{2} = \left\{ \frac{1}{3} + \frac{1}{6}(3n-1) \right\} \frac{n}{2} = \frac{n}{12}(3n+1).$$

11. Divide by $x^4 - 5x^2 + 7$ and R must vanish.
 $P = 40$ and $Q = 56$.

J. H. T.

Book Reviews, Notices, Etc.

BOOK REVIEWS.

Cæsar.—The Gallic War. Rivington's, London.

We have received several of these neat little volumes, containing each one "Book of Cæsar," with brief notes and a vocabulary. They form a part of "Rivington's Latin Series," and are very handy editions of the text for class-room use.

Little Dialogues for Little People.

Little Speeches for Little People. Chas. A. Bates, Indianapolis, Ind.

These little books contain a number of well selected rhymes and verses, and simple dialogues suitable for recitation by the younger children in primary schools and departments, and will be welcomed by many teachers as a help in the work of combining instruction with amusement.

Outline Maps. D. C. Heath & Co., Boston.

This is a series of Progressive Outline Maps for the use of geography and history classes. The series already includes nine maps, and others are being added to the series. The maps have already been tested, it is claimed, with great success in Cincinnati, Boston, Providence, and about twenty other important cities, and a large number of smaller schools. The plan seems well adopted both for lightening the teachers' labors and for making the study of geography increasingly interesting and profitable to pupils.

Riverside Literature Series.

We have received from the publishers, Houghton, Mifflin & Company, Boston, Nos. twenty-one to twenty-six of this neat and admirable cheap edition of American Classics. The numbers before us contain respectively "Poor Richard's Almanac and Other Papers" by Benjamin Franklin with notes; Parts I. and II. of "Tanglewood Tales" by Nathaniel Hawthorne; "Rules of Conduct" by George Washington, with introduction and notes; and "The Golden Legend," Parts I. and II., by Henry W. Longfellow, with notes by Samuel Arthur Bent, A.M. The books of this series are issued monthly.

How to Become a Public Speaker. Philadelphia: National School of Oratory and Elocution.

A great orator, like a great poet, is born, not made, and one of nature's orators will scarcely need any artificial guide to the full development of his gift. Nevertheless there is a wide field for this little work, both among embryo public speakers and among ministers and others who wish to substitute extempore speaking for reading from manuscript. The work gives in a clear and concise manner much valuable instruction to such, and there is no reason why, by systematically and conscientiously carrying out its directions and hints, any man of average intelligence and education should not become, if not an eloquent, at least a fluent and forcible public speaker.

The High School English Grammar; Based on Whitney's Essentials of English Grammar, by John Seath, B.A., Inspector of High Schools for Ontario.

This book, whose appearance has been awaited with some interest, is at length offered to the profession. As, during the few days it has been on our table, we have been unable to find time for more than a very cursory examination of its pages, it would be unjust both to the authors and to ourselves to venture at present an unqualified expression of opinion, or to attempt any elaborate criticism. Such criticism it will no doubt receive at the hands of the High School Masters of Ontario. We also reserve the right of fuller discussion in a future issue. Meanwhile we have no hesitation in saying that the author is, to our mind, unquestionably on the right track. English Grammar, as a branch of study for the schools, is a science and should be treated in the only way in which the study of any science is of educational value. The first step is to collate the facts; the second to examine them carefully for purposes of classification and orderly arrangement. The process of generalization, or deduction of general principles and

laws, should come in the class-room, as it comes in the study, or the laboratory, last in order. In the science of language, as in all other sciences, this last stage of the investigation, though it may be the most uncertain in its results is undoubtedly the most valuable, both in its philosophical and in its disciplinary aspects. It is the goal of all scientific investigation—the completion of the analytical process, without which all the preceding stages are comparatively valueless from the point of view of both educator and investigator. Whether Mr. Seath has, in any degree, committed the fault, to which there is, we think, too much tendency in modern scientific investigations, especially in the school-rooms, of losing sight to some extent of this important truth, is a question upon which we are not yet prepared to pronounce an opinion. That he has both carefully and skilfully observed the scientific order is obvious even to hasty observation. If space and time permitted we might call attention to certain expressions which seem to us to need explanation, or justification, perhaps, in some cases, correction. What is, for instance, the real meaning of the statement which we find in the preface, and which is so often made, that English is an analytical language? In what sense is the word "analytical" used in which it is inapplicable to any other language that is the result of growth and is, or has been, spoken? Is it really necessary, in a work intended for High School pupils, to cultivate simplicity of language to an extent which is sometimes scarcely consistent with elegance, and often unfriendly to conciseness? In such a passage as that on page 25 in which it is stated that "grammar does not at all make rules and laws for language; it only reports the facts of good language in an orderly way, so that they may be easily referred to or learned by any one who has occasion to do so," it seems difficult without emphasizing unduly the word "makes" to distinguish widely between the alternatives presented, without being disposed to quarrel with the general statement as derogatory to the higher office of the grammarian before referred to. Substitute the word "deduce" for make,—would the author still adhere to the statement? Coming down to a lower plane of criticism, but one on which we may surely stand while discussing work of this kind, would it not be rather difficult for a pupil to substitute for the words "do so," their grammatical equivalent from the preceding part of the sentence? These are but desultory remarks. The book is certainly one of the most noteworthy that has yet been produced in our local educational sphere. As such it deserves and will no doubt receive, full and appreciative discussion.

LITERARY NOTES.

THE publishers of *The Home and School Supplement*, 50 Broomfield street, Boston, announce for April 15th, "One Hundred Lessons in Business,"—not a book.

By arrangement with the English publishers, D. C. Heath & Co. will at once add to their already long list of pedagogical books "Notes on the Early Training of Children," by Mrs. Frank Malleson. This book has already had a reception in England that strongly commends it to the attention of mothers and educators.

GINN & COMPANY announce for June a work that will be of some interest to students of language, entitled "The Order of Words in the Ancient Languages Compared with the Modern," by Henri Weil, translated from the third French edition, with notes by Chas. W. Super, professor of Greek in the Ohio university.

D. C. HEATH & Co. will issue April 9th, *Novellen Bibliothek*, a collection of standard short stories in German, selected from the best modern writers, with explanatory and literary notes by Dr. Wilhelm Bernhardt, of the Washington High School, Washington, D.C. The following stories are given in this volume:—"Am heiligen Abend," (On Christmas Eve), by Helene Stoll; "Mein Erster Patient (My First Patient), by Marc Boyen; "Der Wilddieb (The Poacher), by E. Werner; "Ein Fruehlingstraum (A Spring Reverie) by E. Funder; "Die schwarze Dame (The Lady in Black), by A. E. Wiesner.

Question Drawer.

QUESTIONS FOR THE EDITOR.

I.

In case a teacher is obliged to dismiss school for a day or two on account of illness, can the trustees if so disposed, deduct his pay for the time thus lost?

II.

If a pupil commit an offence at noon or during recess worthy of corporal punishment, may the teacher inflict such punishment at such recess, or must he wait until the school has been formally called in?

III.

The agreement between a public school teacher and the trustees may be terminated by either party giving to the other at least one calendar month's notice. As Monday, January 3, 1887, was the first lawful day to do business in this year, would a notice given on that day terminate the agreement on January 31st, or would the agreement run until the last day of February?

IV.

Are Lennox and Addington Counties united with one County town?

Are Durham and Northumberland?
Are Dundas, Stormont, and Glengarry?
Are Prescott and Russell?

V.

Are pupils, preparing for High School entrance examination in July, 1887, required to study all the periods which cover the history of England?

VI.

Where can a work on precis writing and indexing be obtained?

VII.

Will there be a paper set on drawing in July, 1887, for entrance candidates?

VIII.

What studies, and to what extent, are required, for the midsummer entrance examinations? Also, for December examination?

IX.

Please give the name of publishers of a new unabridged dictionary, published in Chicago; price \$6, in sheep. We wish one for our school.

ANSWERS.

I.

In case of sickness, certified by a medical man, every teacher is entitled to his salary during such sickness for a period not exceeding four weeks during the entire year. This period may be increased, but not diminished, at pleasure of trustees.

II.

The question is strictly a legal one. We do not know whether any decision has been made on a test case. We should say however that, if such punishment must be inflicted it would be much more seemly to reserve it for school hours. By that time the teacher's indignation will have cooled, and he will be able, we should hope, to devise some better and more effective means of enforcing discipline and improving the offender.

III.

Common sense would say that such notice would be sufficient. We do not know what the lawyers and courts might say.

IV.

Yes, in each case.

V.

"Outlines of English History" are prescribed. No exception is made in respect to any portion.

VI.

Will some one who knows kindly answer?

VII.

No. Drawing book No. 4 or 5, of the prescribed course will have to be submitted.

VIII.

It would require too much space to answer in full. Write to Secretary of Education for a circular.

IX.

"Stormonth's" is no doubt the dictionary meant. We do not know the name of any Chicago firm selling it for six dollars, but the trustees can procure it from Grip Publishing Co., Toronto, at that price by adding a subscription to this journal, \$7.50 in all.

ANSWERS TO QUESTIONS IN PREVIOUS ISSUES OF SCHOOL JOURNAL.

We have received several answers to the request of "Junius" for a recipe for copying pad. Following are two differing slightly in proportions:—

I.

Take one pound of glycerine, four ounces of French glue, and one pint of water; melt together in a pan over the fire, and when the mixture is thoroughly dissolved, pour into a shallow tin dish large enough in area for the paper to be used in making copies. The tin should be as free from scratches as possible. In writing the original to be copied use aniline ink. Moisten the pad slightly, immediately before pressing the written sheet upon it, and carefully sponge all ink from the surface after using. Use soft water in every case.

Bolsaver.

MAC.

II.

Have a tinman make a shallow pan, by turning up the edges of a sheet of tin 10 x 14, half an inch all round, and soldering the corners. For a pad of that size, take 2½ ounces clear white glue, or gelatine, and 15 ounces of glycerine, (some prefer the proportion 1 to 5,) soak the glue in cold water till fairly soft, in the meantime, heat the glycerine by placing the bottle in a kettle of water and boiling. Pour off the water from the glue, set the dish containing it with the boiling water, pour in the heated glycerine, and stir till thoroughly melted and mixed, then pour into the shallow pan, and let it cool, when it will be ready for use. When the surface becomes tough from use, the pad can be melted over without injury.

The ink for copying must be made from purple or violet aniline, and is easily made by dissolving the crystals in water, but the success of copying depends very much upon having good ink. The writing should be allowed to dry before laying it upon the pad, then smoothed down carefully, to see that every part is in contact with the pad, after letting it remain about a minute, remove it, and proceed at once with the copying, smoothing down each paper, and taking it off at once. As soon as finished, wash off the ink with warm water and a piece of sponge or soft cloth.

Sherbrooke.

H.

Another correspondent recommends equal portions of glycerine, white glue and water, about 7 oz. of each, and adds the following recipe for the ink: 1 oz. aniline dye, 7 oz. hot water, ¼ oz. gelatine and 4 or 5 drops of ether. Keep from the air. To remove the ink, pour warm water upon the composition and allow to remain two or three minutes.

U. A. BUCHNER.

THE college is certainly the bone and sinew of all American education, and its interests should be zealously guarded. It is at present beset with peculiar danger. Between the university hobby on the one hand, and the practical craze on the other, the college finds itself in a precarious condition.—*J. I. D. Hinds, Ph.D.*

VICTORIA will complete a half century of her reign in June. When she came to the throne Martin Van Buren had but recently been inaugurated president. Her uninterrupted wearing of the crown has seen William Henry Harrison, John Tyler, James K. Polk, Zachary Taylor, Millard Fillmore, Franklin Pierce, James Buchanan, Abraham Lincoln, Andrew Johnson, Ulysses S. Grant, Rutherford B. Hayes, James A. Garfield, Chester A. Arthur and Grover Cleveland succeed to the presidential office. And her reign has seen the death of these fifteen presidents with two exceptions. And yet Victoria had reached the age of woman's estate when she received the crown.—*Educational Gazette.*

AND

The price is one dollar and fifty cents (\$1.50) for a Nickel-plated "Light King" Lamp, which gives the most powerful light of any lamp in the world. It is perfectly safe at all times, on account of the patent air chamber with which it is provided. It does not require an air-blast to extinguish it, as the Patent Extinguisher shuts off the flame at a touch of the finger. This lamp cannot be bought at wholesale any cheaper than you can buy a single one for your own use, and can be bought at this price ONLY at our sale-rooms, No. 53 RICHMOND STREET EAST, TORONTO, or sent by express for 25 cents extra.

AND

For two dollars and twenty-five cents (\$2.25) you can buy from us, and ONLY FROM US, a beautiful Lamp with brass kettle and attachment for boiling water inside of five minutes, without obstructing the light in any way. Twenty-five cents extra if sent by express.

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To Advertisers!

WHO WISH TO REACH
THE TEACHING
PROFESSION.

The publishers of THE EDUCATIONAL WEEKLY have purchased THE CANADA SCHOOL JOURNAL. They are amalgamating the two papers in THE EDUCATIONAL JOURNAL, and combining the two lists of subscribers.

Under the Regulations of the Education Department of Ontario, "Arbor Day" will be observed at all the Schools of the Province on the first Friday in May. With a view to this celebration, a special Arbor Day number of THE EDUCATIONAL JOURNAL will be issued on the 1st of May. This issue will be 10,000 copies, and will circulate the paper in every School Section in the Dominion. For the purposes of all whose interest it is to place their announcements before the Teaching Profession and the School Boards, this publication will offer the best advantage and the best value ever given in this country.

We quote the following low rates for advertising:—Half column, \$8; one column (120 lines), \$14; half page, \$20; one page (10x13½), \$32.

All orders and copy should reach us not later than April 25th.

The Grip Printing & Publishing Co.

PUBLISHERS.

THE HIGH SCHOOL GRAMMAR

By JOHN SEATH, B.A.,
Inspector of High Schools for the Province of Ontario.

Pronounced by the English Masters of High Schools and Collegiate Institutes:

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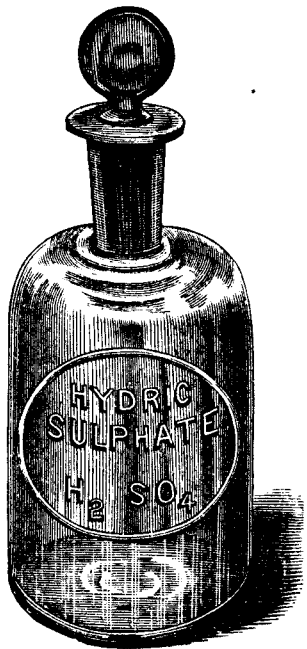
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