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J. E. WELLS, M.A. Editor.
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Editorial Notes.

It would be interesting to know whether the English schoolboy who translated "Most men, therefore," by "*Hominissimi iguntur*," was being trained on the inductive or the cramming method.

THE two new "labor saving" books, *Practical Problems in Arithmetic and One Hundred Lessons* (400 exercises), in English Composition, are meeting with an extensive sale. Teachers see at a glance that these little works save a great deal of time and labor, and nearly every order asks for both of them. Fifty cents will secure them, by return of mail, post-paid.

PROF. MAHAFFY, while at Chautauqua last August, made several flings at the American plan of multiplying colleges and universities. In connection with the American school at Athens, he said:

"I made my headquarters at Athens at the American College, where Prof. Waldstein and Prof. Tarbell were then working. I was surprised then, and am more surprised now, when I see the condition of this country. I was surprised that that institution was not endowed with sufficient money. It could do a great deal more work, if it had the means. I am surprised, because I find that this country is infested with a crowd of generous philanthropists who are going about like roaring lions, seeking what they can endow."

IN an article in *Murray's Magazine* a few months ago, on "The Evils of Scholarships," Miss Beale points out very forcibly some of the objections to the prevalent practice in regard to these. Scholarships in the English schools, she says, have largely become the implements which schools use to vie with one another in buying up the best talent in the market, to be used afterwards in the way of advertisement; and they divert the attention of the young from the value of education as an end in itself to mere money-winning and prizes. They foster premature specialisation and cram. Is not this true in regard to school and college in other countries beside England?

THE Committee on Secondary Education, which has been for some time at work in the United States, has caused an abstract of its report to be prepared and circulated. The inquiries of the Committee were conducted on a very thorough and systematic plan. Two hun-

dred and sixty-three separate reports were received from those whose opportunities for obtaining knowledge in regard to the subjects of inquiry, were of the best description. Among the ten conclusions or suggestions embodied in the abstract referred to, the following seems to us worthy of special emphasis and special attention:—"III. With few exceptions, no opportunities or inducements worthy of the name, in the way of secondary or higher education, are offered the rural population."

A LIVELY discussion at a recent meeting of the Woodstock School Board brought out the fact, that the Board has been in the habit of making appointments to the teaching staffs of the schools, without consulting the Principal. Principal Garvin was quite right in pointing out that this is wrong and unfair. It is surprising that any Board should think of making an appointment to any subordinate position, **save with the full knowledge and consent of the man who is responsible for the efficiency of the work done.** All such appointments should be made, as far as practicable, upon the recommendation of the Principal, and it should be made clear, too, that with him rests virtually the power of dismissal. If the Principal is held responsible, as he should be, for the work and conduct of the school, it is but reasonable that he should have the authority necessary to enable him to carry the responsibility.

AN advertisement in some of the English papers indicates the setting up of a new industry, or as we should perhaps say, profession—that of a child-flogger. The advertiser, having had large experience in the discipline of the young, offers his or her services to parents for a consideration. Their homes will be visited and chastisement inflicted to order on unruly and disobedient children. We confess to a prejudice **in favor of parents wielding the rod themselves rather than by proxy**, but it strikes us the proposed arrangement would be just the thing for those schools in which flogging is a part of the regular routine. One of the strong objections in many minds to the ordinary method is that it is rather beneath the dignity of the profession for a teacher to become a flogger of other people's children. Here is an alternative. Let the services of an itinerant professional wielder of the taws or ferule be engaged. One might serve a given number of schools, visiting each at a fixed hour. Thus the master may save his time, muscular energy and dignity, and a new sphere of activity be opened up for the industrious poor.

THE extract entitled "Eradicating Falsehood," by H. R. Hotze, in our last issue, should have been credited to the *County School Council*, the predecessor of what is now *The Public School Journal*, of Bloomington, Ill. We had forgotten to mark the slip with the name of the paper, and consequently were unable at the time to give due credit.

By the will of the late Mr. Gooderham, of Toronto, \$125,000 is bequeathed to the Building Fund of Victoria University, and \$75,000 to its Endowment Fund, both on the express condition that the Institution be removed to Toronto. Judging from the tone of the report of a recent meeting of the Board of Regents, this bequest is regarded as having settled the question of removal, but not necessarily that of federation. There are some indications that a union of the divided friends of Victoria, on the basis of an independent University in Toronto, is a not improbable solution of the question.

WE hope during the year to hear often from young and inexperienced teachers. Let us hear of your difficulties and discouragements. Doubtless some amongst our many readers will be able and glad to help you, out of the riches of their experience. Tell us, too, of your successes, and the methods by which you have achieved them, that thus your experience may become helpful to others similarly circumstanced. And be assured that whatever aid in the way of sympathy, advice, or help of any kind, the *JOURNAL* may be able to render is most heartily at your service.

REFERRING to our query, whether some better descriptive names might not have been found for the new High School Examinations about to be instituted, the Editor of the *Educational column* in the *Southern Counties' Journal* says:—"Surely shorter and more suitable names can be got for two of them. So far as the substitution of 'The Primary' for 'Third-class non-professional' is concerned no fault may be found. For the 'Junior Leaving Examination,' in our opinion, the somewhat discredited word 'Intermediate' would be an excellent substitute, and for 'Senior Leaving Examination,' the 'Final.' There would thus be the three High school examinations, called Primary, Intermediate, and Final, without there being the slightest room for confusion, or the lest objection on the score of brevity or euphony." We think the names thus suggested would be a marked improvement on those proposed by the Education Department.

THOSE having questions or other communications for the English Department of the *JOURNAL*, are requested to note the changed address of the Editor of that Department, as given at the head of the column. As is known, probably, to most of our readers, Mr. Huston is now at the head of a college, which is the first, we believe, in Canada to have established a Manual Train-

ing Department. This Department is very fully equipped, having, as appears from the advertisement in the *JOURNAL* of July 15th, a large workshop, furnished with a ten-horse power engine and expensive machinery, and being under the direction of a master who has the double advantage of being a skilful workman and an honor graduate of Toronto University. The experiment, for as such it may be regarded in Canada, is thus being tried under very favorable conditions, and the results will be observed with a good deal of interest by educators.

THE approach of the chilly autumn days should remind teachers of the necessity for special precautions to guard the health of the children. There is, probably, no more dangerous season than that transition period, when it is, we are apt to think, not cold enough for fires, and when it is yet too cold to be safe or comfortable without them. No doubt the seeds of troublesome and sometimes fatal disease are often laid in the colds caught in a damp, chilly school-room. The children come in from recess in a glow of warmth, perhaps in a state of perspiration, and have to sit down in an atmosphere much below that which is either comfortable or healthy for a sedentary worker. The result is a crop of colds, coughs, sore-throats, etc., which render the children's lives miserable for days or weeks, and often do permanent injury to health. The heating arrangements in every school should be so convenient, and the fuel so handy, that a fire can be had whenever it is needed, without reference to the date. Every teacher should make it a matter of duty to see to this.

THE career of the late Mr. J. Campbell Thompson, whose death occurred a few weeks ago in Toronto, is worthy of more than a passing notice. Mr. Thompson had some time since retired from the practice of the teaching profession, in which he was for many years very successfully engaged. He was probably personally known to many of our readers. He was a native of Ireland, and came to this country as a young man some fifty or sixty years ago. From a notice in the *Globe* we learn that, in recognition of his services as an Adjutant in the British army, his father was granted a quantity of land in the Township of Adelaide, west of London, when that region was a dense wilderness. Young Mr. Thompson's taste did not lie in the line of agriculture, however, and he became qualified as a teacher, and began a brilliant career in that profession. He was successively Principal of the St. Thomas Grammar School and the Strathroy Grammar School, and for many years was the coadjutor of Rev. Benjamin Bailey, Principal of the London High School. After this he left the public service and taught a number of private pupils until during the last few years. He took a degree at Toronto University, and was always rather a scholar and recluse than one seeking public honor and notice.

Educational Thought.

WHAT is required is *mind training in the right direction*. That is the greatest necessity of the times. We need to transfuse into our school system, something that will impart a bent to the mass of young minds in our schools in the direction of the work of life, and at the same time a discipline and training which shall make this work higher, better and more skilful.—*Thring*.

To read aloud intelligently, with ease, understanding and feeling, as it ought to be the first aim of sane teaching, so it is the crowning excellence, the consummate perfection, the most finished product, of the highest culture. It stands, moreover, that great test of value to the human race that all can begin, though none can find an end. Nothing is of true value to man that is not universal.—*Thring*.

THE opportunities of teachers for moulding character are scarcely less than those of mothers. How little are these opportunities employed! What a change could be wrought in the condition of humanity, if the energies of our profession were applied as vigorously to the training of the heart as they are now applied to the training of the mind. What lessons in chastity and sobriety, in kindness and generosity, in heroism and martyrdom might sink into the mellow heart of youth to bear in after years the golden grain of noble deeds.—*President Winston*.

THE heart and the soul and the conscience are in need of training as well as the mind, and this training should be a part of every teacher's work. To be a man and to do something for humanity is a grander lesson than to read Virgil or to solve Quadratics. The influences of heredity will often hinder the education of the heart and soul of a wicked boy; but the influences of heredity are equally as powerful to hinder the culture of the intellect. The true teacher will surrender to no influences of heredity, but will know that all things are possible.—*President Winston*.

THE mission of art is, in some respects, like that of woman. It is not hers so much to do the hard toil and moil of the world as to surround it with a halo of beauty; to convert work into pleasure. In science we naturally expect progress; but in art the case is not so clear; and yet Sir Joshua Reynolds did not hesitate to express his conviction that "so much will painting improve that the best we can now achieve will appear like the work of children." The appreciation of nature, which characterizes the present century, the intense love of scenery, to which we owe so much, which not only adds so much to the happiness, but even, I venture to think, to the purity of life, we owe in no small degree to art.—*Sir John Lubbock*.

THERE is just one road to success, and that is the road of hard work. All sorts of short cuts have been devised and tried by people, but they have all been short cuts to failure. The long road of hard work is the only highway that leads to success; all by-paths end in the swamp. This is the great lesson that ought to be taught to our boys to day. There is a great deal of bad teaching in our families and schools. Every kind of teaching is bad which inclines a boy to trust to something else than hard work for success. One trouble with a good deal of the teaching of boys is that it fixes their minds on the reward rather than on the work. Activity is the necessity of every strong nature: a lazy boy is a sick boy or a defective boy. Boys ought to be taught to love hard work for itself, without reference to its rewards. There is no fear about the success of the man who loves hard work; if he does not achieve the one particular thing he wants, he will get happiness out of the work itself. It is useless to tell the boys that this world is a place in which everybody gets what he wants. It is a world in which very few get what they they want. Frank, honest teaching is greatly needed; teaching which will make boys understand that life is full of hard work, that no one particular success can be counted on, but that the man who is willing to work, who is honest and true, is the man who will stand the best chance of becoming prosperous and influential, and is the man who will, under any circumstances, have the supreme satisfaction of having done his work like a man.—*Christian Union*.

Special Papers.

THE TEACHING OF MORALS IN THE PUBLIC SCHOOLS.

WHAT AND HOW?

BY SAMUEL B. CAPEN, BOSTON.

THE highest bodily development is that which cares for each and every part in its proper proportion. If a single organ is omitted the whole body suffers. Going one step higher, we consider it supreme folly to care for the body and neglect the mind; to train that which is only animal at the expense of the intellectual. But the supremest folly must ever be that which caring for body and mind both, neglects that which is spiritual and eternal. A rude block of marble may be chiseled never so skilfully into some matchless human form and it will be marble still, cold and lifeless. So with each one of us, mind and body may be developed, but it will be the external shaping; we need to have that which is immortal within us awakened and kindled into new life and vigor before any of us can really be said to live. It is equally clear that in childhood and youth this moral training should be commenced. This is the formative period in which foundations for the whole future are being laid. As you can train the sapling into almost any shape, making the tree either graceful or unsightly, so you can mould a child into a saint or a demon. Lord Shaftsbury gives as the result of his observation that all crime commences between eight and sixteen, and if the child lives a correct life to the age of twenty, the chances of his continuing to do so are as forty-nine to one. This, however, is too elementary for such an audience. But I fear sometimes that we do not recognize how important a factor that part of the young life which is spent in school is in its moral influence upon many of our children. We all know that some of the homes are from which these children come. Unholiness and impurity are there, expressing itself in word and act. With whole families crowded together into one or two rooms, many of these children know nothing of what we call the proprieties of life. Must I not say that many of them know only that which is indecent?

I visited a primary school recently, situated in a neighbourhood with homes similar to those which I have just described, and the vile pictures and words upon the outbuildings told all too plainly what the homes were from which these children came. Unless they have some training in school of another kind they will grow up in ignorance of all that which is purest, and sweetest, and noblest. The education which the state gives in such cases only increases the power to do evil, if we have quickened their intellects without touching their moral natures. When I was a lad we were accustomed to play the game of "Follow Your Leader." Whatever the first boy did, however grotesque, each boy who followed after must do likewise. I have thought often, lately, that life was a great game of follow your leader. Silently, yet steadily, we follow another. The boy imitates the father; he talks, he even walks like him. The girl imitates the mother, and, this is the part of the truth we are emphasizing to-day, *the scholar, the teacher*. It is just because of this truth that the wise framers of our Massachusetts laws have said: "It shall be the duty of the teachers to use their best endeavours to impress upon the minds of the youth committed to their care and instruction the principles of piety, justice, and a sacred regard to truth, love to their country, humanity and universal benevolence, sobriety, industry, frugality, chastity, moderation, temperance, and those other virtues which are the ornament of human society and the basis upon which a republican constitution is founded."

It is the same truth that has led the schools in twenty states to give moral instruction, and in nine more, both moral and religious. From these general truths, is it not proper to say specifically, in answer to the "What," that every teacher ought, therefore, to try:

1. *To inspire all his scholars with some noble purpose in life.* Many of our young people get nowhere in particular, for they are aiming at nothing in particular. They do not care, and it is impossible to steer a ship in a calm. We need to give our youth a worthy impulse and help them to keep it steadily in view. We need, in this supremely worldly age, to inspire them with the thought

that the great thing to strive for is not money or fame, but character. "It is not what a man has, but what he is, that makes the man." Try to lead them not only above their appetites and passions, but above all selfishness and meanness as well. Who wants to live in the cellar in the darkness, when he can dwell in the sunshine? Teach them not to be willing to live in the basement of their animal natures, but to come up where God's truth is supreme. Not to play life, but to live for something noble.

2. *Teach them Fidelity, and that whatever they do shall be done thoroughly and faithfully.* Let them have some conscience in all they do, and never allow themselves to be shiftless. Teach them to work so they can have self-respect and never be eye servants. Teach them to be true to themselves, for if they are not they will find their own consciences very troublesome travelling companions all through the journey. Endeavour to get out of their heads the foolish notion that manual labor is not as honorable as some other kinds. So many of our young men want work that is clean and nice and refined, and many a good mechanic is spoiled to make a poor clerk. A faithful mechanic is in as honorable a position as any man, and far more so than a shiftless, indifferent clerk. Teach that there is not the slightest chance in the world for the boy or girl who wants a "soft job," and whose principal thought is to get the most pay for the least work. Such scholars should be made to see that the softest spot, while they hold these ideas, is under their hats!

3. *Try to guide them in their Reading.* It is a passion with most of our young people to read, and the passion can be a great blessing if only guided aright. Their minds are like the prepared plate of the photographer, ready to seize and hold every impression, and it is possible to guide them. Not long since a young lad went to our public library, saying to the young lady in charge that he had just read "Robert Elsmere," and thought it was the driest thing he had ever read, and that he wanted now a real "blood and thunder novel!" But the lady dissuaded him from it, and led him to take a book on history, which he reported in a few days he had read with great pleasure. To show the necessity of this watchfulness a friend showed me a paper which was being distributed at five o'clock in the afternoon, on one of the principal thoroughfares of Boston. The title had rather a semi-religious look, and he put it innocently into his pocket, and laid it on the table when he reached home. Providentially, however, before his boy had seen more than the title he looked it over himself and found it a vile, indecent sheet. A young lady riding in the cars was offered, by a young man, a book which, when she told the title to her friends, they advised her that it was one of the vilest ever written. The devil is busy circulating such literature. Let us not permit him to conquer because of our silence. Fill a measure full of wheat and there will be no room for chaff. There is an old fable, that Satan, seeking for victims, saw one summer's day, a beautiful girl seated in the open door of a cottage, and he said, "I will creep into her mind and defile her." But as he silently drew near, he heard her singing a beautiful hymn. With a howl of rage, he hurried away, saying, "That place is all occupied." Encourage the young to read, from the first, only that which is good, and there will be no place in their hearts for the evil.

4. *Put them on their guard with regard to their companionships.* Mrs. Browning once said to Charles Kingsley, "What is the secret of your life? Tell me, that I may make mine beautiful, too." After a moment's pause, he replied, "I had a friend." It is impossible to overestimate the importance of these friends. I have seen young men lifted and inspired to the noblest things because they have chosen for their intimate associates, those who were pure and good; and I have seen young men ruined who began the downward road by making false choices of companionships. Warn those in whom you are interested, to refuse to keep company with those who tell the questionable story and who speak slightly of that which is pure and innocent. Teach them to avoid such companions as they would the pestilence. As a chemist can tell you, from one drop of blood, that there is poison in the veins; as a chip will tell the current of a stream, so show them that in such associates there are the beginnings of evil which will destroy any life.

5. *Teach them to be temperate and pure.* In the last few years there has been so much interest taken in temperance that hardly any young person can have failed to have had some knowledge of the awful peril in the use of alcohol. It is a poison and ought to be marked with a skull and cross-bones like other poisons. But the perils of impurity are not so often emphasized. I do not think we should hesitate to be plain and direct. When I was in the English High school, under Thomas Sherwin, he did not hesitate to warn us against secret sin. Why should we let the devil do all the plain teaching,—and a little thought will show us how this may be done. It is said of General Grant, that seated one day among a number of officers, a general of high rank rushed in, saying, "Boys, I've got such a good story to tell you! There are no ladies present I believe?" "No, but there are gentlemen present," was the curt reply of Grant, and the story was not told. The world is full of such facts and incidents, which can be used, if the teacher desires to do it, to press home this truth. Teach them to avoid looking at the indecent pictures which sometimes appear in our comic papers and certainly line the theatre boards posted in our streets. Show them that it is the most manly and womanly thing to "turn away from evil," and never try to "face it down." Let them beware of harboring impure thoughts, for they are like the spark in the hold of a ship, it will work its way right and left until there is a bed of fire under one's feet, and destruction is at hand.

II. With regard to the second part of the question, "How," I have but little to say in the presence of expert teachers. But I remember asking a boy once about a certain study and he replied: "The time spent on that does not amount to much, for the teachers do not care anything about it." This leads me to say, that in the subject before us, of all others, it should be urged with *hearty earnestness* or it will make no impression. A teacher must make his words a part of his own being in order to make them tell for good. Why does one man succeed and another of equal talent fail utterly? Because one is thoroughly in earnest and the other is not. The Indians nicknamed General Sheridan, a few years ago, as "The little man that means business." The late Doctor Bellows, of New York, had a great power over an audience. One day, after an address was ended, a gentleman said to him: "O Doctor, I wish I had your inspiration!" "Inspiration," he replied, "it isn't inspiration at all, it is perspiration." It is the teacher who puts his whole soul into his teaching always that writes his own enthusiastic words upon and into the lives of those who gather around him. But this, I think, is especially true in teaching morals, and where the scholar must be made to feel that the teaching is not perfunctory, but out of the heart. The teacher of history, for instance, can easily, if he will, show how the nation that does righteousness is sure to prosper, and when it becomes corrupt it is weakened and perishes. How can one teach history and leave God out? you leave out the chief factor. Those who have heard Henry A. Clapp lecture on Shakespeare, remember how clearly he points out that the great dramatist, in all his plays, encourages virtue and brings disgrace upon vice, bringing out so clearly that the sin of all sins is to do evil and then make light of it. All such, I am sure, will see how easily one can teach history and morality together if he is only in earnest about it.

Finally, may I say, with all frankness, that no one can teach morals who is himself conscious of any immorality of his own. You can never teach another what you do not know thoroughly yourself. An old farmer, who had been driving people about for two months during the summer vacation, had often seen them point to the sunset painted on the western sky and say: "Oh, how beautiful!" Finally he was heard to exclaim, "They have been talking this way all summer about nothing but one of our pink-and-yaller sunsets!" If we see no beauty in that which is pure and holy and sweet ourselves, be very sure we cannot make any one else see any.

I feel more at liberty to say this, because of the high character of most of the gentlemen who are masters and principals in our various schools. But it is a good thought, of which we may all be frequently reminded, that if we want to have the fullest respect of those committed to our care, it must come, not because of any authority we may have in virtue of our office, but because of what we are.

When you teach morals, of all things never forget that your words will go no farther than your own life carries them. Back of the teacher is the man, and what he is, and not what he professes to be, will always determine the force of his words.

Gentlemen, the road is hard enough at the best for our children and youth to tread; there are pitfalls enough already in it without any faithless life of ours being a stumbling-block in that pathway.

If a business man may be allowed to say a plain word to the professional, I believe I realize more and more as I touch young men and see how much their early training has to do with success or failure, the solemn responsibility of the teacher. Your profession may not be so noisy and conspicuous as some, but it is none the less sacred and all the more mighty. It is not like one of the great forces of nature which do their work so silently? Has any one ever felt any jar as the world spins on its axis? Has any one ever heard any creaking of the machinery that lifts the tides? *God's greatest forces are always silent.* So when I see how you are moulding the minds which are so largely to shape the future of our land, and yet notice how quietly it is done, I say this work is like God's. Your business is certainly a very serious one, and the man that does not consider it such can never teach morals, and he had better leave it for ever to those who do realize its dignity and its supreme importance.—*From Education.*

Question Drawer.

[N. B.—For answers to questions in English and Mathematics see those departments respectively. Correspondents will please send all such questions direct to the Editors of those departments.]

(a) CAN a person get a pure diamond (not paste) set in a ring for less than one hundred dollars?
(b) What would a one-carat diamond cost?—INQUIRER, L.

[(a) Yes. You can get a ring with a real diamond, very small, of course, for four or five dollars, and those of good size and quality from \$10 or \$20 upwards to almost any figures. (b) From 25 cents upward. There is scarcely any article of commerce in which there is so much variation in value as determined both by size and quality.

WILL you please give me the correct pronunciation of the word Derby? When speaking of the races I always hear it "Darby." Is it then Darby hats, Darby china, etc., etc.? I have also heard the Earl of Derby called Darby. By answering the above you will greatly oblige.—A SUBSCRIBER.

[The weight of authority is decidedly in favor of *Derby* (e as in *her*). *Darby* is probably merely local, though one or two lexicographers give it as the pronunciation of the geographical name.]

WHERE can a teacher obtain a box of chemical apparatus and chemical substances for making experiments to a class using Stewart's Chemistry Primer?—R.W.E.

[From the Map and School Supply Co., on King street, or from W. J. Gage & Co., Front street, Toronto.]

[IN reply to a question in a previous number, Mr. Neil MacEachron informs us that, according to Gaskill's Atlas, Mt. Hercules, in New Guinea, is the highest mountain in the world. Its height is given as 32,768 feet. The same authority gives Mt. Everest 29,002. Professor Ford mentions as higher than Mt. Everest, Gaurinsanhur, also in the Himalayas, 29,025 feet, or almost exactly $3\frac{1}{2}$ miles high. Finally, a note in the *Indiana School Journal* says that "it is now claimed by Capt. A. J. Lawson, of London, that Mount Everest is not the highest mountain on the globe, but that the highest is a peak in New Guinea, being 32,763 feet high. This is 3,781 feet higher than Mt. Everest. This mountain has been named Mt. Hercules; it was discovered by Capt. Lawson in 1881."

[PROFESSOR FORD, of Michigan, kindly reminds us that in our list of Presidents of the United States we failed to credit Monroe with re-election.]

Is there any work on Agriculture? If so, where published and at what price?—N.M.

[We presume N.M. means a Canadian work. We know of none. It has been understood that such a work was forthcoming for the Ontario schools, but we have seen no announcement of its publication.]

WILL you inform me, in your next issue, to whom I should apply for information regarding educational matters in:

- British Columbia.
- Manitoba.
- Territories.
- California.—INQUISITOR.

[Apply to the Superintendent of Education in each country.]

AS I desire to read up some Normal School work for the first term of 1890, what text books should I get for that purpose?—W.J.B.

[Some of the authorized books are: Browning's Educational Theories; Hopkins' Outline Study of Man; Fitch's Lectures on Teaching; Baldwin's Art of School Management.]

WHICH method of studying Latin is generally followed, the Roman, English, or Continental?—J.H.C.

[The reference is, we presume, to the mode of pronouncing Latin. The English mode prevails in England and Canada. In Europe, of course, the Continental. In the United States all three are, we believe, to be found. As most persons learn Latin for the purpose of reading the classical literature in that language, it really matters very little which system is adopted. For those who wish to use Latin in Europe, the Continental method is best.]

PLEASE publish in your next JOURNAL a list of the books required for Third Class candidates, and oblige.—A SUBSCRIBER.

[This is very indefinite. If the Literature selections are meant, they have already been published in the JOURNAL. Candidates for Third-Class Non-Professional Certificates are examined in the subjects prescribed for a general course in Form I. of the High School Course of Study. For this apply to the Secretary of the Education Department.]

WILL there be a text-book on Agriculture required for the coming course for Entrance, and will Temperance be a subject for examination?—A SUBSCRIBER.

[Papers will be set in Agriculture and Temperance as optional bonus subjects. A candidate may choose which of them he will take, but it is not compulsory to take either, and he cannot take both. Marks not exceeding 75 may be added for the subject chosen.]

[R.K.—Information in respect to civil engineering can probably be had by addressing the Registrar of Toronto University, asking for the prospectus of the School of Practical Science.]

- CAN a teacher collect his salary quarterly, though it be not so mentioned in agreement?
- (a) Can a teacher collect his salary at the close of his teaching term, if he resign his position before the close of the year? (b) Can he collect his salary for the amount of time occurring between the close of school and the payment of teacher's salary in the case above?
- In the first part of second question, can the teacher collect interest on the amount unpaid?
- Can a teacher resign his position by giving three months' notice, if nothing is mentioned in agreement concerning resignation?
- Can he compel the trustees to accept his resignation if three months' notice be given, terminating at the close of a calendar month, although the agreement says three months notice must be given previous to the termination of a six months' term?—J.D.B.

[1. Yes. 2. (a) This should be matter of agreement. Where payment for one quarter has been

promptly made, we doubt if payment for any portion of the next quarter can be collected till the end of quarter. This construction would lead to negative answer to 2 (b) and 3. We cannot offer an opinion on the other questions without fuller information. It is a general and good rule that one is bound by the terms of an agreement and must abide by them. You had better send your questions, with your agreement or a copy of it, to the Secretary of the Education Department, asking advice in the matter.]

Music Department.

All communications intended for this department may, until further notice, be addressed to A. T. CRINGAN, 23 Avenue Street, Toronto.

MUSIC.

BY ALEX. T. CRINGAN, G.L.

THE question is frequently asked, "What progress is the Tonic Sol-fa system making in Canada? The answer to this, we are certain, will prove of interest to the large number of teachers who have contributed to the success which has attended the system ever since its introduction. Hamilton can boast of being the first of our Canadian cities to adopt the system as a part of the regular school course, and engage a special teacher and superintendent, to initiate the regular teachers into the mysteries of the new system. The system had been in regular use for several years before any other cities awoke to the advantages to be derived from its adoption. About three years ago it was adopted by the Public School Board of Toronto, and also in rapid succession by Montreal, St. Thomas, Stratford, London, Ingersoll, and many others. It is a pleasing sign of the practical usefulness of the system for school work, that in no case where it has been fairly tested have the results proved unsatisfactory. Of course, a considerable amount of opposition has been met with, but it has usually emanated from those who had not taken the trouble to investigate the claims of the system, or who were jealous of its encroachment on some fancied rights. Many who are now numbered among the most enthusiastic supporters of the system were formerly among its most bitter opponents. By observation of the results of the system where it has been fairly tested, and an investigation of its underlying principles, they have been led to admit that for the practical teaching of music in the school-room it stands without a rival. This is not to be wondered at when we consider the nature of the system and its characteristic notation. It originated with a teacher, it has been improved by teachers, and has been formulated for teachers, with the result that only those principles which have been proved to be in accord with modern philosophical ideas have been retained. In February last copies of the following circular were issued to all teachers who had been known to use the system:—

- Has the introduction of the T. S. system resulted in an increase of interest in music among your pupils?
 - Have you been enabled to teach music more successfully since adopting this system?
 - Do you find any element in the T. S. system which cannot be applied as an interpretation of the staff notation?
 - Do you consider the use of the T. S. system calculated to aid the pupil to an intelligent appreciation of the staff?
 - What is your opinion of the T. S. system as a means of mental training?
 - Are you in favor of music teaching being made general throughout the schools of the Province?
 - Do you consider the T. S. system adapted to the school system of the Province?
- About eight hundred replies were received, and in no case was any opinion expressed that was in the slightest degree unfavorable to the system. The first and second questions were answered in the affirmative in every instance. The third was answered in the negative by all who gave any answer, but a few gave no answer, on account of having no knowledge of the staff notation.

The fourth was answered in the affirmative by all who answered the preceding question, many adding that it seemed to them to be the only method by which the staff notation could be successfully taught in the Public schools.

To the fifth question the majority replied "Excellent," and some ranked it as equal with mathematics as a means of mental training.

The two last questions elicited but one opinion from all, and that was that music teaching should be made general throughout the Province, and that the Tonic Sol-fa is well adapted to the Provincial school system.

Surely the above is an indication of the willingness of teachers to take up the hitherto avoided subject of teaching music, provided it is presented in a simple and logical manner. More might easily be written in favor of the system, but the intention of the writer is not simply to advocate the claims of the system, but to present it in a manner which will make it capable of being readily understood alike by teachers and pupils.

WE would remind the readers of the JOURNAL that the question drawer is always open, and at their disposal. The writer is always ready and willing to help any who may meet with difficulties in connection with the music lesson.

THE "Teacher's Hand-book" of the Tonic Sol-fa system is now ready.

Mathematics.

All communications intended for this department should be sent before the 20th of each month to C. Clarkson, B.A., Seaforth, Ont.

THE TRISECTION OF A PLANE ANGLE.

by elementary geometry has not yet been accomplished. Referring to Mr. Benson's attempted solution as given in our June number, our correspondent, *Reader*, remarks: "To test the so-called principle, suppose $\angle BSA = \frac{1}{2}$ a right angle. Then $WX = MO = WP$. Also $\angle WXC = \frac{2}{3}$ of $\angle BSA$. Now $\angle CW > \angle WP$ and $\therefore \angle WXC > \angle WXC$ or $\angle XCA > \angle WXC$, i.e., $> \frac{2}{3}$ $\angle BSA$, as is easily seen by drawing a figure to suit the case." We have more matter on this solution of Mr. Benson's. But we do not wish to be too severe on Mr. B.'s work, seeing that some of our own that was printed in the same issue will not bear the fierce light that beats on every word of this column. Messrs. W. G. WATSON and EDWIN E. NELSON deserve our best thanks for pointing out that our solution of number 67 cannot be right, for if BD and EB are each 8 feet, then the second ladder ED must be less than 16 ft., whereas it is 30 ft. in length. Mr. Watson thinks that since $AC = \frac{1}{2} AB = 15$ ft., and $AB = 30$, \therefore Euc. I. 47 BC = 26 nearly, and therefore since EC = 48, EB or BD = 22 ft. This seems conclusive reasoning, but let us apply I. 47 to the triangle BDF, and we see that $BF = 11\sqrt{3} = 19$ nearly, therefore EF = 31 nearly, that is the perp. longer than the hypotenuse! It seems, therefore, that Mr. W. has also missed the correct result. Now this problem and the solution given with it came direct from the acute brain of the late Bishop Colenso, who evidently overlooked the fallacy. We think both his reasoning and Mr. Watson's are sound. If they are not we shall be glad to have some other critical correspondent point out just where the error lies. Sir William Hamilton says that mathematicians can and sometimes do err in point of form, but that it requires a most ingenious stupidity to go wrong where it is far more easy to keep right. (*Discussions*, p. 279.) Perhaps he would, were he here, point out and classify the fallacy contained in number 67 and its solution, and then repeat his remark that in mathematics one cannot go wrong; it is like walking in a ditch. Will some of our readers try to detect this error which eluded Colenso and passed unnoticed into this column? We shall return to the note in brother Benson's eye next month.

W.M. sent a solution to the first part of number 44, see H. Smith's Arithmetic, p. 259. Thus:— $\frac{1}{4}$ of area of side walls and $\frac{1}{11}$ of area of end walls = 21 ft. \times ($\frac{10}{11}$ ft. + $\frac{1}{11}$ length of room) = area of floor, which is also 21 ft. wide. Hence the length

of floor = $\frac{10}{11}$ ft. + $\frac{1}{11}$ length of floor; or 6 times width = 105 feet width = 27 $\frac{1}{2}$ ft. W.M. also gave a solution to the second part of 44, of which we gave an easy solution in the May number.

PROBLEMS FOR SOLUTION.

69. H. Smith's Arith., p. 216, No. 2. Ten per cent. discount is allowed on goods sold on 6 mos. credit. What discount ought to be allowed (1) if payment is made 3 mos. before the stated time, (2) 3 mos. after that time? Money worth 5% per an.

70. In the circumference of a circle whose area is one acre, a stake is driven. Find the length of a rope attached to this stake which will allow a horse to graze over an acre outside the fence of the circular field.

71. Give the radius of the inscribed circle, and the longest side of a right-angled triangle; complete the triangle.

72. Prove $\sin^{-1} \frac{3}{4} + \tan^{-1} \frac{1}{2} = \cos^{-1} \frac{3}{4}$.

73. C is the centre of a circle and CA is part of the radius. Find the points in the circumference where CA subtends the greatest angle.

74. Paid 25% duty on a watch, and sold it at a loss of 5%. Had I received £3 more I should have cleared 1%. Find cost price.

75. A rod appears to measure 6 ft. 10 in., but $\frac{1}{12}$ of an inch has been worn off at one end and $\frac{1}{8}$ of an inch at the other. Yard stick used in measuring. Find the real length.

76. When it came to the reckoning, one man in the company offered to pay 4 pence for himself and 4 pence for every man in the company (*not every other man*), and each man said the same. Similarly a woman offered to pay 3 pence for herself and 3 pence for every woman in the company, and each woman said the same. They paid 240 pence altogether. Find the number of men and of women.

77. In a partnership, X owned the site, valued at \$1,500; Y the building, \$2,400; Z the machinery, \$3,000. At the end of a year they agree to take equal shares in the business. But the land had increased in value 20%, and the building and the machinery had decreased 10% and 25% respectively. Who should pay, and how much?

78. How many years' purchase must I give for an estate to get 3 $\frac{1}{2}$ % interest for my money?

These and a number of other less difficult questions have been sent by subscribers, with requests for solutions. We hope our readers will respond generously. In No. 78 compound interest must be intended, for annuities at simple interest are only deceptive and self-contradictory. There are several problems in back numbers unsolved; we hope to receive solutions before the end of the year, so that we may start with a clear slate in 1890. The only way to make the JOURNAL better worth supporting is for every teacher to support it by literary and financial contributions. Its prosperity and efficiency will be an exact measure of the growth and strength of professional spirit among Canadian teachers. Medical journals, and law journals, and church journals are accurate mirrors of their constituencies. Are the teachers to fall behind other professions, or do they wish to have a voice in the affairs of the country? The various educational papers of Ontario have done much to make the teacher's position better than it was; their power for good is now greater than ever before. Shall we let them perish for lack of reasonable support?

BE noble in every thought and in every deed.

THERE is not a moment without some duty.—*Cicero*.

WE should always act the truth as well as speak the truth.

QUARRELS would never last long if the fault was only on one side.

SIN has many tools, but a lie is a handle that fits them all.—*Holmes*.

FROM the lowest depth there is a path to the loftiest height.—*Carlyle*.

HE who has not a good memory should never take upon himself the trade of lying.—*Montaigne*.

Correspondence.

THE ONTARIO PUBLIC SCHOOL GRAMMAR.

To the Editor of the EDUCATIONAL JOURNAL:

SIR,—If this book deserves all the praise bestowed upon it in some quarters, it might be used with advantage here in the North-West as well as in Ontario. I fear, however, that there would be considerable difficulty in getting the children of the prairie to master some of its complications. We might succeed tolerably well with the first half of the book, but all seems confusion when we come to the verb. Take, for instance, the verb or verb-phrase, "Must have been written." This, according to the "Scheme of Conjugation" on page 144, must be parsed as the "Obligative perfect of the passive conjugation of the transitive verb write of the old conjugation." Now a class of little children might sometimes fail in the first attempt to parse the phrase correctly, and how to draw the above string of adjectives in proper order, from an average child, by questioning, is not very easy. A child, even above the average, might parse the phrase in one of the following ways:—"A verb-phrase," "verb-phrase, old conjugation," "obligative verb-phrase of the old conjugation," "passive obligative verb-phrase," "perfect passive verb-phrase," etc., etc. Again, if such a verb-phrase as "might have been writing" is to be parsed, a child may describe it as "potential perfect," "progressive perfect," "potential progressive," etc., etc., before he hits upon the correct description according to the mind of the author. Now all these parsings are correct as far as they go, but some important words are omitted, and those given are not in the proper order. The teacher should, therefore, be able by questioning to get from the pupils the authorized parsing. But how is this to be done? It would be useless to ask the child, "Of what mood is the phrase?" for verb-phrases, according to the text-book, have no mood. If he be asked: "Of what conjugation," then, "old conjugation" is a correct answer; and to the question, "What is the form of the verb?" "progressive form" is but one of a hundred different answers all equally correct. We want the child to say "progressive form of the potential pluperfect," etc., but there is no way, as far as I can see, of making him say so except by telling him and doing all the parsing for him. Perhaps the author would have the parsing done first in the following form, and in course of time the italicised words omitted:—

"Might have been writing is a verb-phrase of the passive *voice-more-properly-conjugation*, old conjugation, potential *nature-of-mood*, pluperfect, *so-called-tense*, and progressive *so-to-speak-form*."

It would be well if the Department would issue "A Companion to the Public School Grammar."

Respectfully yours, W. M.

NORTH-WEST TERRITORY,
September 17, 1889.

IT is a poor service, indeed, that does not deserve at least a "thank you." It is a careless teacher, indeed, who neglects by example to teach courtesy. When people cannot afford to be ordinarily civil they must be greatly pressed for time. A hundred opportunities arise during the day for the teacher to show by speech and manner what politeness is, and these should never be neglected. Pupils are fearfully imitative, and all the preaching in the world upon the value of politeness will not prove so effective as the example of a teacher who exhibits in the school-room the habitual politeness of the well-bred, refined man or woman.—*Exchange*.

THE noblest work of a teacher, and the most difficult to perform, is the inculcation of lofty ideals. It may be doubted whether a truly great man ever lived that did not receive in early life an impulse to greatness. It has often been said and is generally believed that great men inherit greatness from their mothers. If this be true, it is true because the mothers of the world implant in the heart of childhood early impulses to greatness. Their gift of greatness is not by heredity, but by education. They are the first teachers and mould character, which is greater than intellect, and guides the life of a man with all its energies and powers as completely as the silent influence of the moon controlling the ebb and flow of the mighty ocean.—*President Winston*.

Examination Papers.

UNIVERSITY OF TORONTO.—ANNUAL EXAMINATIONS, 1889.

JUNIOR MATRICULATION.

ENGLISH POETICAL LITERATURE.

Examiner: DAVID REID KEYS, M.A.

NOTE.—Candidates for University Scholarships will take only those questions marked with an asterisk. All other candidates (whether for Pass or Honors, Second Class or First Class Certificates) must take the first six questions and any two of the remainder.

I.

Breathes there the man, with soul so dead,
Who never to himself hath said,

This is my own, my native land!
Whose heart hath ne'er within him burned,
As home his footsteps he hath turned,

From wandering on a foreign strand!
If such there breathe, go, mark him well;
For him no Minstrel raptures swell;

High though his titles, proud his name,
Boundless his wealth as wish can claim;
Despite those titles, power and pelf,

The wretch concentred all in self,
Living shall forfeit his renown,
And, doubly dying, shall go down

To the vile dust from whence he sprung,
Unwept, unhonor'd, and unsung.

II.

O Caledonia! stern and wild,
Meet nurse for a poetic child!

Land of brown heath and shaggy wood,
Land of the mountain and the flood,

Land of my sires! what mortal hand
Can e'er untie the filial band,

That knits me to thy rugged strand!
Still, as I view each well known scene;

Think what is now, and what hath been,
Seems as, to me, of all bereft

Sole friends thy woods and streams were left,
And thus I love them better still,
Even in extremity of ill.

By Yarrow's streams still let me stray,
Though none should guide my feeble way;

Still feel the breeze down Etrick break,
Although it chill my withered cheek;

Still lay my head by Teviot Stone,
Though there, forgotten and alone,

The bard may draw his parting groan.

*1. (a) To what causes is the popularity of the above passage due?

(b) State the subject of each of these stanzas, and show how they are connected with each other and with the general plan of the poem.

(c) Explain the various reasons for preferring the poet's word to that with which it is coupled in the following cases:—*breathes*, l. 1, and *lives*; *hath*, l. 2, and *has*; *meet*, l. 18, and *fit*; *knits*, l. 23, and *binds*; *parting*, l. 36, and *dying*.

(d) By what rhetorical means has the author heightened the effect of lines 17-23?

(e) Explain the italicized passages.

(f) What words seem to be used owing to the exigencies of rhyme?

(g) Derive *pelf*, *minstrel*, *stern*, *child*, *sires*.

(h) In what part of Scotland are Yarrow, Etrick and Teviot? What special interest has each for the student of poetical literature?

*2. To what class of poetry does "The Lay of the Last Minstrel" belong? How does it gain by the Minstrel telling it, instead of Scott himself?

*3. What part in the story is played by the Goblin Page?

*4. Show how the poem reflects its author's character.

5. Explain the following passages:

(a) Our slogan is their lyke-wake dirge.

(b) Me lists not at this tide declare.

(c) A merlin sat upon her wrist,
Held by a leash of silken twist.

(d) Both Scots and Southern chiefs prolong
Applauses of Fitztraver's song;

These hated Henry's name as death,
And those still held the ancient faith.

(e) The standers-by might hear unneath,
Footstep, or voice, or high drawn breath.

*6. Quote one (but *not more than one*) of the following descriptions:

The Minstrel.
Melrose Abbey.

The Opening of the Wizard's Grave.

*7. Scott has been charged with describing forms and externals more at length than inward feelings. Give your views on this subject with illustrative quotations.

*8. How has the author taken advantage of feudal institutions to add interest to his poem? What are its deficiencies as a picture of feudalism?

*9. Criticise the literary style of "The Lay of the Last Minstrel."

10. Criticise the introduction of supernatural machinery into the poem.

*11. Indicate Scott's place among the poet's of his time.

*12. Compare his poetry with that of Tennyson.

ALGEBRA.

HONORS.

Examiners: { W. H. BALLARD, M.A.
A. R. BAIN, M.A.
J. MCGOWAN, B.A.

NOTE.—Candidates for University Scholarships will take only those questions marked with an asterisk. All other candidates (whether for Pass or Honors, Second Class or First Class Certificates) must take the first question and any eight of the remainder.

*1. Solve the equations

(a) $(y+z)^2 = \frac{5}{x}$,
 $z(xy+1) = y-4$,

$y + \frac{1}{z} = 0$;

(b) $x^2 = \frac{mx+n}{nx+m}$.

*2. Shew that the sign of the expression $ax^2 + bx + c$ is constant for all real values of x so long as b^2 is not greater than $4ac$.

If b^2 is greater than $4ac$, under what conditions will the sign of the expression be constant?

Find the condition that $ax^2 + bx + c = 0$, and $px^2 + qx + r = 0$, may have a common root.

*3. Find an equation connecting the quantities a, d, n, s , when a is the first term, d the common difference, s the sum of the series, and n the number of terms in an Arithmetical Progression.

If $-p, q$ be the values of n which satisfy this equation, shew that the sum of p terms beginning with $d-a$ is the same as the sum of q terms beginning with a .

*4. Sum to n terms and to infinity the series $a, ar^2, \&c., r$ being a proper fraction.

How far does the expression obtained for the sum to infinity correctly represent the series?

Two infinite geometrical series so related that the first term of each is the common ratio of the other have the same limited value; find it.

*5. The m^{th} and n^{th} terms of an Harmonical Progression being given, find the $(m+n)^{\text{th}}$ term.

If A, G, H , be the arithmetical, geometrical, and harmonical means between two quantities m and n , shew that

$$\frac{A(m-H)(H-n)}{A-H} = G^2.$$

*6. If $y^2 + z^2 = ayz$
 $z^2 + x^2 = tzx$
 $x^2 + y^2 = cxy$
shew that $a^2 + b^2 + c^2 - abc = 4$.

Employ this result to eliminate x, y, z from

$$\begin{aligned} (x+y)^2 &= 4c^2xy \\ (y+z)^2 &= 4a^2yz \\ (z+x)^2 &= 4^2zx. \end{aligned}$$

*7. Find the number of combinations of n things taken r at a time.

Shew that this is the same as the number taken $n-r$ at a time.

If there are n seats in a room, in how many ways may $n-r$ candidates be seated for an examination?

If two particular candidates are restricted to the front row which consists of p seats, in how many ways may the seating be effected?

*8. Assuming the Binomial Theorem for positive integral indices, prove it for negative and fractional indices.

If C, C_1, C_2, \dots, C_n , are the coefficients in the expansion of $(1+x)^n$ shew that

$$CC_1 + C_1C_2 + C_2C_3 + \dots + C_n - C_n = \frac{1 \cdot 3 \cdot 5 \dots (2n-1)}{(n+1)} \cdot 2^n \cdot n.$$

*9. Discuss the form of the general term of $(1 \pm x)^{\frac{m}{n}}$ (m and n being positive integers) according as the index is a proper or an improper fraction.

10. Shew that $(n+1)(4n^2 + 11n + 6)$ is the sum to $2n+1$ terms of the series

$$1 \cdot 2 \cdot 3 - 2 \cdot 3 \cdot 4 + 3 \cdot 4 \cdot 5 - 4 \cdot 5 \cdot 6 + \&c.$$

11. Find the r^{th} term in the expansion of

$$\frac{(1-x)^3}{\sqrt{1-4x}}$$

Find the coefficient of x in the expansion of

$$\frac{\sqrt{1-x}}{(1+x)^3}$$

*12. Find the coefficient of x^n in the expansion of

$$\frac{1}{(1-x)(1+x)^2}$$

EDUCATION DEPARTMENT, ONTARIO,
MIDSUMMER EXAMINATIONS, 1889.

THIRD CLASS TEACHERS.

ENGLISH GRAMMAR.

Examiners: { J. F. WHITE.
J. E. HODGSON, M.A.,

NOTE.—Candidates will take the first four questions, and any two of the others.

1. "I have been in the meadows all the day
And gathered there the nosegay that you see,
Singing within myself as bird or bee
When such do field-work on a morn of May.
But, now I look upon my flowers, decay
Has met them in my hands more *fatally*
Because more warmly clasped,—and sobs are free
To come instead of songs. What do you say,
Sweet *counsellors*, dear friends? that I *should go*
Back straightway to the fields and gather *more*?
Another, sooth, may do it but not I!
My heart is very tired, my strength is low,
My hands are full of blossoms plucked before,
Held *dead* within them till myself shall die." 14

(a) Analyse fully the dependent clauses, stating the kind and relation of each.

(b) Parse the words in italics.

(c) Shew the difference in use between "myself", l. 3, and "myself", l. 14; "that", l. 2, and "that", l. 9; "do", l. 4, and "do", l. 8.

2. (a) Shew how the pronoun differs in inflection from the noun.

(b) Explain clearly the difference between personal and relative pronouns.

(c) What is meant in saying that the relative is sometimes restrictive and sometimes descriptive or connective? Illustrate by the following examples:

He sent it by your brother John who was going there. Here is the book that you wished. It was I who was present. He obeyed his master which was his duty.

3. Explain the use and, as clearly as possible, the meaning of the italicized words:—

Go *there* quickly. How many are *there* here? Act well your part, *there* all the honor lies. *It* is the hush of night. We read or talked as *it* chanced. They roughed *it* in the bush. The bulk of the people, *it* is true, were but slaves. Keep such *as* are useful.

4. Correct, giving reasons:—

(a) If a piece of iron and of glass be heated to the same degree they communicate to the hand a very different sensation.

(b) After various escapes and forty-one days concealment the king landed safely in Normandy, no less than forty persons being privy to his escape.

- (c) The officer has no power of detention over those even whom he knows will get intoxicated.
- (d) Although nearly midsummer, the heat was not oppressive, but residents feel it far more than new comers.
- (e) One if not more of these proprietors, hold land in large quantities, buying it before the last land act was passed.
5. (a) What are all the different forms that (1) the subject, (2) the predicate of a sentence, may take? Illustrate.
- (b) Explain "person" as attributed to (1) the noun, (2) the pronoun, (3) the verb.
6. (a) What grammatical relations may a verb press by its form? Give examples in illustration.
- (b) Define subjunctive mood, stating in what cases it should be used. Apply your principles in the following:—
- I shall wait till he $\left\{ \begin{array}{l} \text{comes.} \\ \text{come.} \end{array} \right\}$ If it $\left\{ \begin{array}{l} \text{is} \\ \text{be} \end{array} \right\}$ raining we cannot go. If I $\left\{ \begin{array}{l} \text{was} \\ \text{were} \end{array} \right\}$ he I should do so.
7. (a) Shew the different ways in which adverbs are formed from nouns, pronouns, and adjectives.
- (b) What other duties do adverbs sometimes perform besides "modifying verbs adjectives, and other adverbs?" Illustrate.
8. (a) Classify and explain the use of the italicized expressions: He dreads *going*. I saw him *crossing* the street. On *hearing* the news they left. He *went to buy* a house. A *riding*-whip. I wish to *cross* the street. I saw him *cross* the street.
- (b) State, with examples, the different classes of words that may be used to connect.
9. (a) Divide into root-word, prefix, and suffix, stating the meaning of each part:—invincible, allegiance, conjecture, incendiary, synonymous, promissory, exquisite, bigamist, attainable, executive.
- (b) Give English words of classic origin corresponding in meaning to—happen, watchful, softened, evildoer, fatherly, fellowship, endless, written after, talkative, watery.

English Department.

All communications intended for this column should be sent to W. H. Huston, M.A., Principal Woodstock College, Woodstock, Ontario.

LITERATURE FOR ENTRANCE EXAMINATION.

LEAD KINDLY LIGHT.

THIS beautiful poetical gem is a favorite with all that read it. Even to persons whose poetical tastes are almost undeveloped there is something in its sweet sadness that awakes a sympathetic thrill, and to readers who have thought upon the hidden mysteries of life, and have in some measure experienced the feelings revealed in the poem, there will always be a much intenser sympathy. To many the poem is associated with the appropriate and sweet music that generally accompanies it. In all the wide range of holy psalm and soothing song of praise of the Christian Church there are few greater favorites than "Lead, Kindly Light." No better way could be adopted to place the pupils in a sympathetic mood than to have it sung either by the teacher alone or by the whole class. This would be the first step to the memorizing of the poem.

After the poem has been carefully read the scholars should be required to state the subject of each stanza with as little assistance from the teacher as possible. They will probably agree on the following as representing the thought of each stanza: (1) *The prayer for guidance*; (2) *The change of heart*; (3) *The confidence in God*; or better still, (1) *The present*, (2) *The past*, (3) *The future*.

QUESTIONS.

By questions the pupils will be led to understand what "gloom" is referred to, and why it is called "encircling." Is there a gloom that does not encircle? Why is "amid" used instead of "through," and why would "darkness" not be better than "gloom"? Why is "Light" written with a capital letter, and what lig-t is referred to? Why did the poet use "lead" instead of "guide" or "direct"? What is the idea brought out by the use of "on"?

Whither is the journey? What is meant by "the night"? What "home" is referred to? Why is "Lead Thou me on" repeated? What is meant by "keep"? Would "save" or "preserve" do instead? Why "feet" and not "hands"? What is indicated by the fact that he did not wish to see the distant scene? What words are worthy of emphasis in the last two lines of the first stanza?

"I was not ever thus." Why is "ever" used instead of "always"? What state is denoted by "thus"? What words are emphatic in the first two lines? "Shouldst." Why not "wouldst"? What state of mind is indicated by his formerly wishing to choose his path, and what by wishing to "see" his path? What is the meaning of "garish"? Why is "day" used instead of "night"? "Spite of fears." What would cause the fears? Why is "wishes" not used instead of "will"? Select a word meaning somewhat the same as "ruled." Which is the better word? Why? Why is the prayer made that past years should not be remembered?

Why is "sure" used instead of "surely"? What is the meaning of "still"? What is the difference between a moor and a fen; a crag and a hill; a torrent and a stream? "Angel faces." What is meant? What is the meaning of "since"? Why had he "lost" the faces? Give the meaning of "awhile"?

GENERAL.

What lines rhyme? How many syllables in each line? How many accented syllables? Whether are the words long or short? How should the piece be read—slowly or fast, loud or softly? What parts should be read most quietly?

LOCHINVAR.

THIS spirited selection will greatly interest the class. Have two of the best readers chosen the day before "Lochinvar" is to be studied, and let them prepare the poem and read or recite it to the class, and then let the class decide as to the merits of the two readings. In this way a very interesting discussion will arise which will draw out the class and thus result in the proper comprehension and a better appreciation of the poem.

The development of the thought should be carefully attended to. The class will be able to point out that the first stanza describes the appearance and character of Lochinvar; the second his haste and his yet being late; the third his entrance to the hall and the conduct of his rival; the fourth Lochinvar's proposal to dance; the fifth the behavior of the bride and her consent to the dance; the sixth the behavior and appearance of dancers and spectators; the seventh the escape; the eighth the unsuccessful pursuit.

SUGGESTIVE QUESTIONS.

What need of "O"? What is meant by the "nest"? Explain "wide border." What is the difference between "steed" and "horse"? What word is generally used instead of "save"? Why is Lochinvar described as being almost unarmed? Parse "all" before "unarmed." Why is "he rode" repeated? What is meant by "faithful"? by "dauntless"?

Explain meaning of "brake." Substitute a word for "stone." Where is the *Esk*? What is a "ford"? "Consented"; explain.

Pronounce "gallant." Who was the gallant? Explain meaning of "laggard." What is the difference between a "dastard" and a "coward"?

"Bridesmen." Who were they? What is meant by "kinsmen"? Parse "hand." What is the difference between "craven" and "coward"? Why did the bridegroom not speak? Why is he called "poor"? Parse "never."

What is the meaning of "wooded"? of "suit"? of "denied"? What is meant by line two? Does the tide flow up the Solway? "This lost love." What lost love is meant? What is meant by leading a measure? Why only one cup of wine?

What is the difference between a goblet and a cup? Was it customary for ladies to kiss the cup of wine? What is the difference between drinking and quaffing? Why is everything done so rapidly? What is indicated by the sighing of the lady; by her blushing? What would cause the smile; what the tear?

"Form"; why was not "body" used? What is a "galliard"? Tell the difference between "grace" and "adorn." Explain meaning of "fret," "fume," "bonnet and plume," "dangling." What other name are "bride-maidens" sometimes called?

Parse "touch." What is the meaning of "charger"? Why is "so light" repeated? What is the difference between "bank" and "scour"? What did Lochinvar mean when he said "They'll have fleet steeds that follow."

Explain meaning of "mounting," "Lea," "lost bride." What is the difference between "racing" and "chasing"; "daring" and "dauntless."

With what word does each stanza end? Why?

QUESTIONS.

I. Will you kindly analyse the following—Fourth Reader, page 54: "Every occurrence in Nature is preceded by other occurrences which are its causes." The sentence for analysis is "which are its causes."—A SUBSCRIBER.

II. (a) Fourth Reader, page 69. To whom does the last stanza refer?

(b) Fourth Reader, page 98. Who does Burns mean when he says "My Mary"?

(c) What was the "Council of State"?

(d) Distinguish between steam and vapor, as used in lesson entitled, "Clouds, Rains and Rivers."

(e) What is the Literature prescribed for Second Class, 1890?—A SUBSCRIBER.

III. (a) Please state in your paper what you consider a correct answer for the following question: Give the grammatical value of the inflections in the following: "Hand's hands' were sought; seeks, seeking, seek."

(b) Kindly answer the following: Give all the inflections of "man, he."—MAC.

ANSWERS.

I. The sentence is an adjectival subordinate to "occurrences"; its subject is "which"; and the predicate is "are causes," "are" being a verb of incomplete predication completed by the subjective complement "causes"; "its" is an attribute of the complement "causes."

II. (a) "That young friend of ours," sufficiently explains.

(b) "Highland Mary" was a young woman whom Burns ardently admired and whose untimely death he deplored.

(c) A council of advisers selected by the king to consider matters referring to the State.

(d) "Steam" is the common name; "vapor of water" is more peculiarly a scientific term.

(e) See the announcements of Education Department in this journal.

III. (a) The word "grammatical" is used in different senses. Of this question we take the meaning to be "what would be the function of the inflection in the sentence"? We should therefore say that in *hand's* the inflection is adjectival to some word understood; in *hands'* the inflection is both adjectival, denoting the possessive case, and a sign of plurality; in *were*, the inflection denotes plurality and past time; in *sought*, time of action is denoted, and if the word be used participially, quality of action is indicated; in *seeks*, person and number of subject are denoted; in *seeking*, the incompleteness of an action is implied though not stated.

(b) *Man, man's, men, men's. He, his, him; they, theirs, these and them*, are strictly not inflected forms of *he*, as they are borrowed from the old plural of *that*.

WHAT stronger breastplate than a heart undaunted? Thrice is he armed that hath his quarrel just; And he but naked though lock'd up in steel, Whose conscience with injustice is corrupted.

—Shakespeare.

NO sword bites so fiercely as an evil tongue.—Sir P. Sidney.

EVERY step of progress which the world has made has been from scaffold to scaffold, and from stake to stake.—Wendell Phillips.

BUSINESS NOTICES.

We direct attention to the announcement of the merits of the "Concise Imperial Dictionary." It is our intention to handle this Dictionary in connection with the JOURNAL, and we offer it in the best binding, and the EDUCATIONAL JOURNAL for one year, both for \$5.50, plus 14 cents for postage. Subscribers who are paid in advance may deduct the amount they paid for one year, send the balance, and have the book at once. This gives the party the JOURNAL for \$1.00.

TEACHERS' CONVENTIONS—OCTOBER.

PEEL, at Brampton, October 1st, 2nd and 3rd.
SOUTH GREY, at Durham, October 3rd and 4th.
EAST HURON, at Brussels, October 10th and 11th.
WEST VICTORIA, at Woodville, Oct. 10th and 11th.
Mr. W. Houston, M.A., Parliamentary Librarian, will attend the meetings at Durham and Woodville, and will, in each case, deliver a lecture on the evening of the first day.

Will Secretaries of Associations, or Public School Inspectors, have the kindness to forward us programmes of their meetings, for announcement as above. Also, will Secretaries please send an epitome of the more important business transacted, for publication in the JOURNAL.

Editorial.

TORONTO, OCTOBER 1, 1889.

PHYSICAL vs. INTELLECTUAL TRAINING.

PROFESSOR RICHARDS, of Yale College, not long since made a study of the records of 2,425 students, in order to determine, if possible, the relations of athletics to scholarship. The general result reached was that the athletes were found to fall slightly below the non-athletes in scholarship, but not to so great an extent as to justify a demand for the suppression of athletics in connection with educational institutions. In some branches of athletic exercises the proficients are above the average of the non-athletes in scholarship. The *Schoolmaster* thinks that "for the slight difference noted between the two great classes, there may be greater strength and endurance or physical development compensating for the loss of scholarship." Possibly the converse of what is implied in this view may also be not without weight. Nature seldom lavishes her various gifts on the same individual. It is not often that the highest mental and the highest physical endowments are combined in one student. One is better fitted by nature for athletic, another for intellectual achievement, and each is naturally disposed to give himself most enthusiastically to that in which he can most easily excel. This means simply that the class of students who surpass others in athletics and fall behind them in the more purely intellectual studies, do so by virtue of natural or innate tastes and aptitudes. There is no assurance that they could have done more in the lecture room had they done less in the gymnasium.

Professor Richards' induction harmonizes well with what common observation and common sense would have led us to expect. In regard to athletics, as to almost everything else in life, the "golden mean" is the thing to be sought. We do not believe the human frame was ever intended to be as big or as strong as that of an ox, or that development of muscle

beyond moderate limits is the true goal of manhood. On the other hand, undue development of brain, coupled with an attenuated frame and a weak nervous system, presents an almost equally undesirable combination. Other things being equal, the man or woman whose bodily and mental powers have been trained and exercised *pari passu*, vigorously and persistently, will be the man or woman best fitted for all the higher purposes of life. Everything in the shape of a craze for athletics should be frowned down, in school or college, with the same resoluteness with which every tendency to excessive mental toil, with its enfeebling concomitants, neglect of rest and physical culture, should be suppressed. A Sullivan with his brute-like biceps, and an over-wrought brain perched upon a framework of feeble limbs and feebler nerves, are about equally useless for the true work of life.

THE INDUCTIVE METHOD.

A CORRESPONDENT, "N. K.," writing from West Bruce, just before the vacation, took exception to our calling the remarks that were made at the Teachers' Association in that district on the "inductive method of teaching" a "vigorous discussion." Perhaps it was not. We judged by the newspaper report.

But our correspondent's main object in writing is, he tells us:

"To get some 'light' on the inductive method, by your applying it in the following cases:—(1) 'In teaching a pupil the rules for the gender of the third declension in Latin; (2) in determining the syntax of the collective noun in English; (3) in pointing out the difference between metaphor and allegory. I might suggest more cases, but these I deem sufficient.'"

The tenor of our correspondent's letter, which, by the way, has quite an unnecessary tinge of the "bitterly sarcastic," implies that the subjects specified will refuse to lend themselves to the inductive method. We are unable to see that they present any special difficulty. Of course we do not suppose that any intelligent teacher is going to bind himself hand and foot by the inductive method, to the extent of preventing his pupil from judiciously using the facts and generalizations reached by the investigations of others, along the same lines in which he is working.

Take the first case, that of the gender of Latin nouns of the III. Declension. We imagine two teachers as typical illustrations of the two methods. Teacher No. 1 proceeds in what our correspondent would, perhaps, regard as the good old style. He puts into his pupil's hands a Latin Grammar, and requires him, after mastering the paradigm, to commit to memory a complicated set of rules, with which are incorporated numerous and puzzling exceptions including long lists of words, for the determination of gender. Can a drier, more repelling, and, educationally considered, more worthless mental drudgery be imagined?

Teacher No. 2 adopts a different course.

After the paradigm has been learned—and this will not have been done until the pupil has first, by actual use of the language in sentences, got clear ideas as to the meaning and use of the inflections—the process of reading the language will be continued until the learner has had opportunity by actual observation to make some of the generalizations which constitute the rules in question. When his interest has thus been aroused, and the student-habit cultivated and to some extent rewarded, he will be prepared to make such use of the labors of grammarians as the teacher may recommend. We doubt if the judicious teacher will even then advise him to waste his time and burden his memory by committing indiscriminately, the whole dry mass of minute rules and exceptions provided in the larger grammars. In fact, unless when obliged to cram for an examination, some might doubt the advantage of ever learning such rules by rote.

The same choice of methods presents itself in the study of the syntax of the collective noun in English. The unfortunate pupil who is compelled to memorize, as were many of us in the good old days, such phrases as, "When a noun of multitude conveys unity of idea, the verb, etc., should be singular," will still find to his disgust that the main question, viz., whether a given noun does "convey unity of idea," has, after all, to be settled by an act of judgment. The same rule may be elicited from any pupil of average intelligence, by the examination of a few simple sentences. If these are constructed by himself, so much the better. Few mental processes, it seems to us, are easier than that by which an ordinarily active mind will reach the generalization in question, while the process itself will be enjoyable, and educative beyond comparison with the memorizing of a rule laid down by some grammarian.

We wonder how "N. K." himself teaches the difference between metaphor and allegory. Can it be that he would first have his pupil commit the definitions of each and of all the other figures of speech from some text-book in Rhetoric, and then proceed to apply these definitions to specific cases. We have seen such things done. One of the "educators" at whom "N. K." is disposed to sneer, would, we fancy, pursue quite a different course. When figures of speech of the kind indicated were met with in the course of reading, he would simply call attention to a few of each of the two kinds referred to, and ask his pupils to point out wherein they differed. This would awaken interest and lead to pleasurable mental effort, with the result, we venture to say, that the readers would, in a short time, have clearer ideas of the difference between "metaphor" and "allegory," than would have been obtained by any amount of memorizing of abstract definitions.

The teacher who persists in being "a mere driller" rather than an educator, loses for himself the chief delight of teaching, and robs his pupil of the chief joy of learning, by commencing the educational process at the wrong end.

THE CHAIR OF METAPHYSICS.

As the time draws near when it will be necessary for the Government to name the successor to the Chair of Metaphysics and Ethics, made vacant by the death of Professor Young, considerable anxiety is being felt in educational circles in regard to the matter. The large number of applicants, between twenty-five and thirty, we believe, while in one way it makes the work of choice more difficult, should, at the same time, render it all the easier to secure the right man, and have this most important Chair worthily filled.

We note that a strong deputation representing graduates of the University waited upon the Government a few days ago, to urge the appointment of Mr. Hume, a graduate of the University, with whom the late Professor is said to have been especially pleased, and who has since taken a course of post-graduate study at Johns Hopkins University. Without personal knowledge of the merits of Mr. Hume and of each of the other candidates, it would be presumptuous to offer an opinion in regard to the person who should be appointed. But some of the grounds on which Mr. Hume's appointment was urged, while they might be worthy of consideration, and should, perhaps, turn the scale in a case where other things were equal, or very nearly so, do not, it seems to us, of themselves carry much weight. It was urged, for instance, that he belongs to Ontario, is a graduate of Toronto, and is familiar with the philosophical system of the late Professor. All will agree, we suppose, that the one great aim which the Government should have in mind in making the appointment is to secure the ablest and best man for the position. Beside this, the first two considerations sink into comparative insignificance. There is, indeed, a good deal to be said in favor of the view, that, other things being equal, the interests of the University and of higher education might be better served by the appointment of one who had received a different training from that of the University, provided it was not inferior, and who would bring with him to the work different methods, ideas and ideals from those of his fellow-professors. It might be urged that thus would greater variety be brought into the Professoriate, and the tendency of all such institutions to move in a rut, and to measure themselves by themselves, be to some extent obviated.

With regard to the third argument, which looks to the continuation of Professor Young's metaphysical system, there is, perhaps, more room for difference of opinion. The point taken suggests a very serious aspect of the case. It cannot be denied that not only the philosophical views, but the very modes and habits of thought of a teacher of metaphysics and ethics are of great importance in their bearing upon the belief, and as a consequence, upon the character and usefulness of the students who sit under his instructions. And yet it would be almost absurd for those responsible for the appointment to determine beforehand what system of

philosophy should be taught in the institution, and to seek to regulate their appointments accordingly. The members of the Government are not more fitted, or more likely to be agreed, than any other six intelligent men in regard to the matter. Moreover, the people of Ontario have given them no mandate to determine the system of belief which shall be taught to the young men and women of the country as truth, in regard to these or any other subjects on which opinions of wise men differ.

There is clearly but one way out of the dilemma. The Government must make its choice with regard not to the philosophical faith of the applicants, but solely in view of their character and intellectual and educational ability. A man wedded to the doctrines of a school, or of a professor, might be the very worst man for such a position, and that, too, quite irrespective of whether his system happened to be right or wrong. What the student has a right to expect in a professor is that he shall, as far as may be, be master of all systems, and capable of giving a clear and unbiassed exposition of the leading principles of each, leaving the student free to draw his own conclusions. The man, if he have mental and moral force will, of course, have his own views, and will not fear to express them and give his reasons for them. But it is not his business, as a professor, to teach his own views, or seek to impress them upon students, to the exclusion of others.

It was, we believe, the crowning excellence of Professor Young as a teacher, that he was thus able to analyze all systems impartially, to set them forth dispassionately, and to inculcate the fullest intellectual freedom. As he gave to the public no authorized exposition of his own views, it would be unfair and unsafe for those who never heard his lectures to attempt to criticise them. But we think we speak by the book when we say that, in the opinion of many of those best qualified to judge, his great merit as a professor rests but slightly upon original and positive teaching, and very largely upon the impartiality, acumen and eloquence with which he expounded and criticised the systems of others.

AN excellent maxim in school, as in family government, is, never punish for the consequences of wrong conduct. It is a very necessary maxim for both parents and teachers. How often is an act of carelessness or disobedience suffered to pass unnoticed so long as no harm comes of it. But so soon as the child lets fall and breaks the article he has been forbidden to touch, or does some injury by his careless habits, he is often ruthlessly punished. It should be unnecessary to point out that the wrongfulness of the act is in no wise increased by the consequences that may follow it.

BEAUTIFUL hands are those that do deeds that are noble, good and true.
OUR own heart, and not other men's opinions, forms our true honor.—*Coleridge*.

Literary Notes.

The Kindergarten, Chicago, keeps its old friends and continually wins new ones. This month's issue is bright, attractive and interesting, and of real value to those who wish to profit thereby.

THE publishers of *St. Nicholas* announce that that popular children's magazine is to be enlarged, beginning with the new volume, which opens with November, 1889, and that a new and clearer type will be adopted. Four important serial stories by four well-known American authors will be given during the coming year.

SEVEN writers—clergymen, college professors and public men, some of them specialists of acknowledged standing—have associated themselves to discuss special questions of social interest and import, and to prepare papers to be afterwards given to the public from time to time in the pages of *The Century*. The writers include the Rev. Professor Shields, of Princeton, Bishop Potter, of New York, the Rev. Dr. T. T. Munger, of New Haven, the Hon. Seth Low, of Brooklyn, and Professor Ely, of the Johns Hopkins University. For each paper the author will be responsible, but he will have had the benefit of the criticism of the other members of the group before giving it final form. The opening paper will be printed in the November *Century*.

THE October number of the *Popular Science Monthly* is marked by the great variety of its contents. Dr. M. Allen Starr has an illustrated article on "The Old and the New Phrenology," showing what has been really ascertained about the location of the faculties in the brain, and how the errors of Gall and Spurzheim have been exploded. A lively picture of "Evolution as Taught in a Theological Seminary," is given by Rollo Ogden, a seminary in New York being the institution criticised. There is an entertaining sketch of "Life at the Cameroons," by Robert Muller, M.D. Dr. Robson Roose writes on "The Art of Prolonging Life," giving advice as to the care of body and mind, and telling what length of days may be expected. The article on "Education in Ancient Egypt," by F. C. H. Wendel, will surprise many, who would not suppose so much information on the subject was obtainable. These are but a few specimens of its table of contents. [New York: D. Appleton & Company. Fifty cents a number, \$5 a year.]

THE *Atlantic Monthly*, for October, opens with a generous instalment of Mr. Bynner's serial, "The Begum's Daughter," which the London *Spectator* pronounces "a very powerful story." William Cranston Lawton contributes an article on "The Closing Scenes of the Iliad," which is of special interest to all classical scholars, not only for his account of the closing scenes, but for his judicious remarks on the character and composition of the Iliad. A paper which just now will be read with great interest by a large circle of readers is one upon the late President Woolsey, by Prof. J. H. Thayer, of Harvard. It is an admirable description of a thoroughly admirable man. L. D. Morgan writes of "Ladies, and Learning," with reference to the old idea entertained concerning the education of women and the much broader and truer ideas which now prevail. There are several other articles of interest in the number, including three poems, reviews of some important new books, and the usual variety in the Contributors' Club. [Houghton, Mifflin & Co., Boston.]

Primary Department.

FAITH IN CHILDREN.

BY RHODA LEE.

It has been said by one who understands well the art of management, "that it is not what you compel children to do but what you persuade them to do, that shows your ability as a teacher." There is no special virtue or advantage in a stronger will being able to influence or subdue a weaker, for often in forcing a child to do right, we create in him a distaste and antipathy toward good that will result merely in a violent reaction when beyond our control.

Do not mistake this persuasiveness for the weak coaxing and pampering with which some children are treated, but recognize in it the numerous artifices which have been referred to as the spokes of our schoolroom "tact-wheel." Let us consider *faith* or confidence in our pupils as a second and very important element of tact, and note some of its advantages and uses in regard to school work.

To obtain the best work from a person, we must think the best of him. This is specially true in regard to children. Do not undervalue their abilities but rather err by overrating them. Great expectations are generally productive of great results.

If there is any teacher who will demoralize a class, it is the one who constitutes herself somewhat of a police-officer or detective in the school.

It was once my misfortune to be in a senior class where the teacher had the decidedly erroneous idea, that the aim and desire of every girl in the room was to take advantage of her, and deceive her whenever she had the opportunity. In fact, on several occasions she informed her scholars that "she didn't think there was an honest girl in the class." You can readily imagine the contempt in which she was held by the majority of her pupils and how little love or co-operation there was in that room. The "unprincipled" did their utmost, and the teacher, taking no pains to either expose or prevent them, denounced honest and dishonest alike.

There were girls in that room who were the very essence of honesty and uprightness, and they resented this treatment bitterly. A little boy, having been placed in a new school, and being asked by his brother how he liked it, replied that "it wasn't any use trying to be good in that room for she thought we were *all* bad."

We do not think there are many acting on that principle now. We all feel too keenly the potency of faith and trust in our children. Do not suspect your pupils but rather repose in them the highest confidence possible. Tell them you will never fail to trust them, until they have proved themselves unworthy.

Some may think this far too high a position to take in the primary grade, and say that there is, just here, a possibility of falling into very grave error. There is, it is true. A great many children have little or no moral training at home, and to trust these children implicitly, without any test as to their honesty would be decidedly wrong. They would be likely to deceive when possible, and in the practice of these petty deceits it may be their character, instead of being improved, would be irretrievably ruined.

The error therefore, that we may fall into is the lack of vigilance. There must be the daily, hourly lessons of uprightness and honesty, and the steady implanting and cultivation of the love of truth. And while we need not make our suspicions known, we may indirectly investigate any matter and test the honesty of our pupils, without allowing them to think for a moment that our respect for them has waned or our faith wavered. It may be that some of these children never hear a kind or encouraging word at home. No one "believes" in them at home, no one has any faith in their ability to do much of anything. But they come to school after seven years spent in that pitiable home, and when some good noble-hearted girl takes them in hand and in an earnest little talk tells them what she thinks they are going to do, and how *she* "believes" in them, they feel that little self-respect that they never had before stealing into their hearts, and they determine they are not going to disappoint their teacher. Cultivate belief in your pupils and their desire to be worthy of your trust will grow in proportion.

No teacher will ever be troubled with roughness or rudeness, who appears before her class a good example of a lady, letting her pupils know that she believes they all wish, and understand how to be ladies or gentleman at school as well as at home. Our little folks love to be placed "on their honor," but resent being watched, if they think the watching is for the purpose of finding fault or detecting offences. By numerous little illustrations they might be made to see the object of our vigilance. I have on several occasions said to my class, "You notice children, that I look at your work, and watch you considerably, but it is not because I think you don't want to do right. Oh, no, school is just like going across a stream on stepping-stones. None of you want to slip off into the water, but I have to watch you, just to see that you always step in the centre of the largest and safest stone. I am here to help you across the stream, taking the way that I am sure you always want to follow, the happy way of the upright and honest."

Two incidents which came immediately under my notice, proved to me the advisability and duty of belief and confidence in children.

In a certain Model school in our Province, a teacher happening to be absent, a student was sent to take charge of the class. The scholars were what might be termed models of good behaviour and good work. The moment she entered the room, she began to look about in a suspicious way and threaten all kinds of dire punishment to anyone who offended or transgressed any of the rules. This was such unusual treatment that some of "the spirits" began to grow rebellious, and before the morning was over she had lost her control, and had to ask assistance from the Principal.

There was another division in this school in which the teacher had great trouble and which was as a rule very difficult to manage, but in her absence one day, a student of a very different type was sent to the class.

Her first movement was to tell the class in her truthful, whole-hearted way, how little she knew of them, but how much she expected, and how anxious she was to see all the good motives she knew they had, acted upon while she was with them. Before her inspiring little address was concluded the boys were all in a somewhat worshipful frame of mind, and the girls, apparently bent on pleasing her, were ready to act on her slightest suggestion. It goes without saying, that she had very little trouble with her class.

We are doing in school a great work of mind-expanding and knowledge-giving, but what we need most just now is more of the lifting-up process. We need to attend to the moral as well as the mental faculties.

"Honor to those whose words and deeds,
Thus help us in our daily needs,
And by their overflow
Raise us from what is low."

And in no more potent way can we raise our children than by heightening their self-respect. But to do this we *must* have confidence in them, and reliance on their desire, in every emergency, to choose and do the right.

Place always before your little folks a high ideal, rouse their ambition to reach it, foster this ambition by your faith in them, and be assured that this part of your discipline will never be lost, but will leave its impress upon your children throughout their lives.

OBJECT LESSON FOR OCTOBER.

BY RHODA LEE.

AS in every lesson we investigate and study new objects it is not so necessary in this work as in some others to have novelty and variety in our methods. Yet even object lessons are apt to grow monotonous and lose their interest for us, if there is always that certain sameness which must follow a similarity in plan.

In the lowest classes we cannot have much slate work in connection with these lessons, but in the more advanced divisions we may give the scholars an outline to fill in on their slates. Let them mark off five columns heading them in the following manner. What we discover about the——, by :

- 1st. Looking.
- 2nd. Feeling.
- 3rd. Tasting.
- 4th. Smelling.

Leave the fifth column for extra remarks.

After having completed their investigations and thus systematized their discoveries take the same plan on the black-board and draw from the class, in their best language the substance of their slate work.

We might take this month, 1st. *Grapes*, as we can easily provide each scholar with a little of this fruit so plentiful just now.

2nd. *Pumpkin seeds*. Suggest this lesson to your scholars a few days before having it and they will provide you liberally with the seeds.

3rd. Some late flower such as the Marigold, Balsam or Wild Aster.

CALISTHENICS.

BY ARNOLD ALCOTT.

SINCE it has been decided that physical exercise is beneficial to the scholars, both physically and morally, let us proceed to find out to which parts of the body we should devote our attention.

The position assumed in school is not always as erect as it should be, and we, as teachers, should exert moral force enough to get an upright position when possible. But such position cannot always be had because of the nature of the lesson. Then again, the pupil leads a sedentary life. Therefore, it is obvious, that that part of the body containing the vital organs, the heart and the lungs, especially demands exercise. To the strengthening and building up of the chest, then, should we devote a part of the time; and for this purpose we will give a few hints as to how the following exercise, which is taken from the Manual of Drill and Calisthenics, by James L. Hughes, should be taught.

1st. Arm and chest exercise:—

One. Hands clenched and thrown forcibly back as high as the shoulders, elbows near the sides, nails to the front.

Two. Throw them as high as possible.

Three. Bring them back to the shoulders as in *one.*

Four. Bring them to the sides.

Before commencing, teacher gives the command, "Stand up." All commands should be given in a low, definite tone, with a pause between the first part, *i.e.*, the *cautionary* word; and the second part, *i.e.*, the *executive* word. Also, more force should be put on the latter. Now that the class are standing, the teachers should see that they are in the position of *attention*, *i.e.*, with the heels together, the toes turned out at an angle of forty-five degrees, the palms of the hands close to the clothes at the sides, the thumbs close to the forefingers, the eyes front and the head erect.

Teacher should then tell the class to watch her, and she should pattern the first part of the exercise, *i.e.*, she should clench her hands *tightly*, place her thumbs horizontally across her fingers, touching the second finger, then she should bring her elbows *close* to her sides, raise the forearms parallel to the upper arms, the clenched hands should *touch* the body with the knuckles in the *rear*.

The teacher should, without having made any verbal explanation, tell the class that she wants them to do as she has just patterned for them. Teacher gives command, "one." Pupils imitate, some correctly, while others fail.

ERRORS.

We will point out the errors which will be most likely to occur, hoping that the teacher will exert special care to have the *minutiae* of the motions correctly performed. If we do not heed the minor points how are we to expect to succeed in the more intricate movements. Mistakes are made regarding

- (a) the position of the *thumbs*.
- (b) " " " *elbows*.
- (c) " " " *knuckles*.
- (d) " " " *hands* in relation to the chest.

Do not *tell* the pupils that the elbows should be close to the sides, the thumbs across the fingers, the hands touching the body with knuckles in rear, and so on, but proceed scientifically, and *lead them to discover their own faults*.

CORRECTIONS, HOW MADE.

In some such way as follows, *i.e.*, by suggestive questions, we are able to place our pupils on the right track.

Teacher.—"I am going to do the motion in two ways. Those of you, if any, who notice a difference between the first and the second way, let me know." Teacher then takes one part of the motion, say that of clenched hands, and does it, first without clenching tightly, and without placing the thumbs across the fingers. Then again, the second time, she closes the hands tightly and places the thumbs across.

Teacher.—"Those who noticed a difference?" Pupils raise (at the full extent of the arm), the right hand. In passing, I may say that I insist on the right hand being raised, because I believe that this gives a definite uniformity in the class, which it is well to arrive at in little things, if we wish to obtain it in the more important.

Teacher.—"What difference did you notice?"

Pupil.—"You did not put your thumb in the same place both times."

"You did not close your fist tightly both times." Then the teacher tells that the second way was right, and immediately does the motion again. We do the exercise correctly, the latter time in preference to the former time, because the memory retains the latter impression more vividly than the former. Also, we deal only with the thumb and finger motions at this stage, because we believe in following out that very important principle of teaching, viz., "Teach one thing at a time." We must insist that the hands be tightly clenched, as there is a distinct exercise in this one action.

"The human mind is finite," and the minds with which we have to deal, have not yet arrived at maturity. Therefore, how important is it that we never forget to "proceed from the simple to the complex." Having led our children to find out the right, it is our duty to see that they do it.

Let us go on to the next error, viz., that of the position of the elbows. The teacher proceeds as before, and the first time does not put the elbows close to the sides, but lets them stick out. The second time they are brought close to the sides. Children are then appealed to, and the difference detected, and the right method is impressed. Now, in a similar manner, develop that the hands are to slightly touch the chest. Teach one sub-division of a motion at a time. Thus, division "one" of this exercise has at least four sub-divisions as will be seen from the errors which have been pointed out. Do not leave division "one" until it is done fairly well by your class.

Now, give your pupils a change from this physical work, and tell them to watch you while you do another part of this exercise. Division two: When the command "two" is given, bring the arms smartly from position at "one," and raise them vertically, the hands still remaining clenched. Now, tell class to do "two." And then correct as before, by getting differences pointed out. The errors in this motion will be that the arms will not be thrown vertically from the shoulders, but will be in a slanting position. Remember the pedagogical maxim, "Proceed from the known to the unknown," and refer to telegraph poles, trees, etc., to get the correct position. Then have "one" and "two" repeated, and teach part number "three," which is simply number "two" over again. Then give command "one," followed by "two," and then by "three." Then show the class that "four" is bringing the hands to the sides, but the hands are not to be opened until the exercise is to be stopped. Thus, if the first exercise be done five times they are not to be opened the first, the second, the third, or the fourth time; but the fifth time the teacher gives the command, "steady," and then the pupils open the hands, just as in the position when in attention.

In the system of physical culture, known as Dr. Sargent's System, it is shown that "it is in symmetry, not in immensity of strength, that health lies."

SYMPATHY BETWEEN BODY AND MIND.

We remember the old aphorism, "The face is the index of the mind." If we thoroughly grasp and truly feel the meaning of it, then I think we will put forth intense efforts to secure for slouching Tom, for swaggering Charlie, and for awkward Katie, a self-poise, and a freedom of muscular movement, which will have a beneficial reflex influence on the mental and moral life within.

Dr. Pratt, in an article entitled "Gymnastic Drill," in the *Popular Educator*, a few months ago, concludes with these remarks:—She says that "the best service we can do our pupils is to teach them to look upon their bodies as mere servants for the

Ego within; to know that these bodies may be trained to be attentive, obedient, quick to respond to the slightest call of the soul within."

"The study of no book, I am sure, can give our pupils more really useful knowledge, more helpful hints, more trustworthy guidance in life, than the right study of that flesh-bound volume—self."

Let us, as teachers, look into the future of our scholars, and

"When the world shall link their names
With gracious lives and manners fine
Assert our claims, and proudly whisper
These were mine."

School-Room Methods.

A LESSON THAT GREW.

BY SARAH L. ARNOLD, SARATOGA SPRINGS, N. Y.

THERE has been much discussion of late in regard to the propriety of narrowing our school vocabulary to make ourselves understood by little children, by translating good English into the language of babyhood. It has been asked, and with reason, whether such belittling is not rather a hindrance than a help to true growth.

Miss Oddways has been thinking about it. While considering the *pros* and *cons*, she gave a lesson in a primary class. The lesson was nominally a memory exercise, a part of every Friday afternoon being given to committing to memory some suitable selection. What would be "suitable" was the vexed question. Miss Oddways thought.

Leaving unceremoniously the carefully graded rhymes, in which array "Twinkle, twinkle, little star," "Little drops of water," "You'd scarce expect one of my age," etc., asserted their well-proved appropriateness, she proceeded boldly into the class-room, accompanied simply by a few stanzas of Tennyson's "Song of the Brook."

The children were waiting. "Let us sing," said Miss Oddways. They sang, as happily as children will. Then Miss Oddways bade them watch her as she wrote upon the board,—

"The Song of the Brook."

The five little words grew rapidly beneath her fingers. The bright eyes read as rapidly, and hands testified to quick thought.

"Who can read the name of the song we are to learn to-day?"

Everybody could; and everybody wanted to read it aloud. That done, they looked to see the song, but met a question instead.

"How many ever saw a brook?"

Everybody in the room; and everybody wanted to tell. Little brooks and large brooks, brooks in the fields and brooks in the woods,—they knew. They had fished in them, picked flowers beside them, waded in the shallow places. There was no dearth of enthusiasm in regard to brooks.

"How many of you ever heard a brook sing?"

Some looked their wonder. One ventured to voice his incredulity in the proper circumflex. "Sing, Miss Oddways!" But one blessed child of intuition (that there are some such in every school Miss Oddways thankfully remembered), answered with kindling eyes, "Oh, I know what you mean! The sound the brook makes when it runs over the stones and the rough places!" Then they all knew.

"Let us listen," said Miss Oddways, "and see if we remember it so well that we can almost hear it now." Breaking the hush that followed, she asked, "Would you like to learn a song that sounds so like the brook that you almost think you hear the brook speaking the words?"

A chorus of assent came as she turned to the board.

"I came from——"

she began. "That is the beginning. Who knows where the brooks come from?"

They knew,—the wise little people. They knew where brooks were found in the fields and the woods; and where in the still woods, might be found their very beginnings. Some had been there, and knew how still and wild the places were. They watched eagerly while Miss Oddways finished the line,—

"I come from haunts of coot and hern."

The "coot and hern" were discussed then. The children knew something of them both, and Miss

Oddways added to their knowledge. Then they found that, knowing where the brooks come from, and knowing, too, the habits of the coot and hern, they knew what "haunts" were. So they were ready to read the line together.

"I make a sudden sally,"

wrote Miss Oddways. Drawing a line under "sally," she told them its meaning, and used it in other ways until the children understood.

"Now I have told you about one word; you may tell me about the other," she said, underlining "sudden," also.

"It means quick," volunteered Bennie.

"I wonder if this was a still brook or a noisy brook," said Miss Oddways.

"It couldn't be very still if it was singing," Jamie thinks for the class.

"What makes some brooks still, while others sing?"

"Oh!" cried Bennie, "the fast ones sing!"

"Bennie may tell us what the brook says, in his own words."

It came after judicious questioning. "I come from the woods where the coot and hern stay, and I run all at once out of the dark woods into the field."

"How many ever saw a brook when the sun shone on it? How did it look?"

They fastened on many good words before "sparkle" came. Upon its advent Miss Oddways wrote,—

"And sparkle out among the——"

They knew. Flowers and ferns and stones and bushes. There was not time to talk long enough.

"Fern,"

the teacher wrote, adding,

"To bicker down a valley."

They knew that brooks found low places, and so were ready for "valley." They knew that no brook chose a path as straight as an arrow, but waded and wavered and trembled in its course. So they learned what "bicker" meant.

Then they repeated together the first stanza of the song.

"Tis surprising," said Miss Oddways, "how much these children know. They are born poets, and we feed them on shavings. I'm almost ready to believe they could have written 'The Song of the Brook' themselves. Any way, they can sing it if we give them a chance. I don't know why we should dilute poetry until it cannot be recognized as such, when they appreciate the real thing. I'm not sure that I shall not go to the children to be taught. I shall think about it."—*The American Teacher.*

NOTATION AND NUMERATION.

BY J. S. SPEAR.

I HAVE heard teachers complain that they find it difficult to teach notation and numeration.

I have found it easy and interesting. I will suppose that the pupils have a knowledge of all two-place numbers, for I think no teacher has any great difficulty in teaching these numbers.

I place some familiar number on the board, as 47, and ask, "What is this?" "Forty-seven." (Placing 2 on the left) "what is it now?" "Two hundred forty-seven."

I follow by numerous similar examples till all three-place numbers composed wholly of digits are fixed. Note the fact that the third place from the right is hundred's place.

Then, having a familiar number, by placing the same digit in unit's place, directly under the number already written, thus:

247.

"What is this?" "Seven" (placing 0 at the left.)

247

07

"What is it now?" Probably the class will hesitate. Then explain that 0 in no way changes the value of the number, but that it is still seven.

(Placing 2 in hundred's place)

247

207

"What is it now?" "Two hundred seven." Then call the attention to the two numbers, noting similarity and difference. In the same way develop 240. Follow by thorough drill in reading all com-

binations of three places. I teach notation in the same order. Direct the class to "write seven." "Make it forty-seven." "Make it two hundred forty-seven." "Change it to make it two hundred forty." "Erase to make it forty."

When perfectly familiar with the notation and numeration of all three-place numbers I proceed to thousands.

Beginning in the same manner with a number that is already known, as 247.

"What is this?" "Two hundred forty-seven" (placing 3 on the left). "What is it now?" "Three thousand two hundred forty-seven" (fixing the fact that the fourth place is thousands) When ready to go on, place another figure on the left, as 6. "What is it now?" "Sixty-three thousand two hundred forty-seven." The next step is gained by placing still another figure on the left, as 4. "What is it now?" "Four hundred sixty-three thousand, etc." And so on as far as it is desirable to carry the work. At each step change one or more of the digits to 0, as, when 3247 has been learned, write 3047 under it. If the class hesitates, cover the left two figures, then pointing to the remaining two, ask: "What is this?" "Forty-seven." Then, pointing to the 3, "what is this?" "Three thousand." "Then what is all of it?" "Three thousand forty-seven." Then place 3007 under the last number learned and develop in same manner.—*Educational Gazette.*

For Friday Afternoon.

RESOLUTION.

- If you've any task to do,
Let me whisper, friend, to you, *Do it.*
- If you've anything to say,
True and needed, yea or nay, *Say it*
- If you've anything to love,
As a blessing from above *Love it.*
- If you've anything to give,
That another's joy may live, *Give it.*
- If some hollow creed you doubt,
Though the whole world hoot and scout, *Doubt it*
- If you know what torch to light,
Guiding others through the night, *Light it.*
- If you've any debt to pay,
Rest you neither night nor day, *Pay it.*
- If you've any joy to hold
Next your heart, lest it get cold, *Ho'd it.*
- If you've any grief to meet,
At the loving Father's feet, *Meet it.*
- If you're given light to see
What a child of God should be, *See it.*
- Whether life be bright or drear,
There's a message sweet and clear
Whispered down to every ear— *Hear it.*
—*Harper's Magazine.*

BEING A MAN.

- I CAN tell you how to be a man—
This is the way to begin :
Stop saying, "I can't," and say "I can,"—
March up to your work with a good stiff chin—
That is the way to begin.
- If you mean to be a man, you know
You must do the best you can.
- When the tempter comes, you must speak up, "No!"
He'll take to his heels if you talk to him so ;
I've tried it myself, and that's how I know,
For I'm going to be a man !
- Yes, no more whining nor tears for me
I've left them out of my plan ;
No falsehood, no words profane or low ;
I turn my back on all that, you know,
When I start to be a man.
— H. H. M., in *Common School Education.*

BOYS WANTED.

BOYS of spirit, boys of will,
Boys of muscle, brain and power,
Fit to cope with anything,
These are wanted every hour.

Not the weak and whining drones,
Who all troubles magnify ;
Not the watchword of "I can't,"
But the nobler one, "I'll try."

Do whate'er you have to do
With a true and earnest zeal ;
Bend your sinews to the task,
"Put your shoulder to the wheel."

Though your duty may be hard,
Look not on it as an ill ;
If it be an honest task,
Do it with an honest will.

In the workshop, on the farm,
At the desk, where'er you be ;
From your future efforts, boys,
Comes a nation's destiny.

A RUSSIAN FABLE FOR REPRODUCTION.

ONCE upon a time the elephant was a great favorite with the lion. All the beasts in the forest began to talk about it and wonder what reason the lion had for taking such a fancy to the elephant. "It is no beauty ; it is not amusing ; and it has no manners," they said to each other.

"If it had such a bushy tail as mine," said the fox, "it would not be so strange."

"Or if it had such claws as mine," said the bear. "But it has no claws at all."

"Perhaps it is the tusks which the lion has mistaken for horns," said the ox.

"Is it possible," said the donkey, shaking its ears, "that you don't know why the elephant is so well liked? Why I have known all the time. It is because it has such long ears."—*Exchan. e.*

Hints and Helps.

TRY IT.

ONE of the greatest hindrances to success in school work is the lack of thought on the part of the pupils. They do not know whether they know what they know or not, and any tactics that will make them think are welcome. We saw a superintendent in a primary school one day, when he had asked a simple question which was answered at random, place this example upon the board :

- 2 boys,
 - 3 geese,
 - 4 wagons,
 - 2 ducks,
 - 3 bedsteads,
- How many heads have these?
How many tongues?
How many legs?

We thought it trifling at first, but he made one of the best of school exercises out of it.—*American Teacher.*

TO CURE IMPERFECT ENUNCIATION.

PUPILS who have a tendency to slur should be made to read many times sentences similar to the following :

- She has lost her ear-ring.—She has lost her hearing.
- He lives in a nice house.—He lives in an ice house.
- Let all men bend low.—Let tall men bend low.
- He saw two beggars steal.—He sought to beg or steal.
- This hand is clean.—This sand is clean.
- He would pay nobody.—He would pain nobody.
- That lasts till night.—That lasts still night.

SYNONYMS.

PUT the following on the blackboard and let your pupils tell in writing the distinction between the words and use them correctly in sentences :

1. Did you conceal or dissemble the truth?
2. Was the incident laughable or ludicrous?
3. Are you content or satisfied with what you get?
4. Are you content or satisfied with what you have.

5. Was his opinion contemptuous or contemptible?
6. Did he display gallantry, intrepidity, fortitude or heroism in his suffering?
7. Was it vexation or mortification you displayed in your disappointment?
8. Is, "We learn to do by doing," an adage, a maxim, a proverb, or an axiom?
9. Where you prejudiced, biased or predisposed in your opinion of the case?
10. Are those who pretend to be what they are not hypocrites or dissemblers.

IN COMPOSITION WRITING.

I have found it of the greatest help to read an interesting story in the usual way on Friday afternoon, and ask the children to bring it written out on Monday morning. This weekly exercise is always corrected by myself at home. The following method I have generally found successful : The exercise should consist of (1) short essays on familiar subjects, (2) reproducing narratives and letters. To these may be added the summaries of lessons, paraphrasing of easy poetry, and synopsis of any book they may have read. Two things must be specially attended to in these exercises, namely, neatness and accuracy. A letter should occasionally be written on the black-board by the teacher as a model for the pupils, showing the form, how to begin and end it, how to write the address, etc.

FOR TARDINESS.

Are you ever annoyed by having your pupils come into the school late in the morning? If you are, try something like this : Clip an interesting story from a newspaper ; paste it upon card-board ; cut into short paragraphs ; distribute among the pupils, (first number the paragraphs). This plan gives each one an exercise in reading, too. Sometimes, I give them what we call "dig" questions: We call them this because it takes so much searching to find the answers. My pupils work diligently to find the answers, and are anxious to give their answers. This exercise is the first after the "Lord's Prayer." Sometimes we have information lessons for a change. I am not troubled with tardy pupils.

FOR CURING RESTLESSNESS.

There are always in every school bright children who finish their work before the others, and then are ripe for mischief. For this class I have been placing on the board topics from the daily news of the day. For instance, selecting some item from the newspaper embodying some interesting fact, I write this item on the board with a few suggestive questions, and as we have an excellent reference library at our command, I have those who have finished their regular work look up the questions and give the result to the school in a few moments which I reserve for this purpose. I then supply in a brief talk whatever is lacking that seems to be important. I am often quite surprised at the ability shown in writing and the interest manifested by the children. It also creates an interest at home, as I find by the statement prefaced by "Papa says."

The crying need of children is for something to do. Supply this need by the right kind of work, and the children are happier and better and the cases of discipline will diminish to a wonderful degree.—*Central School Journal.*

SHORTHAND Writing thoroughly taught by mail or personally. Situations procured all pupils when competent. Send for circular. W. G. CHAFFEE, Oswego, N. Y.

CATARRH, CATARRHAL DEAFNESS, HAY FEVER.

A NEW HOME TREATMENT.

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Sufferers from catarrhal troubles should carefully read the above.

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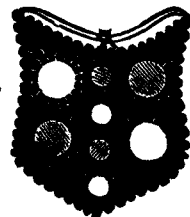
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12. Landing of the Pilgrims.....	229—230
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13. The Ocean.....	247—249
14. The Song of the Shirt.....	263—265
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FIRST DAY.

9.00 to 11 a.m.....	Grammar.
11.15 a.m. to 12.30 p.m.....	Geography.
2.00 to 3.30 p.m.....	History.

SECOND DAY.

9.00 to 11.00 a.m.....	Arithmetic.
11.05 to 12.15 p.m.....	Drawing.
1.15 to 3.15 p.m.....	Composition.
3.25 to 4.00 p.m.....	Dictation.

THIRD DAY.

9.00 to 11.00 a.m.....	Literature.
11.10 to 11.40 a.m.....	Writing.
1.30 to 3.00 p.m.....	Temperance and Hygiene, or Agriculture.

Reading to be taken on the above days at such hours as may suit the convenience of the examiners.

ALEX. MARLING,

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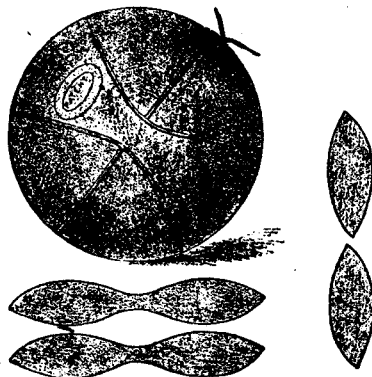
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