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## J. E. WELLS, M.A.

Editor.
H. HOUGH, M.A.

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## Table of Contents.


"Rida Taylor," writing to one of the Toronto dailies, makes a good point. Referring to the fact that while many trustees say, "we have female teachers because we prefer them," many others say, in effect, "we have female teachers because they are cheaper," she adds :

That was a good idea of the Wentworth Teachers' Association to appoint a reporter to give an account of the proccedings to the press. Why might not every Association do the same, and have a condensed report sent promptly to the Educational Journal? The aim of these Associations is mutual help. By publishing the best points made by the contributors of papers, methods, etc., the area of help is extended so as to embrace all the readers of the Journal.

The Universities of Ontario seem to be rapidly enlarging their faculties, and extending the sphere of their operations. The University of Toronto has added two important chairs within a short time. Queen's has recently made some very important and promising additions to her staff. And now Victoria welcomes two new professors in the persons of Mr. A. J. Bell, Ph. D., Associate Professor of Classics, and Mr. J. Petch, M.A., Associate Professor of French and Italian. These gentlemen are regarded as highly qualified for their respective duties.

The opening of Clark University, at Worcester, Mass., a week or two since was an event of considerable educational interest. An exchange says :
"Clark University, like Johns Hopkins University, is intended to be a university in reality, and not one in name merely; that is to say, it is a collection of advanced professional and scientific schools, admission to which is restricted to those who have taken an ordinary college degree, or have done an equivalent amount of work, and are so prepared for advanced instruction. The career of this institution will be watched with great interest." g


#### Abstract

The Victoria Warder says that there is considerable trouble in some school sections over the questions, "Who should light school fires?" and "Should the teacher be paid to do it?" We can only say that it must be a strange Board of Trustees who can, at this time of the Century, either think it any part of the teacher's duty to do such work, or wish anybody to do it without fair remuneration.

\section*{Editorial Notes.}


"Is it not a lasting disgrace? We may thank our brothers for doing justice to our ability, but we have not done them justice. May it not be said of many of them that they are leaving the noblest profession on earth because it does not pay?. Can they not charge us with entering the teaching ranks, selling our services for a trifle, and so bringing the profession into disrepute and the salaries to nothing, minus board? No wonder they leave it! No wonder our services are valued at what is paid for them! Let us pray that we may be rewarded hereafter, for we don't get much now."

The little illustrated school journal, School Work and Play, recently issued by the Grip Printing and Publishing Company, was admired by all who saw it, teachers and children alike. Twelve copies were issued, each containing eight pages ; and as back numbers can be supplied, the whole make a very pretty, fully illustrated, and entertaining book of 96 pages, interesting to both old and young. This book, bound in neat paper covers, will be sold at io cents, postage paid ; and as it will serve very nicely for a Christmas publication, the attention of teachers and others is called to the fact that it can now be supplied. Send orders to this office, and get the books by return mail.

A"High School Teacher" writes to one of the Toronto dailies, deprecating the enforcement of a recent regulation, No. 60, issued by the Department of Education. We have not seen the regulation in question, but the effect of it is, as described, to render ineligible for positions as specialists in Collegiate Institutes, " first, all except graduates ; second, all who have not ten years' experience prior to July, 1889 ; third, all who had not prepared candidates for senior matriculation with first-class honors." Exception is taken to the regulation on its merits, and to the fact that it is retroactive. In regard to the latter it is asked: "If this principle in legislation be admitted, what guarantee have teachers who are now qualified that they will not be disqualified to-morrow ?" There is force in the argument suggested, though we are not sure that it cannot be satisfactorily answered. But the wisdom of laying down a hard and fast rule, demanding ten years' experience as a qualification, is certainly open to question. Many a teacher with two years' experience is incomparably superior to many another with ten. One effect of the regulation must be to restrict within very narrow limits; the field of choice open to managers of Collegiate Institutes. Evidently the "dead line of 50 " is not intended to apply in the teaching profession.

A correspondent who signs himself "Etonensis," writing to the London Times from Eton, says that a " new tyranny" has declated itself in that venerable school. Not only is the timehonored institution of cricket-fagging, by which the small boys field while the big boys bat, still in full force, but at some houses even fifth form boys are compelled, by the athletes of the sixth form and the public-opinion of the school, to play cricket fourteen times a week in summer and football five times a week in winter, whether they have any liking for those games or not. Old abuses die hard. Even in our own Provincial University, the seniors and other old students, having been compelled to abandon "hazing," have taken to jostling the freshmen, a process which seems to be hazing somewhat toned down and re-christened under a new name.

WE extract the following from the Kingston Whig's report of a recent meeting of the Council of Queen's University:
"A document was read from the High Schoolmasters' section of the Ontario Teachers' Association censuring Dr. Knight and Mr. P. McGregor, delegates elected by the University Council, for not attending the High School teachers' meeting at Niagara. The Council passed a resolution with reference to the communication, exonerating the delegates on the ground that they had fulfilled the spirit of their instructions by attending a much larger meeting of High school teachers in Toronto than that held in Niagara."

This may show that the delegates performed the work with which they were entrusted to the satisfaction of the Council, but $\grave{t} t$ is obviously no answer to the charge of discourtesy brought by the Teachers' Association.

The Premier of Quebec has promised to ask the Legislature for a vote of ten thousand dollars in aid of free evening schools in Montreal. The Toronto Mail has been for some time past advocating, with characteristic ability, the establishment of an educational institution in Toronto, for the benefit of mechanics and others who are fully employed in the daytime, but whose evenings might be turned to excellent ac count in self-improvement, were a good institution of the kind proposed accessible. These are movements in the right direction. If good facilities for evening study could be provided, and those whose days are occupied with labor of any kind could be got into the habit of improving them, as many doubtless would, the effect upon the intelligence, morals and success of the coming generation could not fail to be of the happiest kind.

We beg leave respectfully to call the attention of the Education Department to "Headmaster's" letter in another column. The matter of which he complains is certainly a serious hardship. It is easy to see that it would be, to say the least, very undesirable for the headmaster of a Public school to absent himself for several days during term, in order to attend an examination. In the majority of cases it would
probably be out of the question for him to obtain leave of absence. It must be, as our correspondent observes, -the wish of the Department to give every encouragement to teachers wishing to secure certificates of higher grade. The fact of having such an ambition is in itself pretty good evidence that the teacher is of the right kind, and, vice versa, the opposite inference may often be safely made. There could be no great difficulty, it seems to us, in making the needed change in the time of examination. Might it not be well for headmasters to make some joint representation to the Minister in regard to the matter?
"D.B.," writing to the Toronto Mail in regard to the "state-salary-xpected" advertisements for teachers, says that a number of school boards advertise annually, even when they desire to make no change in the staff. This device is adopted, he thinks, as a means of intimidating or coercing the teachers under engagement and who may desire to remain, and tends utterly to destroy the honest, independent action of him who would willingly devote several years of service to the same school. "D.B." suggests, as a means of remedying this evil, that "every applicant for a situation should first drop a note to the Principal of the advertised school (enclosing a stamp, of course), asking whether this is a bona fide advertisement or only an intimidator. A few other questions, too, they should put. For example-If you are leaving, is your reason for so doing likely in any way to affect the position of your successor? What salary is now paid? and what is the condition of the school generally?" The suggestion is a good one, and worth adopting, if only as a matter of courtesy.

As a matter of journalistic fairness we insert "N.R's." reply to our remarks on his former letter. In reference to the examples in the syntax of the collective noun with which he seeks to puzzle us, we suppose we shall still further discredit ourselves in our censor's eyes when we say that we regard both constructions in each of the pairs of sentences as correct, as any child of average ability could be made to see by a few questions on the inductive plan. The question of the singular or plural construction turns upon the conception in the mind of the writer or speaker. Juries take food as individuals. They occupy the jury-room and perform their official functions as a single body. The Parliament is dissolved as a body, but its members sleep in their graves, literal or metaphorical, as individuals, and must be awakened as such. Further than this, we see nothing in "N.R's." letter requiring answer. Several of his remarks seem to imply that he supposes us, in using the general term "Educator," to have had reference to some particular individual. We do not think other readers will make that mistake. If any one sufficiently interested will kindly turn to our article in the issue for October ist, and read it in connection with "N.R.'s" letter, he will be able to

## Educational Thought.

He that will stand to pick up and examine every pebble that comes in his way, is as unlikely to return enriched and laden with jewels, as the other that travelled full speed.--Lockc.

Every day there should be implanted in the mind of each pupil in our schools some instinct for right and noble action, deep and strong. The day is well-nigh lost without this. - Penn. School Journal.
IT is the habitual thought that frames itself into our life. It affects us even more than our intimate social relations do. Our confidential friends have not so much to do in shaping our lives as thoughts have which we harbor.-Exchange.
As it is evident that the possession of truths and the development of the mind in which they are deposited are not identical, considered as ends, and in relation to each other, the knowledge of truth is not supreme but subordinate to the knowing mind.-Sir William Hamilton.

Educators should feel beyond everything that character is the highest attainment of a human being, and use their influence accordingly. We know that character can always be counted on. Conditions and circumstances may shift and change, but the vital elements of character remain the same.-Ohio Educ. Monthly.
If we want art, we must begin where all great artists of the world have begun-by studying Na ture, by loving beautiful things. Asthetics are not mysteries of which only a few fluent litterateurs possess the key; they are open-air, every-day matters, which concern us all, and of which we can all judge, if we give them the study and the love which are necessary to discover the truth.-H. Quilter.
Nature never gives. She exacts strict pay for all you take. She does not scatter her largesses to the idle and the careless. She only pays the wages of your work. Worse than that, her highest fruit she, puts just beyond your reach to tempt you on to your extremest effort. If you will not strain to your utmost for it, you must be content to go without it; it does not drop into your hands of itself.--W.W. Story.
Thoroughness does not, however, mean completeness as to quantity, but as to quality. The mistake is often made of supposing that, to be thorough, a subject must be wholly mastered, and time is wasted in striving after what is not suited to the circumstances nor to the present attainments of the pupil. Thorough instruction insures correctness, clearness, and command of knowledge, and such degree of certainty as the subject and condition of the pupil admit of. These may be secured and tested at each step of progress, and thus the grand moral principle established that to be is more than to seem.--Prof. Joseph
Marsh. Marsh.
THE attitude of masters ought. not to be slovenly. The careless or sleepy posture reproduces itself in disagreeable ways. The true organiser, and sagacious trainer, will not cause disorder by standing in the way of a stream of boys, or by coming in at wrong times, when numbers are going out. Boys are particularly alive to this kind of disrespect. Another grave cause of evil is the dishonor shown to the place in which the work is done. Things are allowed to be left about, and not put away when finished with, great roughness is permitted in the treatment of the room, and its furniture. Yet there is no law more absolutely certain than that mean treatment produces mean ideas; and whatever men honor they give honor to outwardly. It is a grievous wrong not to show honor to lessons, and the place where lessons are given.-Thring.
"Think truly, and thy thought Shall the world's famine feed; Speak truly, and each word of thine Shall be a fruitful seed;
Live truly, and thy life shall be
A great and noble creed" A great and noble creed."
-H.A.S., in National Educator.

## Special Papers.

## THE TEACHING OF HISTORY.*

In order to make sure that we are adopting a Correct method in teaching any subject on the school programme, it is necessary to have a clear conception of the subject itself, and also of the end in view in using it for educational purposes. Though methods cannot be safely determined a priori, it is an undeniable fact that empiricism alone is not to be trusted in arriving at a final conclusion as to the relative values of diverse methods of dealing with any given subject. History is no exception to this general truth. He who would teach history successfully must have in his mind a clear conception of the nature of the subject, and an equally clear perception of the end in view in teaching it. With these to guide him, he can test different methods, and accept or reject with some degree of intelligence.

History has been variously defined even for edu cational purposes. It is sometimes regarded simply as an interesting story or narrative, and is dealt with in the class-room chiefly, if not entirely, from that point of view. This aspect of the subject has a certain measure of value in it; for children love narrative, and well written history is as good as any other, and better than most other stories. It has the advantages of plot and action, and, moreover, it purports to be true, though it is folly to forget that all history, as written, is latgely fictictous, partly the ense of what is omitted, and partly because of the manner of representing what has been selected for the narrative, whether events or persons. But while the narrative element in history is important, it is obviously too narrow a view to take of the subject, when nothing else is made use of during the school-room history hour. History is narrative, but it is narrative and something more.
Again, history has been at times regarded as valuable only or urainty for the biographical element it contains. The drama that history unfolds is a drama in which the great men of their times-the Alexanders, the Bonapartes, the Cromwells, the
Bismarcks, and the Gladstones have been the Bismarcks, and the Gladstones have been the
chief actors, and it is neither an unprofitable nor an unphilosophical view of history that regards it it as made up chiefly of a series of biographical sketches of these leaders of thought and action. But history is more than that. Great men have accomplished much, but other forces have been at work in making history besides great men. They cannot be ignored in the teaching of history, but neither can they be allowed to become too prominent, much less to monopolize the attention of teacher and learner.

Then some thinkers and teachers lay great stress, and rightly so, on the ethical value of history, which has been defined to be philosophy teaching by examples. The great law of moral retribution has been exemplified in countless ways in the history of nations as it has been exemplified in the experience of individuals. If sentence has been pronounced on the sinning individual, it has been just as emphatically and just as irrevocably pronounced on the erring people or nation. This view ofhistory is unspeakably important, and as interesting as it is instructive. But history is more than a concrete embodiment of the law of retribution, more even than that along with a biographical and picturesque element. Indeed, When all these elements have been specified, that which is most important of all for school purposes has been omitted.

Tre most useful view of history from a pedagogical standpoint is that which regards it as a science. The development of mankind from savagery to civilization has brought into existence an immense number of phenomena of the most interesting kind. It has produced racial distinctions, varieties of religion, domestic relationships, social usages, political institutions and enforceable obligations. All these phenomena, and many others not mentioned, have a present existence, and each of them has itself a history. All laws, all institutions, all cusvariation, and their variations have been due to causes. That complex thing which we call modern civilization is, therefore, the product or resultant of

[^0]many forces, which have been at work for an indeterminate time. It is the consequent of many antecedents, the effect of many causes. In short, history is a chain of causation, the phenomena of one age being the conditions which made the succeeding age possible. On this view of history there is
nothing but a chronological distinction between the nothing but a chronological distinction between the
present and the past, and this is the theory of history on which all great thinkers now strongly insist. In the words of Mr. Freeman : "History is past politics and politics present history." History is politics crystallized and politics is history in a state of flux The web is constantly lengthening and un-
folding. Touched at the point where the process is going on it is politics; touched at any point where it is finished it is history.

If history is a science then it should be taught as a science by scientific methods. There are two general views that may be taken of it as a science, and the method resorted to will be according to the view adopted. We may take up the antecedent and pass from it to the consequent, or take up the cause and pass from it to the effect; but, we may on the other hand begin with the consequent and pass to the antecedent, begin with the effect and pass to the cause. Which shall it be? Viewing history as a chain of causation and viewing science as essentially investigation or inquiry, there seems to be hardly any room for doubt on this point. True scientific inquiry or research always regards effects and looks for causes. This is the way in which inductive reasoning proceeds. It is the way practised by Aristotle and Montesquieu and expounded by Bacon and Mill. To learn history as a series of causes producing effects is to put premium on mere memorization ; to learn it as a series of effects which must have had causes adequate to produce them is to put a premium on ratiocination. Obviously then history should be studied from the now to the then, and equally obviously it should be studied from the here to the elsewhere, if we are to pass in the truly inductive way from the known to the unknown.
The inference is that geography and history are closely blended, and that they should at first be taken up together, and as one subject. The child when he is introduced to this subject should not be told the name of either history or geography. His attention should be directed to his own locality, to its topographical features, to the people who occupy it, to the occupations by which they maintain them selves, to the manner in which they live, to the customs they observe, to the worship they practice, to their relations to each other, whether domestic or jural, to the institutions by which they carry on political government, whether local or general. His reason can be appealed to by questions as to the permanence and persistence of social and political conditions. He can notice changes for himself. One generation dies and another succeeds. Institutions are modified and improved. Laws are enacted or amended. Industrial methods change, and one industry succeeds another. The past is thus suggested, and what was it like in these and other respects? Other localities are suggested, and how do they compare with his own? The comparative method is thus introduced and comparison is essential to inductive reasoning. It is the process by which we classify, and classification is the essential condition of generalization. In no other way can we reach principles from isolated facts, laws from isolated phenomena, causes from isolated effects.
Another strong reason for beginning history and
geography with the now and here is that if the child geography with the now and here is that if the child is to have, as most children do have, time for only a limited amount of acquisition in this department of knowledge, he should be allowed to make certain of becoming acquainted with what is most likely to be useful to him in his subsequent political status. To know something about the office of a magistrate in his own locality is more important than to know something about the office of the Lord Chancellor of England; to be able to understand what a reeve is will be of more practical use to him and to the community, than to be able to describe the functions of the Chancellor of the Exchequer of Great Britain and Ireland. So in regard to time. A township council is a more important body for him as a future taxpayer, than either the Roman comitia or the Athenian Areopagus, and the captain of a village
volunteer company is more worthy of his attention volunteer company is more worthy of his atten
than a Roman Dictator or a devastating Attila.
It does not follow that if this view of history be
taken and acted on, the other views above specified must be ignored. The picturesque element can be brought out just as well on the one line as on the other, and so can the ethical and the biographical elements. The advantage is all on the side of the rational view with nothing in the shape of offsets, It is sometimes said that the study of the past enables one better to understand the present, and I freely concede the truth of this dictum ; but on the other hand the study of the present may equally throw light on the past, and this is the more legititimate and useful way to look at the relation between them. It is hard for any one to form any clear idea of the Athenian Areopagus, of the Roman comitia, or of the English manor, but he is aided in doing so by having first a clear conception of modern courts of law, election processes, and municipal institutions. He can investigate what is all around him in actual operation and can then modify his conception of institutions and laws as he finds himself constrained by the evidence to do ; he cannot investigate the actual working of institutions long extinct, or geographically distant, and hazy conceptions of what is not present will throw little, if any, useful light on what is.

If this is the right view to take of method in teaching history, these important and very practical inferences follow: (I) That history cannot be properly taught or learned by means of manuals, and (2) that no uniform written examination for the whole Province is practicable in the early stages of the pupils' progress. With reference to the former point, I wish to say that a good manual is all right in its place, but that place is in reviewing, not in learning history. It gives a bird's-eye view of the whole subject and that is useful after one has learned it in some probably unsymmetrical way. With reference to the latter I must express my opinion that history could be better taught in the Public schools if it were left off the Entrance Examination syllabus. If it be said that it would not be taught at all, or enough, if the examination were abolished, my ans wer must be: (I) That we should not habituate
teachers to regard passing pupils at an examination teachers to regard passing pupils at an examination
as the great end in teaching any subject ; (2) that as history is now taught for entrance examination while it does some good, it does much harm, and its discontinuance would probably be a net gain instead of a net loss; (3) that history properly taught would prove a source of interest to both teachers and pupils, and would be attractive rather than repulsive ; and (4) that in all probability its inherent attractiveness, backed by the authority of a Departmental regulation and the influence of the Insp-ctors, would secure a place for the subject on the working programme of every Public school.

## A GOOD IIDEA.

We were struck with a novel plan we found a superintendent using the other day-a method to correct the defects of teaching he had observed among his teachers. He made a practice of clipping from educational papers what struck him as being peculiarly helpful to his teachers. He had these pasted on card-board, and would leave them with teachers whom he thought needed hints and helps. For instance, here is a teacher who is weak in discipline. He marked two or three cards for her use. Here is another that lacks system; he left her a card telling the advantages of systematizing, and how it may be done. Still another lacked enthusiasm in her work; he had something helpful for her. And thus it was, for all. Of course he made suggestions and frequently took charge of classes for his teachers, but he made the remark-that these clippings were something they kept at their desks to think over and be reminded of their errors and the plan of correcting them. Every teacher might follow the same plan to great advantage. Educational literature is worth nothing if it cannot be wrought in the work of every day teaching.-Mo. Journal.

## If your lips

## You'd save from slips,

Five things observe with care, Of whom you speak, To whom you speak, And how, and when, and where.

## Primary Department.

## HOW TO TEACH LANGUAGE TO PRIMARY PUPILS. <br> \section*{arnold alcott.}

In this paper we will offer a few suggestions, as a means of variety, in our language lessons. It has been said by a competent authority, that the eight-year-old child uses only about one hundred and fifty words.

Now, let us try to find out just how the child obtains this vocabulary, so that we, as educators, may be able to follow the natural method, when we come to help our pupils to add to their stock of words. These little folks know the names of all of the objects in their homes which they have seen and have used, and have heard talked about ; also, they learn in their play and in their talks with others, and also by hearing the conversation of others. Therefore, the children learn by the objective method. They know the thing itself.

Just here, we may, if we will, pick up a valuable clue to guide us in our teaching of any subject, namely, to associate a thought or an idea with an object, so as to impress the idea firmly, clearly, and fixedly in the mind.
Then again, we read between the lines, and conclude that, as the child learns by its talk with others, and by hearing others speak, therefore, as much as possible, our little friends should hear good English. Children are such splendid imitators, that we should endeavor, in every way, to place before them what is excellent, in order that they may become perfectly accustomed to the use of the best phrases, and in order that the proper use of langudge, as a definite means of thought-expression, may become a habit.

Of course, we know that we should develop the child's power of observation. It does not know so very much about the common objects around it, therefore we should help it to receive impressions, and to define them. How are we to do this? Certainly, there is no better way than by means of Object Lessons, or, as some have been pleased to term them, development lessons. In these the new idea having been acquired, the new word is given as the sign for this idea. Will you note how invaluable these lessons are, as a means of language training, because of the thing, the idea, and the word being so closely connected? Let us adhere steadfastly to object lessons, as a means for advancing our pupils in language.
Another method is by means of personations. This is most certainly a natural way. There is not one of us who cannot remember when he used to delightat playing store or school, at playing driver on a street-car, or, if girls, what did we like better than playing "lady," and going visiting, and so on, and so on. Just the other day, a friend said that when he was a boy, to drive a street-car was the height of his ambition. Now the desire of "doing" was natural and right. What was needed was, that it be directed into proper channels of usefulness, and we are glad to know that so many of our teachers are trying and succeeding in their efforts
We had better philosophise a little before proceeding. So we will put down our thoughts thus
We know, ist, that children love personating.
We know, Ist, that children love personating.
and, that they delight in "doing "
2nd, that they delight in "doing" something, in that a perfectly healthy, cheerful child must be "alive." It cannot be otherwise.
3rd, that children like imitating the "old folks" better than they like imitating the younger nes.
From division one we conclude that if we introduce personation in our lessons, we are on the right track, because it is natural, and, therefore, possesses the merits of brightness, executive power, easè and fun.
From division two, we conclude that we should give our pupils tangible work to do ; that we
shouldnot expect them to do very much purely should not expect them to do very much purely
mental work; that we should remember thet mental work; that we should remember that a written thought, or one performed by means of a physical act, is infinitely superior for educational purposes to one expressed by word of mouth.
From division three we conclude that the "old folks" should remember that the young folks are noticing and admiring them, and that, therefore
they (the old folks) should be worthy patterns for imitation. Therefore, the teacher should be a mode in language. Also, because children imithe idea the term which we use to express it. When the child has got the idea, we should not be at all afraid to give it the new word to express the thought.
One method of personation is, as above mentioned, that of playing store. Five or six scholars may come to the front of the class-room, and have their slates standing on the platform, and have written on them their signs, that is, their names and the kind of store they are keeping. Also, they should have a few articles such as the average "boy" has in the recesses of that pocket, namely, marbles, a top, a jack-knife, a string, pencils, and so on. These will be goods and money. Now the other members of the class may write down their orders, that is, the goods which they want to buy, and then the teacher may let some actually come up and purchase. This latter is very interesting, and may also be productive of an extra teaching in language, for we should say "Good-day" to the storekeeper, and we must consult him about the quality of his goods, and about the fairness of his prices. Children are nearly intoxicated, if I may so speak, with these personation lessons.
I have outlined, very briefly, indeed, a lesson on personation. If you think for yourself, you will find that it is a field having a very large area, and yielding the golden harvest of interest and sympathetic co-operation of scholars with teacher.

As suitable for personation lessons, and as a
connecting link between the stories of my former connecting link between the stories of my former I suggest the following :
a. Little Red Riding Hood.
b. The Three Bears.
c. Who Stole the Bird's Nest ? and the favorite story known as
d. Who Killed Cock Robin ?

Let your boys be the Wolf, and your girls Red Riding Hood.
Be sure to get the proper tones of the different bears, namely, the thin, wiry squeak of little Tiny, the gruff voice of the papa bear, and so on.
While considering this delightful subject of personation, I remember a device which I tried in my class, and with which they were immensely pleased. We believe in having games in our school-room, and this is one of them. It is called the game of
Trades. Let me tell you how we play it. The teacher sends out about six of her pupils, and tells them (after they are outside) that she wants them to be blacksmiths. Then she finds out from them what blacksmiths do. Of course, the boys readily answer that they hammer. Then she tells these six pupils that they are to go into the room and hammer as if they were blacksmiths. The others in the class are to find out what trade these represent, that is, what they are, whether rower, or digger, or driver, or etc., and then, as everyone decides, the name is to be written on the slates in a sentence, thus:
Fred is a blacksmith ; or,
Tom is a rower ; or,
Ned is a digger ; or,
Mary is a washerwoman, as the case may be With very junior classes.we may at first take the latter part orally. In another paper, we may suggest some other "trades" which may be practised. Language lessons can be more varied, we had almost said, than any other lessons.
What class would not waken up, and be enthused? What boy or what girl so dull that the eye would not brighten and the countenance glow with interest in this work?
It has been said, and very truly, at least in my own case, that those teachers most influenced us for good who made the imparting of knowledge and the gaining of it a pleasure to us; who made us learn, or, better, who caused us to learn, as it were.

Surely no subject affords a wider range for the excitation of pleasurable emotions in our pupils than the study and teaching of language.
The writer hopes that the humble efforts here put forth, will serve as a stimulus to fellow-workers, for these few words are intended to help you to "do not what others do, but, rather," to
"Do the very best you can."

## GEOGRAPHY.

There was a time when the teaching of primary geography embraced merely a mass of discon nected, dry facts and a few so-called definitions of the division of land and water, which were al most entirely unimagined by the children, but were nevertheless diligently committed to memory and stored up for future use. Thanks to the advance of the "new science," that day has passed, and geography, as it is now taught in some schools, is one of the most developing powers lying within reach of the teacher. Before going any further, let us realize the fact that there is a real science of geography, and that it is a subject requiring great thought and preparation in teaching. Let us consider what it is, and why it is taught?
Geography is defined rightly to be the study of the earth and its inhabitants. It may, therefore, be divided into two parts, the first treating of structures, now called structural geography, the second relating to man, past and present, his position, labors and achievements, all of which constitute, in reality, history. The first part, therefore, forms the groundwork for the second. Until we have given the subject ample thought we cannot realize the heights we can climb, nor the depths we can penetrate in the study of geography. There are many reasons why it should be made a prominent study in our schools. It, almost more than any other study, is qualified to develop largely the imagination. By imagination we do not mean the creat ing of anything entirely new,-that is not within the powers of the mind,--but rather the building up and uniting of seen and known facts to form the unseen. This we are constantly doing in geography. In the district about the school we have some fine hills; we also have some specimens of rocks. We lead the scholars gradually, by means of these simple sense objects, to imagine the great chains of mountains on our continent, and the high peaks of the Alps. Just here I am reminded of a professor who asked a class to try and imagine some new animal, either very beautiful or very ugly. There were some highly developed imaginations in the class, and they used them freely, but nothing new was evolved. There were new and unheard of combinations, certainly, but all from the old sense products.
When we have entered the study of structural geography, after moulding islands, we carry our pupils in imagination around the large islands of the world, discovering new features in them and gathering up interesting facts. We trace our little river up to its source, finding out how it starts and how it is increased, until we are able to leave it and navigate the great St. Lawrence and Amazon.
It is useless to try and enumerate the various ways in which geography excites and develops imagination. We know the value of this faculty, we know the resources of pleasure and happiness a vivid imagination brings us, and how poor in mind's wealth a man or woman is, who is devoid of it. There has not been enough done in our schools to foster and develop this faculty; let us be careful lest in any respect we crush or diminish it.
Geography also, as you have doubtless noted trains the observation and comparison, and as a last argument I would say the reasoning powers. When a child has been given a $k$ owledge of the surface configuration of a country he can tell something of the probable nature of the rivers; short and quick suited to manufactures, or long and slow adapted for navigation. He can reason as to the probable occupation, character and political importance of the people, determining this from the structure of the coast-line, relative position or mountainous nature of the country.

Coming down to a simpler application, we find we are constantly exercising the judgment and reasoning powers of our pupils in even our little objective talks on the seasons, day and night, climate, vegetation, etc.
Do not be content with any " small mercies" as regards your success in geography teaching, but, realizing the vastness and benefit of the study, persevere with courage and patience until you have attained the "highest measure."
A little thought will suffice to show the importance of the correct teaching of structural geography. We can see how, with the exception of the
of a country as regards its resources, manufactures, character of the people, and even politics and religion.

In the teaching of structural geography we do not want to deal with planes and perspective views, but we want to depict the manner of organization in a realistic way, and this can best be done by moulding in sand. We hope some time to have for each child a moulding board provided with a goodly supply of foundry sand and water. But if this is impossible, have a sand box or moulding board yourself, and allow the children to assist you n forming the various constructions you wish to teach. After moulding in the sand such features as mountains, bays, isthmuses and valleys, they may be rudely constructed yet vividly illustrated by the hands; placing the fingers in pyramid position to form mountains, two fingers separated to form a bay, the shoulder forming one hill, the wrist the other, the elbow hollow forming the valley. Paper may be used to advantage also in making these forms.

We must remember, however, that these are only to serve as aids to the imagination. As soon as they have grasped the idea of a mountain, leave the "mud pie" and talk about the Catskills, or even climb the heights of Mont Blanc. This will add enthusiasm and interest, and sparkling eyes, eager ears and attentive minds will be your reward. at home and elsewhere about what they are study. ing. Make collections of pictures of physical features, people of different nationalities, animals encound you will soon have quite a museum, if you shells,
Iells, sea-weed and minerals of all descriptions.
In our special department of primary work I do ning with our course should be limited, but, beginning with the familiar forms around us we should, proceeding correctly, take our scholars in this work just as far as we find possible.
Our first geography lessons should be of the nature of language lessons, or little objective talks on such topics as shape of the earth, day and night, seasons, climate, moon, stars, and direction. I will confine myself in this paper to some of these talks. Proceed in these lessons on the objective method, making them, by every art and device, as interesting as possible. An orange that has been packed in a box so as to flatten slightly at both ends, will best illustrate the earth. In connection with this lesson you may have wonderfully interesting talks on how the earth was found to be round. Some of your scholars will, perhaps, have noticed how on the off on the horizon, and after that gradually the whole vessel.
To illustrate and aid in giving a conception of day and night, I have a large yellow ball of tissue paper or wool, suspended in my case from the stove-pipe by a piece of wire. Then, with an orange, a brown ball, or an apple, which we take represent the scholars. Then we turn round the earth-ball and move it round the sun-ball, and in our imagination live through two or three years of our lives, talking about the seasons, what grew, what the birds did, what we wore, and other interesting things.
In lessons on climate we used a great many pictures to illustrate differences in countries, people, plants, flowers, animals, and occupations. Then We had a number of little lessons on the moon and stars. The children watched at night, and came to school brimful of discoveries (?) and information to tender at geography time.
We may talk about "fairy stories" and object lessons creating most enthusiastic efforts, but for intense interest, attention and retention, take some of these simple lessons forming the introduction to the study of geography.

## AN OBJECT-LESSON TALK.

## by rhoda lee.

Sometimes in the effort to make a lesson attractive and interesting we lose sight, in a measure, of its real nature and character. We fail to keep in view its special aim and the particular form of development it is to effect.:
Let us remind ourselves of the primary aim of object teaching and the various other benefits to be derived therefrom.

The first and foremost aim is naturally the development of all the faculties of the child-mind ; second, the correction, extension and application of the child-vocabulary; third, the gaining of knowledge. Observe it is not gizing but gaining. We do not give gratuitously and promiscuously, but by careful guidance lead our pupils to gain for themselves Sometimes the mistake is make of confusing objec tive or illustrative teaching with object teaching.

In the former we employ the object as a means of illustration, as in the use of " pegs and sticks" to teach numeration. In the latter the object itself is studied, with a view to finding out its composition, construction, parts, and relations.

You cannot expect your scholars to discover these peculiarities of form and construction from an object held in your hand. We, therefore, arrive at one of the fundamental principles, which is, that every child must have the object in his own hands and make his own investigations.

Do not try to force your pupils to see everything that you with your more mature mind may observe, but by skilful questioning place them in the proper position of mind for the perception.

As development is the fundamental and primary aim we should be careful in our choice of objects to decide on those which will be most generally developing.

In my efforts to make these lessons attractive I find that some novel manner of distribution adds interest.

Sometimes the children place their hands in the position we take for the game of "Billy, Billy But ton," then I pass down the aisles dropping something in between the closed hands, no one opening them until the signal has been given.

At other times, eyes are closed and the hand kerchiefs placed on the desks, then a couple of "good fairies" trip around the room placing something under each handkerchief. Then, perhaps, I give a few hints and the scholars guess what we are going to talk about.

In other lessons the children go to " make-believesleep" on the back part of the desks and the object is placed in front, ready for the eager eyes to examine.
My talk has been somewhat more lengthy than I intended and in consequence the outline lesson will have to be omitted, leaving only as subjects for lessons this month, Ist. beech nuts, and. hands, and 3rd. chalk.

## Question Drazer.

[N. B.-For answers to qiestions in Sngli,h and Mithemaics see those dspaitments respectively. Cur respandents will please send all suc'i quastions direct

Will some kind friend of the Journal please send a reply to the following
I am teaching an ungraded country school, with an average attendance of fifty-four pupils. I have been much annoyed with a habit my pupils have formed of studying in an undertone, which, among so many pupils, creates disorder, which, at times, becomes almost unbearable. I have tried hard to overcome this difficulty, hut have failed thus far. In trying to quiet this noisy hum in my school-room I have found it a difficult matter to find out the exact pupils who are studying in this half-audible tone.
Whispering, too, is indulged in to a certain ex tent, and I find it impossible to suppress it so long as the loud studying prevails.
If any of the readers of the Journal have ever had a similar experience, and can recommend a remedy for this evil, I shall be very grateful for the same.-Pica.

I think it important to teach the names of the more important railroads and canals of the U.S.A. Will you kindly publish a list of the same and their location in your next issue of the Educational JOURNAL?--W. M. T.
[There are probably about 1,000 railroads in the United States and Canada. It would be impossible for us to take space to enumerate even the important ones, nor have we any criterion for deter mining their importance. A few of the great trunk lines, such as the Union Pacific, Northern Pacific, New York Central railroads, and the chief canals, such as the Erie, may be traced on any good map.

You would, in our opinion, make a serious mistake if you required your pupils to commit to memory a list of names.]
I. Which is considered the better time to teach the compound rules; before or after fractions?
II. Pupils are in their seats preparing reading lessons and find words they cannot pronounce. Which is the best manner of informing them?
III. A teacher is engaged fot one year. Can he legally, at the expiration of eight months, procure a substitute and leave his position for a more lucrative one, without giving notice? C. G. B. B.
[I. Opinions would probably differ. We should say after. II. We invite the opinions of experienced teachers on this and preceding question. We should say that every pupil should have within reach a good pronouncing dictionary and be taught to use it. The results should, of course, be tested in class. III. Certainly not.]
I. Should three months' notice be inserted in teackers' agreement with trustees, or will one month's notice be legal, if agreed to by both parties?
II. A trustee leaves a section about ist Sept. this year, and goes to reside in another adjoining. Has he any power to act in any way or capacity in the section he left as trustee?
III. Can a secretary-treasurer of " Rural School Board" in monthly payments to teachers, withhold a part of payment for any purpose, or must he pay whole amount to teacher for teacher's disposal as he chooses?
IV. "School Act" says notice must be given of termination of agreement by trustees or teacher a certain number of calendar months previously, so as to terminate on the last day of a calendar month. This would mean, I should say, that if agreement calls for one month's notice, then notice being given in proper form on last day of any month, say 3Ist of Oct., agreement terminates on 3oth Nov., or if notice is given on 30th Nov. then agreement terminates on 31st December.- N
[I. One month's notice would be legal if specified in agreement. II. We think not. Sect. 8 of the School Law prescribes that trustees must be "actual resident rate-payers." Sect. 40 makes it the duty of the Board to call a special meeting of rate-payers to fill vacancies caused by removal. 1II. He has no power to withhold any part of the salary agreed on. IV. Yes.]

Would you kindly publish, in the columns of the Educational Journal, examination papers for First Class Professional Certificate?-F. B.
[We shall try to publish some samples, at least, in next issue.]

1. (a) Are candidates for First Class Certificates supposed to write German script at the examination when they take the course in German? (b) What percentage of marks is usually allowed for French and German dictation?
2. Can a person who passed Second Class nonProfessional examination in ' 85 , attended the Model school in '86, and has been engaged in teaching since, have her certificate renewed without re-examination? If not, what is the proper construction of paragraph 123 of the Departmental curriculum ?-C. [r. (a) No. Possibly the examiners might feel at liberty to test the candidate's knowledge of German script. (b) Regulation 117 gives 200 as the value assigned to French and German each. We are not sure what you mean by "French and German dictation." II. Yes, on the conditions named in Regulation 123.]
I. Could you find space in your next issue to insert a sample of the Entrance paper in Agriculture and Hygiene?
II. Will you kindly describea beet seed botanically. III. I desire to possess a book-" The History of Columbor" or of "Ione"-and a bookseller at home ordered it for me, but it has not come. How could I get it?-A TEACHER.
[I. None were set at ${ }^{-}$last examination. II. Re spectfully referred to our scientific patrons. III Write to Vannevar \& Co., 440 Yonge St., or to Frank Porter, 353 Yonge St., whose advertisements will be found in our columns.]

## Examination Papers.

UNIVERSITY OF TORONTO-ANNUAL
EXAMINATIONS, 1889.
IUNIOR MATRICULATION.--ARTS.

## ENGLISH GRAMMAR.

HONORS.
Éxaminer--David Reid Keys, M.A.
Note.-Candidates for University Scholarships will take only those questions marked with an as terisk. All other candidates (whether for Pass or Honors, Second Class or First Class Certificates) must take the first seven questions and any two of the remainder.
${ }^{\text {* }}$ I. What are the faults and failings of the English alphabet in so far as consonants are concerned?

* $_{2}$. In what different ways has the English language derived words from the languages of Asia? Give examples.
*3. How does Earle classify adjectives? Explain the terms he uses.
*4. Write an article on English diminutives.
${ }^{*} 5$. Account for the plural ending $s$, and explain the irregular plurals of native orgin.
*6. "Of the flexible adverbs formed from caseendings, this genitival is the one that retains most vitality, but it is little more than semi-animate. What vitality it has tends....towards symbolism."
(a) Give examples (two for each case) of adverbs formed from case-endings.
(b) Explain and illustrate what Earle means by symbolism.
*7. Write notes on the following passages, explaining the exact meaning of the words in italics, and suggesting any changes you think necessary
(a) If any monument should particularly excite your curiosity, I shall endeavor to satisfy your demands.
(b) Were I to advise any man for whom I had the least regard, I would caution him not to be imposed upon by false pretences.
(c) He explained the manner in which he would deal with beggars were he a magistrate.
(d) The genius of a country should be investigated with a kind of experimental inquiry; by this means we should have more precise and just notions of foreign nations.
(e) As soon as we are arrived at Moscow. . you shall be informed of all.
$(f)$ I intend she shall be as perfect as possible in every accomplishment.
$(g)$ But it is time to quit this sketch on which, however, I should be glad to dwell.
*8. Account, historically, for the following verbal forms :-Art, can (3rd sing.), could, doth, hast, says $I$, shalt, wast, wert, won't.

9. Explain, with the aid of examples, the grammatical terms :-Absolute Construction, Gerund, Reduplication, Umlaut.
*io. Make a list of auxiliary verbs, explaining the functions of each.
${ }^{*}$ II . Compare English with any other languages you may have studied with respect to its power of expressing distinctions of mood. Illustrate.

## HISTORY AND GEOGRAPHY

 HONORS.Examiner-T. Arnold Haultain, 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 five questions and any two of the remainder.
\#i. Indicate the tracts of the principal submarine cables uniting various portions of the British Empire.
*2. Name and give the position of the chief satellite island groups belonging to the British Archipelago.
*3. Name the more important coal fields of England and Wales.
*4. Describe generally the condition of England, from a commercial or financial point of view, in the ime of Charles I.
To what causes would you be inclined to attribute that condition?
*5. "The poem ['The Faeric Queen'] expressed, indeed, the very life of the time."-GREEN.

Explain what the historian means by this assertion.
*6. Write brief critical or explanatory notes on each of the following:-The Puritan Emigration to New England; "Self-Renouncing Ordinance"; the "Instrument of Government" (1653); the "Test Act "(1673) ; the " Habeas Corpus Act."
*7. Remark briefly on Cromwell's foreign policy.
8. Sketch concisely the character of Wentworth (Lord Strafford).
How was he regarded by his sovereign ?

## EDUCATION DEPARTMENT, ONTARIO. -

 MIDSUMMER EXAMINATIONS, 1889.
## THIRD CLASS TEACHERS.

ORTHOEPY AND PRINCIPLES OF READING.

## Examiners: $\left\{\begin{array}{l}\mathrm{J} . \mathrm{F} . \text { White. }\end{array}\right.$

Note.--Candidates will take the first three questions and any two of the others.
I. (a) Show the importance of pause in interpreting feeling.
(b) Mark by lines (/ for short, // for long) the pauses in the following :
"As one who walking in a forest sees
A lovely landscape through the parted trees,
Then sees it not for boughs that intervene,
Or as we see the moon sometimes reveal'd
Through drifting clouds and then again conceal'd, So I behold the scene."
2. Up rose old Barbara Frietchie then, Bow'd with her fourscore years and ten, Bravest of all in Frederick town,
She took up the flag the men haul'd down ;
In her attic window the staff she set,
To show that one heart was loyal yet.
Up the street came the rebel tread, Stonewall Jackson riding ahead.
Under his slouch'd hat left and right
"He glanced: the old flag met his sight.
"Halt!", the dust-brown ranks stood fast.
"Fire !"-out blazed the rifle-blast.
It shiver'd the window, pane and sash ;
It rent the banner with seam and gash.
Quick, as it fell, from its broken staff
Dame Barbara snatch'd the silken scarf ;
She lean'd far out on the window sill,
And shook it forth with a royal will.
"Shoot, if you must, this old grey head,
But spare your country's flag !" she said.
A shade of sadness, a blush of shame.
Over the face of the leader came;
The nobler nature within him stirr'd
To life at that woman's deed and word.
"Who touches a hair of yon grey head,
Dies like a dog! March on !" he said.
(a) Mark the general pitch, force, and movement (rate) of the extract. What parts require a different rendering, and why?
(b) Give, with reasons, six emphatic words in II. I-6; without reasons, six in $11.19-26$.
(c) Select four words requiring the rising interval (inflection), and four, the falling ; giving explanation in each case.
3. Divide into syllables, accentuate, mark the correct sound of the italicized consonants and of the vowels in the accented syllables :-- Quinine, mirage, sergeant, demesne, deficit, jonquil, peremptory, amateur, complaisance, vagary, sacrilegious, Sik $h \mathrm{~s}$.
4. (a) State what is meant by orotund voice. How is it produced, and for what compositions is it suited?
(b) For what feelings is impure voice the proper mode of expression:
5. In what does stress differ from force or loudness? Indicate, with reasons, the force and the
stress that should be employed in reading each of the following :

## (a)" Come one, come all-this rock shall fly

From its firm base as soon as I."
(b) "The only principles of public conduct, which are worthy of a gentleman or a man, are to sacrifice estate, health, appearance, and even life itself, at the call of his country."
(c) "An old man, broken with the storm of state,
Is come to lay his weary bones among ye."
(d) "All hail, thou lovely queen of night !"
6. (a) Explain clearly what is meant by emphasis, distinguishing emphasis of sense and emphasis of feeling.
(b) What different meanings may the following sentence have, depending upon the position of the emphasis :

Were you not well paid to fight valiantly against Alexander?
7. By what principles are pitch and movement (rate) connected with the suitable interpretation of thought and feeling? Illustrate by reference to the following :
(a) "She is won! we are gone over bank, bush and scaur ;
They'll have fleet steeds that follow!" quoth young Lochinvar.
(b) "But at midnight-strange, mystic hour: -when the veil between the frail present and the eternal future grows thin-then came the messenger!"
(c) Hail to thee : blithe spirit, bird thou never wert,
That from Heaven, or near it, pourest thy full heart.
(d) "Young men, ahoy!" "What is it?" " Beware! beware! the rapids are below you: See how fast you pass that point! Quick: quick! Pull hard !"

## ALGEBRA.

Examiners :
$\left\{\begin{array}{l}\text { W. H. Ballard, M A. } \\ \text { J. E. HodgSon, M.A. }\end{array}\right.$
Note. - Only eight questions are to be attempted. I. (a) Define the terms quantity, unit, number, negative quantity. How is quantity measured?
(b) Distinguish between the arithmetical sum (or difference), and the algebraic sum (or difference) of two quantities.
2. Factor
$(c-x)\left(x^{2}+a b\right)+(a+x)\left(x^{2}-b c\right)+(b-x)\left(x^{2}+c a\right)$.
What values of $x$ will make this expression $=0$ ?
If $\mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{x}$, are all positive quantities, under what conditions will the expression be negative?
3. If two expressions have a common factor, prove that the sum or difference of any multiples of these expressions will have that common factor.

Find the highest factor common to the expressions

$$
\begin{aligned}
& x^{2}(3-2 y)+x\left(3 x^{2}-5 y^{2}\right)-(2 x+5 y) y \\
& x^{2}(3+2 y)+x\left(3 x^{2}-5 y^{2}\right)+(2 x-5 y) y
\end{aligned}
$$

4. Add together the following :

$$
\frac{1}{a-x} \cdot \frac{1}{(a-b)(a-c)}, \frac{1}{b-x} \cdot \frac{1}{(b-c)(b-a)},
$$

$$
\frac{I}{c-x} \cdot \frac{1}{(c-a)(c-b)} .
$$

5. Find all the factors of

$$
x^{4}+4 y^{4}
$$

$$
2 a^{2}-b^{2}+a b^{2}-a^{2} b-2 a-a b+2 b
$$

$$
a^{3} b^{3}+b^{3} c^{3}+c^{3} a^{3}-3 a^{2} b^{2} c^{2}
$$

6. Reduce to its simplest form
$s^{2}-(s-a)(s-b)-(s-b)(s-c)-(s-c)(s-a)$,
where $2 s=a+b+c$.
7. Solve the equations
(1) $\frac{x-4}{x--5}-\frac{x-5}{x-6}=\frac{x-7}{x-8}-\frac{x-8}{x-9}$;
(2) $\frac{1}{15}(9 x-7)-\frac{1}{3}(x-27)-\frac{7 x}{19}+\frac{22}{171}=0$
8. For what value of $x$ will the sum of the follow ing fractions be 3 :

$$
\frac{(x-a)^{2}}{(x-b)(x-c)}, \frac{(x-b)^{2}}{(x-c)(x-a)}, \frac{(x-c)^{2}}{(x-a)(x-b)} ?
$$

9. A person who has $\$ 30,000$ invested receives from part of it an income of $4 \frac{3}{4}$ per cent. per annum, and from the remainder an income of $5 \frac{1}{4}$ per cent. per annum. His total income is $\$ 1,490^{\circ}$; how much has he invested at each rate per cent.?
10. A piece of work is done in 4 days by three men, $\mathrm{A}, \mathrm{B}, \mathrm{C}$, working together. A would require 5 days longer than C to do the whole work; and the work done by $A$ and $B$ together in a day exceeds that done by C in a day, by one-twentieth of the whole work. What time would each require to do the work by himself?
II. A whole number, greater than 800 and less than 900 , is altered by removing the left hand digit and putting it in the unit's place. The new number is three-fourths of the original one. Find the number.
11. The difference between the cubes of two consecutive odd numbers is 218 ; state the equation from which these numbers may be found and carry on the solution as far as you can.

## School-Room Methods.

## BUSY WORK IN PRIMARY NUMBER.

I. There are 4 bones in the palm of each hand, 3 bones in each finger, 2 in the thumb. How many bones in the right hand? How many in both hands?
2. There are 8 bones in each wrist, and 7 bones in each ankle How many bones in your wrists and ankles, taken together?
3. Your slate is 1 foot long and 9 inches wide. Mark it off into squares, one inch each way, and find how many square inches along the length? How many rows the same length? How many square inches on your slate?
4. Make a picture of a bed-quilt for a doll's bed. It is to be 6 blocks long and 5 blocks wide. How many blocks in the quilt?
5. If 12 kites are given to 12 boys, how many kites will each boy receive? Picture the boys flying the kites.
6. Mr. Ames takes the N. Y. Weckly, Harper's Weckly, and a daily paper. How many papers does he receive in a week?
7. How many days in the month of May? How many in June? If school closes June 29th, how many days from now to the close of school?
7. Write the name of each month and the number of days in each month.
9. Write the name of the spoing months. Find how many days in spring. Why is this season called spring? What does the word season mean?

1o. If the fare in the street car is 6 cents, how much will it cost for a father, mother, and four children at half fare, to ride to the Park? How much to ride there and back home?
II. What number multiplied by itself equals 4 ? Equals 9? Equals 16? Equals 25? Equals 49? Equals 8I?
12. How much is $2 \times 2 \times 2$ ? How much is $3 \times 3 \times 3$ ? How much is $4 \times 4 \times 4$ ?
13. How many pupils can be seated in a schoolroom that has 8 rows of desks, and 7 desks in each row? How many, if two sit in each desk?
14. If I have a cube, with a letter on each face of the cube, how many letters are there? If I have six cubes, how many letters?
15. Draw a cube. How many sides can you show?
16. Make 12 dots on your slate and find $1 / 8$ of them. Make 25 dots and join $\frac{1}{5}$ of them.
17. I have 64 blocks. I place them in the form of a square, how many blocks in a row? How many rows? If I place them in the form of a cube how high, and long and wide will the cube be?
18. What is the difference between 1 and a dozen? Between 10 and half a dozen?
19. What is the difference between 14 and 7 ? How many are two sevens? How many years before you will be two seven years old?
20. Draw the face of a clock. How many hands are pictured on the face? Make the numbers, either in figures or in letters. Make the clock say 9 o'clock.-Educational Gazettc.

## LANGUAGE EXERCISES.

## newspaper notices.

1. Lmatine your father has a house to let, and wishes you to write for him a notice for the paper. State the number of rooms in the house, the location, the other advantages, the rent, the place to inquire for further information.
2. Imagine you have lost your pocket-book; write a proper notice concerning it for the morning paper.
3. Imagine you desire a position as book-keeper, and write a short paragraph, that might be inserted in the paper under "Situations Wanted."
4. Imagine you have found a music-roll, and write the proper notice for the paper.
5. Imagine your father desires a gardener, and asks you to advertise for one. Write the proper notice to be inserted under "Wants."
6. Imagine yourself the secretary of the Natural History Club, and write the notice of the next meeting for the local paper. State the name of the gentleman who will address the club, his subject, etc.
7. Imagine yourself a florist, and write an advertisement to recommend your business.
8. Imagine yourself a grocer, and write a similar advertisement.
9. Imagine yourself the principal of a private school, and write a notice stating the time the school will open and its advantages.
Io. Imagine the janitor of your school has met with an accident, that has disabled him, and write a paragraph for the local paper, stating the nature of the accident, and asking help for him.

## TELEGRAMS.

1. Imagine you have been visiting a friend in a distant city. Write a telegram of ten words or less, stating your safe arrival home.
2. Imagine a friend visiting you is sick, and write a telegram to be sent to his mother asking her to come to his aid. Express it in ten words or less.
3. Expand the same to fifteen or twenty words.
4. Imagine your father's stenographer is sick; write a telegram to be sent to a friend, asking him to fill the position for a time.-Popular Educator.

## HOW TO TEACH WEIGHTS AND MEASURES.

If the children can be got thoroughly to understand the construction of these tables, and to know exactly what is meant byeach of the terms-drachm, acre, bushel, etc.-they will be much more likely to be able to work the exercises than if, as is sometimes done, they learn the tables as parrots might, and understand very little of what they are trying
to do. to do.

Children will much better remember what they see than what they hear; and, when teaching the weights and measures, the teacher should always, as far as possible, demonstrate to the pupils the truth of the tables by means of actual weights and measures, and by diagrams.

Length.-Along the top edge of the blackboard a yard might be painted with red or white paint, and divided into feet, with one foot divided into inches. Along the wall of a long school-room, or on the floor, might be painted with red or white paint a chain, divided into yards. If the room is
not long enough to admit of the marking of a chain not long enough to admit of the marking of a chain, as many yards as possible may be marked, and the remainder back to form a second and parallel line; that is, if the room is to feet long, 39 feet should be marked in a line, which should then turn round, and 27 feet be marked in the second line. Or the chain might be marked along the wall of the playground. A perpendicular line neatly painted on the wall from ground to ceiling will also be found useful. This should be divided into feet and yards, and if the first six feet are divided into inches the line will do to measure the height of children and teachers.
The chain should be divided into four equal parts, each of which will be a pole. The children will not find it difficult to understand that ten chains equal a furlong, and eight times this length a mile.
Ared. This is perbaps the hardest table for a child to understand. Let the teacher get some good stout cardboard, and cut out a square with sides. a foot long. If each side be divided into inches, and
thick lines be drawn across with ink to form inch squares, the children will be able to see that 144 square inches equal a square foot. It will be well also to have a separate piece of card an inch square, so that there may be no doubt about what is meant by a square inch. This may be attached loosely to the foot square by means of a piece of string.
A piece of brown paper a yard square, divided to show the nine square feet, can be doubled up and put away when not in use.
To show the most difficult of all the items in the table-the $30 \frac{1}{4}$ yards which equal a square rod or pole-the back of the square yard of brown paper

may be used, Of course the teacher will explain that this is $30 \frac{1}{4}$ times less in size than an actual square rod, which would be too large for her to draw on paper or to manage if drawn. Each side of the square should be divided to show $5 \frac{1}{2}$ yards, and lines drawn across from side to side, when it will be found that there will be 25 squares of a yard each $=25 \mathrm{sq}$. yds., to oblongs of half a yard each $=5 \mathrm{sq}$. yds., and a little square a quarter of a yard each way $=\frac{1}{4}$ yd., that is $25+5+\frac{1}{4}=30 \frac{1}{4} \mathrm{sq}$. yds.
It will be advisable to mark on the floor of the school-room, with red or black paint, a square with sides each $5 \frac{1}{2}$ yards long-that is, a square pole.
The rood, acre, and square mile must be explained by diagrams drawn on the blackboard with chalk.-Educational Gazette.

## AN ARITHMETICAL CONTEST.

LACK of accuracy in adding, subtracting, multiplying and dividing, and an exasperating slowness in doing the work, draw heavily upon the onlooker's patience. Not only are constant drills in classes needed, but arithmetic matches should be frequent. The forms of these may be as varied as the resources of the teacher.

For instance, try this; John and Julia will choose sides. There are five on each side. John, with his band may occupy this seat; Julia, with her chosen, the opposite seat. All can see the blackboard. The teacher gives a sum in addition, writing each line as he reads the figures to the class.
"Add :-John, bring the slates from your side, and lay them on this end of my desk; Julia, yours on this end,"
The teacher then, in view of the class, writes the answer on the blackboard. She then examines John's slates, and finds 3 right ; next Julia's are inspected, and five are found right. Then, on the blackboard the teacher writes

$$
\begin{aligned}
& \text { John, } 3 \text { plus; } \\
& \text { Julia, } 5 \text { plus. }
\end{aligned}
$$

The slates are returned; another sum is given; the slates are again collected, and the result is found to be: John 4 , Julia 2 . The numbers are
duly entered in their proper duly entered in their proper places, thus:

John, 3 plus 4 plus;
Julia, 5 plus 2 plus.
By this time there is much excitement, for it is plainly visible that the sides are even, aud the teacher announces the next sum will decide the game.

When the slates are collected, it appears that John's side has 3 right, Julia's 4, The result now appears thus

> John, 3 plus + plus 3 equals ıo.
> Julia, 5 plus 2 plus 4 equals it:
giving Julia's side the victory by one mark.
I recommend teachers who desire something now for Friday afternoons to try this. My custom was, to give three sums in addition, three in sub traction, three in multiplication, three in division The match caused fully as much excitement as a baseball game.-- Western School Journal.

## 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, wath 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.

TEACIIERS' CONVENTIONS-OCTOBER AND NOVEMBER.
South York, at West Toronto Junction, Oct. 31 and
Nov. I. Nov. 1.

West Bruce, at Kincardine, October 3 I and November I.
East and West Lambton (union meeting), at Sarnia, October 3 I and November I .

Elgin, at St. Thomas, Nov. 8 and 9.
The Hon. G. W. Ross, M.P.P., Minisţer of Education, will deliver a lecture in connection with the South York Institute, on the evening of the first day; subject, "Characteristics of Our School System." A literary and musical entertaiment will be held at Kincardine, on the evening of Oct. 3I. Dr, McLellan, Director of Teachers' Institutes and Inspector of Normal Schools, will attend the meetings at Sarnia and St. Thomas, and deliver a lecture in each case 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, NOVEMBER $1,1889$.

## THE FRENCH-ENGLISH SC்HOOLS.

Acting promptly upon the elaborate report of the Commissioners appointed to inquire into the condition of the Public schools in those portions of the border counties of Ontario which are mainly peopled by French settlers, the Minister of Education has issued a series of special regulations for the correction of defects and abuses in those schools, and the improvement of their general character, especially in regard to the teaching of English. These regulations will not satisfy partisan extremists, but they will commend themselves to moderate men of all parties. They recognize clearly the fundamental principle upon which all are agreed, viz., that the English language must be efficiently taught in all the Public Schools of Ontario. They recognize also the pedagogical axiom that all study and instruction must be carried on in a language known to the children. We have, we think, before pointed out the absurdity of the position taken by some controversialists, in the heat of debate, that English should be made the language of instruction from the very first. In providing for the use of a bi-lingual series of readers for the lower forms, the Department has taken the course which commends itself to common-sense. In this way it may be expected that in the course of two or three years sufficient facility in the use of English will ordinarily be acquired to warrant the exclusive use of English during the remainder of the course.

The regulations provide also for the correction of two other evils which seem to have grown to considerable dimensions in some of
the schools in question, viz., the use of unauthorized and, in some instances, seriously objectionable text-books, and the appropriation of a portion of the regular school hours, in some schools, for purposes of sectarian instruction. The inspectors are enjoined to see that the regulations forbidding these irregularities are strictly enforced.

Some other special provisions in the regulations can be defended only on the ground of special necessity. Of such are those providing for specialized teachers' institutes, similar to that held a few weeks ago, and double sessions in the County Model schools. In ordinary circumstances we should regard it as a first principle that Training and Model schools should be devoted to pedagogical work exclusively. If the districts in question were able to pay proper salaries to well-qualified teachers, such teachers, with a good knowledge of French and English, would be forthcoming. As it is, the pittances paid, which are, perhaps, in many cases, all the poor people are able to pay, are utterly inadequate to command the services of such men. The Department is doing, we suppose, the next best thing, in making arrangements for the special training of the more competent of those who are willing to undertake the work. This is done to some extent by providing that not only shall the Model schools in counties in which there is a lack of teachers competent to teach English, hold two sessions in the year, but also that these schools shall, in conjunction with the ordinary professional course required by the regulations for county Model schools, give a full literary course in English in all the subjects prescribed for district certificates. The final examination for certificates is to be conducted in the English language.

Unceasing vigilance on the part of the inspectors and the Department will be needed to see that the new regulations are carried out in letter and spirit. Meanwhile, those whose minds are disturbed with visions of an inundation of the French language and literature may, perhaps, be reassured by the letter of a correspondent in another column.

## MATRICULATION STANDARDS.

Many of our readers, we dare say, listened to, or read with some interest the address delivered by Sir Daniel Wilson, President of the University of Toronto, at the recent Convocation, expecting to learn, amongst other things, his views with reference to the desirability of accepting the new High School Examinations in lieu, pro tanto, of the ordinary Matriculation Examinations. President Wilson did not indicate his opinions on this particular question. He did, however, lay down some general principles which would accord very well with the proposed substitution. After reterring to the fact that upwards of fifty candidates had been rejected at the Matriculation Examinations of the present year, Sir Daniel proceeded as fol-
"Whether or not this sifting process has sufficed to exclude every incompetent candidate will appear ere long in the work of the classrooms. But it must never be lost sight of that a matriculation examination differs essentially from all later tests for standing or degrees. What is aimed at is to ascertain how far the candidate possesses sufficient preliminary training to enable him to enter successfully on higher University work. If he has not, it is even more in his own interest than in that of the professors that he be remanded for further needful training. But, on the other hand, it is a wrong, and may inflict a grave injury on a gifted and diligent young student, to reject him on the grounds of his inability to cope with some minutiæ of a puzzling examination paper, where the general knowledge available for subsequent study is sometimes made to give way to obscure niceties of rhetoric, etymology or the like inadequate tests."
The reasonableness of these general remarks is obvious. Whether the severe criticism implied in the last sentence touches with keenness and force some of the test-questions frequently found in the matriculation questions set by the University examiners on this and former occasions, we need not stay to inquire. One of the practical questions suggested is whether the desirable result described cannot be reached, and the undesirable result avoided, with greater ease and certainty through the medium of the proposed High School Examinations, than that of any which are likely to be conducted by examiners, often novices in the work, annually appointed by the University Senate. Much will depend, of course, upon the manner in which the former are conducted, and the principle upon which the examiners are selected, but most teachers of experience will, we think, agree with us that the chances of reaching the best results are largely in favor of the High School finals. And, as President Wilson added, " too much importance can scarcely be attached to the wise adaptation of matriculation tests to the stage of intellectual development of the average matriculant."

## ENGLISH IN THE UNIVERSITIES.

The reaction that has happily set in against the comparative neglect of English literature proper in our educational institutions of all classes is making excellent progress. It has reached the Universitics. Under our system it is evident that the matter is very largely in the hands of the authorities of these higher institutions. The courses in the High schools are naturally and necessarily shaped, to a very great extent, by the requirements of the Universities ; and those of the Public schools, in their turn, by those of the High schools. Hence it is very gratifying to find that the authorities of the Universities are coming to recognize the place and value of English classics in their curricula as never before. They are coming to see, too, that the prime requisite is not so much a study of the history and growth of English literature or the biography of authors, or the opinions of literary critics as to the style and merits of individuals or schools, or even nice questions of philology,
though all these have their place and use, as the intelligent reading and appreciation of the literature itself. The trend of University opinion in this direction is well marked in the public addresses which havedately been given by the Professors of English in two prominent Ontario Universities.
Professor Alexander, the first occupant of the Hewly established chair of English in the Uni versity of Toronto, in his inaugural address a week or two since, spoke on this point as follows:
We quote from the Globe report:
" The term literature, like most others, is ambiguous in its use, and susceptible of a wider or of a narrower meaning. If we take it in its widest sense-in the sense sanctioned by its etymology
-literature is written thought. Anything written, provided it is not a mere jumble of words or letters, but represents some idea, belongs to the domain of literature. Not merely the stately epic, the elaborate philosophical treatise, but the familiar letter, the monumental inscription, the scribbled sentences on Pompeiian walls, form a part of the literature of the world. So that we may find ourselves concerned not only with such works as "The Iliad " or " Lear," but with others like "Euclid's Elements," or Darwin's "Origin of Species," whose claim to the title of literature Would be less generally admitted.
"The scientific man reads the "Origin of Species" mainly to get at the truth it may contain or suggest. The literary student, as such, stops short of that ; it is his peculiar business to determine what exactly Darwin meant. So it is that we students of literature are interested in ill departments of thought and yet stand apart from and outside of all.
"Two great results which may be expected to flow from all genuine literary training, are first, openness of mind, that is, a readiness to admit ideas however strange, and to comprehend and accept whatever of truth they contain; secondly, flexibility of mind, the capacity to seize a point of View not our own, to understand other men and other times, what, in short, we may call intellectual sympathy.
"Through literature we are able to feel the kindling spiritual presence of the mighty dead. It is true that but few can thus transmit themselves through the ages; but these few are among the greatest spirits of our race. The power of style in the highest degree is the prerogative of genius alone. When style, in that highest de-
gree, is present, we are not merely told how the gree, is present, we are not merely told how the Writer felt, but his feelings are communicated to Us; not how he saw, but we are enabled to see as he did; not what manner of man he was, but We are introduced into his very presence. In the sphere of studies I know nothing comparable to this. History and biography tells us about men; we see them imaged in a more or less perfect medium, but here we feel the thrill of their emotions, the power of their presence. So that not only does literature bring us into contact with ideas, the higher literature brings us into contact with men, the choice and master spirits of all ages. Here is a society ever open to us, the best and most desirable we can conceive-the truest aristocracy of the human race in their happiest moods, with their wisest and deepest though on their lips."
Professor Cappon's address on the same subject at the opening of Queen's University is more elaborate and lends itself even less readily to the purposes of detached quotation. In regard to both there is danger of misrepresentation and consequent injustice in the selection of the pas-
sages which present merely the point of view we wish to emphasize. In order to counteract any tendency towards this effect we shall be glad, if space permit, to quote passages bearing on other phases of the subject, in a subsequent issue. At present we can but select a paragraph or two, for their own intrinsic worth, and for the valuable pedagogical hints they convey.

After referring to the extravagant notions current in some quarters with respect to the qualifications needed in the incumbent of the chair of English Literature, and making some well-merited strictures upon Professor Freeman's idea that English literature should not be taught in Universities at all, " because it does not deal with facts, but is a matter of pure taste and opinion, on which there is no agreement, and again, because, in his opinion, it cannot be taught (especially because it cannot be crammed), and, lastly, because it cannot be examined upon," Professor Cappon proceeds, as reported in the Kingston Whig.
"Philology, Mr. Freeman proudly reminds us, is the study of facts. Very well. I would ask, what kind of facts is philology concerned with ? What are the materials to which it directs the attention of the student? As everyone knows, these materials are the changes which words undergo during the growth of a language, such as inflectional decay, vowel gradation, transmutation of consonants, etc. It is certainly very interesting, and it is certainly an essential part of a good education in English to know, for example, that the quiescent $g h$ in such words as brought, thought or taught is all that is left to remind us of the ancient guttural sound of the $h$ in the original Anglo-Saxon words. It is interesting, and, for the scholar, profitable to know that this was one of the many similar changes due to the dislike of the conquering Normans for what they considered harsh Teutonic sounds; it is interesting and profitable to know that the Scotch, less subject to Norman influences than the English, preserved the old guttural sound in their language, and continued to say thocht, brocht and so forth. More than all, perhaps, it is interesting and profitable to know or to speculate upon the value of the tendencies thus introduced into the English language, though, at this level, I fear we are no longer in that region of pure facts with which alone Mr. Freeman would have us deal.
"All this I say is interesting and by no means to be neglected in the equipment of an English scholar. But I would not have the student confined to it. I even think it is not advisable to make this side at all predominant in the education of the average student, because it is not the side of English education which has any important bearing on life, or which will greatly help the student when he goes forth into the world to win a place for himself as a business man, or as a professional man, or simply as a man of intelligence and culture. It is a wellknown fact, for instance-Mr. Freeman himself would hardly dispute it-that the philological knowledge of words contributes little or nothing to the power of using them. No one ever thinks of taking the writings of philologists as models of style. I think we may even go so far as to say that to turn the student's attention mainly or altogether to the minute analysis of words, would not only stunt the growth of his ideas, but also his power of expressing them. For the true method of acquiring a command of language is by studying not the isolated forms of words, but words taken in their connection with the ideas which they express. So that by concentrating the student's energies on the study
of words taken in themselves, you form a habit of mind which has no intimate relation to the real use of the books he reads, you train him on a line which leads him neither to a mastery of ideas, nor to a mastery of expression.
"And what would be the mental condition of the average student, if during the formative years of his youth his mind were to be directed mainly or altogether to the history of vowel shiftings and the low Latin ancestors of words in Milton? Could the student so trained be said to have received an education which, in any sense, was a preparation, an equipment for life, either in its higher or lower aspects? Such a man takes up, say, Bacon's essays, and his eye lightens, his countenance brightens with the inward glow of thought, but not at some wise sentence of the great master, not at some finely cut phrase which is a revelation of the living powers of language, but at some obsolete Latin formation which happens to be embalmed in the sentence. Surely, gentlemen, we are to test the value of a study by the value of the mental habit which it forms ; surely the result of such a one-sided training would be to form a highly specialized habit of mind which might very well befit a professor of Middle English or philology, but which can be acquired only at the risk of leaving uncultivated faculties of perception and judgment in a much more important region. Such a student has not been taught the practical use of language; he has not been taught anything of the growth in character and ideas of the nation or race to which he belongs, of the long struggle its great writers and thinkers have had to express each for his age, from the author of the Beowulf to Robert Browning, its deepest thoughts about life and its problems. And if he is ignorant of this past, he has no key to the present, but is liable to misjudge all the higher phenomena of life, to be caught with crude novelties in art and speculation, with theories that Bacon wrote Shakespeare, or to believe that the local poet is on a level with Wordsworth or Byron.
" He has not even been taught the real use of books, or to appreciate the end for which they were written. He has been accustomed to regard them mainly as embalming by some happy accident, interesting examples of vowel shiftings and obsolete formations."

The following figure should have appeared at the head of the Mathematical Department, page 191, but in " making up" the cut was inadvertently left out. We insert it here for reference.


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.

## Correspondence.

## A HEADMASTER'S COMPLAIN'I

To the Editor of the Educational. Journal
SIR,--The regulation requiring candidates to write on the First A and B Examinations in May is a real grievance to headmasters who wish to proceed to those grades. An assistant teacher can generally secure leave of absence to attend an exmmination, and know that not much loss is occasioned to the school by his absence; but it is quite different in the case of a headmaster.

The writer is acquainted with several head masters of large Public schools who would read for Grades $A$ and $B$ if the examinations could be taken during vacation. Doubtless there are many such
It is clearly the duty of the Department to use every possible means to encourage teachers to rise in their profession, and surely some scheme can be devised whereby this obstacle in the way of their progress may be removed.
I think the question of sufficient importance to claim the immediate attention of the Department. I am, yours truly,

Headmaster.

## PUBLIC SCHOOL COURSES.

To the Editor of the Educational Journal
Sir,-A not unfriendly critic, in the edition of the Journal of Sept. 16th, considers some of the statements in my letter regarding the programme for Public Schools as "slightly erroneous." I am glad the fault is no greater; and if the subject were not of such importance, a reply would be uncalled for. As it is, "Educator" has not supreasoning and common sense" of which he speaks.
"Of the time spent by a pupil in school under a good teacher, the most valuable part is that spent in class," is the first statement of mine from which he dissents; and he fears that, without comment, this statement would lead some teachers to neglect desk-work. I entertain no such fear ; but "Educator's" comments, except the last one, are, in the main, good, and fully supply any defect in mine.
"In class a pupil cannot use the knowledge imparted to him by the teacher, and, therefore, must use it at his desk," he says. What, in "Educator's' opinion, should the pupils do in class? Is it possible he would have them listen only while the teacher imparts a stock of knowledge to be used only at the desk? Is the mental meal to be swallowed whole? Is nothing to be drawn from the pupils' previous knowledge to be applied in deducing new principles and knowledge?
He considers that, as the pupil can use the imparted knowledge only at the seat, desk-work is as Under his class-work.
Under his method of conducting a recitation, it might be. Properly conducted, the class-work arouses all the mental powers called into action by
the lesson; it directs, stimulates and animates all the lesson; it directs, stimulates and animates all
good desk-work : and in proportion to the excellence of the class-work is the benefit of the deskwork. As I pointed out in my former letter, the lower classes especially need class-work: and the rural schools contain proportionately few in the higher classes. It does not seem to have occurred to "Educator" that unless the teacher can get time to supervise the work done at the desks, it will do little good, and may even do harm, leading to careless and inaccurate work.
His next criticism is not better supported, and is not so fair. He substitutes for the word "course" the word "subject," which he may, perhaps, consider synonymous. "Does it matter," he asks, "how long it may require a pupil to complete a subject?" Surely the Department in laying down a course of study in History and Geography ex-
pects that the pupil who spends an average time in attendance at school, should complete it with proper teaching and study; and to both pupil and parent, where the time at school must be limited, it does matter how long it takes to complete the course. Why does the course of study prescribe that the History taught the fourth class is to be "Outlines of English and Canadian History," if it does not matter whether the pupils learn more than the reign of a single sovereign? But it is needless to say more on this point.
"Suppose the Departmentarranged a programme
suitable for all schools, then teachers would besuitable for all schools, then teachers would become mere imitators."

Certainly, if the programme could not be improved it would not be wrong to adopt it ; but a teacher who should adopt a programme mercly because it was issued by the Department and not because it was the best for his school, would not be a credit to his profession. But the teachers of Ontario display as much originality and as little servility as any class of persons engaged in professional work, and are in no danger of such an error as "Educator" supposes. He gives us a definition of himself, so to speak. He tells us, "All true educators are earnest, independent thinkers, and enthusiastic workers." It is but courtesy to presume that he is a "true" educator. Does he then fear he might lose his independence of thought should a Departmental programme be issued? Or would he nobly stand while others yielded? "If a teacher can modify a programme arranged by the Department, can he not as easily form one of his own better suited to .... his school?" he asks again. If "Educator" had ever tried to arrange a programme for a rural school under the present
course of study, he would not have asked this course of study, he would not have asked this question.
He protests against striking off any subjects from the course, and tells us that "the aim of our present system is to place the ungraded schools on the same footing as the city schools." That is to say the Department, by requiring the rural schools to conform to the course for city schools, expects
one teacher to teach as many subjects and almost as many classes as the dozen or more teachers in the Wellesley, Dufferin or Ryerson schools in Toronto have to teach; and expects the country pupil, whose attendance, after he reaches the Third class, extends over from three to six months a year, to "keep abreast" of the city pupil with all his city
advantages.

That
That those who manage the educational affairs of best Province aim to make the system of Ontario the best possible, none but chronic grumblers doubt; but they have before this demonstrated their fallibility; and, in the present case, expect more of the country teacher and country pupil than either can pro
perly perform. perly perform.

John Wallis.

## THE ENGLISH LANGUAGE.

To the Editor of the Eoucational Journal.
Sir.-Would not a few minutes' study of the following figures allay the fears of those slaves of a mistaken zeal who have become alarmed because a few children in the counties of Prescott and Russell, and in the Province of Manitoba, are being made acquainted with the lower branches of the
tree of knowledge in their mother tongue? Two tree of knowledge in their mother tongue? Two
centuries ago, when Bacon, Shakespeare and Mil ton wrote, the English language was spoken by only five or six millions of people. Even one century ago it was the language of only fifteen millions, while at the same period German was spoken by forty millions, and French by thirty millions. At the present time German is the language of sixty millions and French of forty millions, while the English language is now spoken by about a hundred and ten millions, or several millions more than those speaking German and French. It is spoken by thirty-eight millions in the British Isles, sixty
millions in the United States, millions in the United States, four millions in Canada, four millions in Australia, two in the West Indies, and inore than a million in India.

The spread of the English tongue is the most remarkable event in the world's history. It is met with in every accessible part of the world. Last fall, when Nansen, the explorer, arrived at Godhaab on the west coast of Greenland, the first question asked him was, "Can you talk English ?" The number of English-speaking people in Paris is alevery large European city. Perhaps the most noticeable fact is that at the recent conference held in Berlin for the settlement of the Samoan affairs the English language was adopted as the instance of the of communication. This is the first instance of the kind, but it certainly will not be the last. No artificial Volapuk is at all necessary, as our friends, the American politicians, may become reconciled to the inevitable fact that they will eventually only form part, but it may be the larger
part, of one great English-speaking confederacy for the result would be the same whether the
United States, Britain, or both were given a new name.
J. R

## THE INDUCTIVE METHOD.

To the Editor of the Eotcational Jourmal:
SIR,--I have just read your remarks in the last number of the EDUCATIONAL Journal, upon ${ }^{3}$ short letter addressed to you by myself, touching the so-called "vigorous discussion" on the "in" ductive method" of teaching grammar.
I objected, and do still object, to this treatment of the subject of grammar, not only as a misapplication of method, but also on the score of wasting time and so of rendering the study of grammar itself an irksome drudgery. Believing that there was a misapplication of method in the case of grammar, and indeed of other branches of study in our High schools, I requested you to apply your method to certain specific topics in which failure or success would be signal.
In answer to my inquiry, you have been pleased to indulge in irrelevant remarks, as, for example, the time at which it would be proper to have a boy commit to memory the rules for the gender of the third declension in Latin, and to what extent the
rules should be learned, and so forth. Now, I did rules should be learned, and so forth. Now, I did matters ; what I did ask you to do was to apply the "Inductive method,' inter alia, to the learn ing of the rules for the gender of Latin nouns of the third declension. This you have not done Why not? Either you could not, or would not Choose which alternative you will. Neither is worthy of your reputation as a candid man, scholar, and an educationist. You tell us that the inductive method is applicable" in the study of the syntax of the collective noun in English." again, instead of applying the inductive method to the case in hand, you endeavor to escape from the enough when you have scolded Lennie. strangely enough, you state in the same parag that "the same (!) rule may be elicited from a pupil of average intelligence, by the examination a fow simple sentences." The rule here referred is the rule laid down by Lennie-wrong, appa ently, as being laid down by Lennie ; but unexcep tionable when deduced from a feat simple sear tences by a pupil of average ability! You furth say that "few mental processes are easier," an "the process itself is educative beyond comparison with (?) the memorizing of a rule laid down by some [not all, of course] grammarian." Professor Bain, also a great man, but not quite so bumptious, remarks, "They [collective nouns] occasion diffi. culties in syntax." Dr. Abbott and other gram marians have found the same difficulty. But, then, benighted men, they had not the advantages which the "Inductive Method" now confers upon "any" pupil of average intelligence," who examines a few simple sentences, and heigh, presto ! the thing is done. Perhaps, however, it is only the "pupil of average intelligence" that finds no difficulties. Master Robert Shallow never finds difficulties.

Here are a few examples for your average pupil to try his inductive method upon, to examine, an to "elicit" therefrom his rule. Let him say i each case why the given verb is singular or plural "The jury were kept without food." "The jury "was in its room."
"The Parliament is dissolved
"How are the Parliament to be awakened from that dust in which they repose?" Each of the pre" ceding has the approval of a grammarian.
The next case to which you were asked to apply your "Inductive Method" was in distinguishing metaphor from allegory.

Here, as in the other cases, you fail to apply your method, and content yourself with speculating as to the way in which I would point out the differ ence between them, and with contrasting $m$ method with that of a certain educator, at whom am credited with a disposition to sneer.
You surely must have been hard pressed when you were thus driven away from the task set, whicl was, not how I taught the difference between the figures of speech specified, nor how your educato might proceed in the case, but to show the differ ence between them, and that, too, by the "Induc me that your "educator" had a red nose, loved ${ }^{\text {a }}$
good dinner, and was born at two o'clock in the afternoon, as to wander away from the subject as you have done; still, it may have been all that your method enabled you to do. To tell you the truth, I doubt very much whether your educator is able to point out the difference between metaphor and allegory, with all his inductive foolery. What is needed here is keen analysis, and not the thrusting in one's face of the ostentatious vanity of induction.

My object here is not to decry the " Inductive Method" in its own place, but to show the egregious folly of hollow form without any life or power. More than this, I have invariably found great sticklers for method great wasters of time, and mere creatures of routine. Give me a man with a head, with life, and I will answer for the re sults.

Let me say, in conclusion, that I hope nothing in my letter is incompatible with the respect justly due to you as a man of high scholastic attainments, nullius addictus jurare in verba magistri. I like to proceed in examining every subject with the torch of self-evidence in my hand, and, therefore, I cannot consistently object to criticism, so long as criticism gives reasons.

Yours very respectfully,
N. R.

Politeness is to do and say
The kindest thing in the kindest way.

## Mathematics.

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

## TRISECTION OF AN ANGLE.

Benson's RULE.--Take a circle whose centre is A , at the middle point B of the radius AC erect a perpendicular BH , curting the circumference in H through H draw the line EH parallel to the diameter DC, and meeting the tangent DE at E; let ODC be the angle to be trisected; lay off the line $H I$ equal to $E F$; join I to the centre A ; then arc MC will be $1 / 3$ of OC, and MDC will be $1 / 3$ of the given angle $O D C$.

We will prove this is not the case when ODC cquals $45^{\circ}$. In this case $\mathrm{OC}=90^{\circ}$, and AG is perpendicular to Gi. Since $E D F=45^{\circ}=E F D, E F=$ $E D=H B=H I$. Suppose $A H$, the radius $=2$, then $A B=1$ and $H B=A G=\sqrt{4-1}=\sqrt{1} \frac{1}{3 .} \quad$ In triangle $\mathrm{AGI}, \mathrm{AG}=\sqrt{3}, \mathrm{GI}=\mathrm{GH}+\mathrm{HI}=\mathrm{AB}+\mathrm{BH}=1+$ $\sqrt{3}$, then $A I=\sqrt{3+I+2 \sqrt{3}+3}=\sqrt{7+2 \sqrt{3}}=$ 3.23482, $\mathrm{AG}=\sqrt{3}=1.73205 . \quad \mathrm{AI}: \mathrm{AG}:!1: \operatorname{Sin}$ GIA, or $3.23482:$ I. 73205 : : 1 : Sin GIA, and GIA $=1 \mathrm{AC}=\mathrm{MAC}$.
So $\operatorname{Sin} M C=\frac{1.73205}{3.23482}=.53543=$ natural sine of $32^{\circ} 22^{\prime}$. But Mc should be $30^{\circ}$, to be the third of $\mathrm{OC}=90^{\circ}$. Hence Benson's rule gives an incorrect answer.
Mr. Benson also claims to have solved the quadrature of the circle and from that the duplication of the cube. He says the ratio of the circumference to the diameter is exactly 3, and not $3.1416+$. This is also wrong, because the perime ter of a regular hexagon is 6 radii or 3 diameters and the circumference is greater than the perimeter of the hexagon.

This is simply another instance in which the human mind has come under a remarkable delusion as to the problems of the duplication of the cube, the quadrature of a circle, and the trisection of an angle, which have been for many centuries pronounced insoluble.
Prof. Benson says he has published a course of Mathematics on this basis, which basis I have shown above to be erroneous. He has persisted in these claims for about thirty years, presenting them, he says, in every part of the world, and of fered a large reward for a proof that he is mistaken. I hope he will remit the reward to $S$. T. Pendleton, Richmond, Va.

ENTRANCE ARITHMETIC, JULY, 1889.
Solutions by E. Richmond, Marnoch, Ont.:
I. 3 lbs . wheat make 2 lbs . flour.

60 lbs or I bus. wheat make $\frac{8}{3}$ of 6 lbs , or 40 lbs. flour.

343 bus. wheat make $40 \mathrm{lbs} \times 433 \mathrm{lbs}$. flour.
$\frac{40 \text { lbs. } \times 343}{196 \mathrm{lbs}}=70$ bbls. flour.
2. $8 \%=\frac{\sigma^{2}}{2} \cdot 2_{2}^{2}$ of $\$ 597.50=\$ 37.80$ Int. for I yr .

2 yrs .5 mons. 12 days $=2 \frac{9}{20} \mathrm{yrs}$. $\$ 37.80 \times 2 \frac{9}{20}=\$ 117.1$ I total Int.
3. At the end of 7 hrs A has gone 28 mls . and B 2 I mls. or they are ( 28 mls . -21 mls .) or 7 mls . apart, and if A walks back he will walk 4 of the seven miles, while B walks 3 mls., or altogether B walks $(2 I+3)$ or 24 miles.
4. $5280 \mathrm{ft} .=\mathrm{I} \mathrm{ml}$.

Circum, of wheel $=5280 \mathrm{ft} . \div 360$ or $14 \frac{8}{8} \mathrm{ft}$. Diameter $=\frac{5_{2}^{2}}{2}$ of $\frac{44}{3} \mathrm{ft}$. or $4 \frac{2}{3} \mathrm{ft}$.
5. $10 \%=\frac{1}{10} \therefore \frac{1 i}{d}=$ pop. at end of ist yr. $\frac{11}{10} \times \frac{1}{16}$ or $\frac{121}{10}$ " " " " 2nd "
$\frac{11}{16} \times \frac{11}{10} \times \frac{11}{10}$ or $\frac{1331}{1080}$ " " " 3 rd"
$133 \frac{3}{0}$ of 1000 or $13310=$ population.
6. I inch represents 8 miles.
. $1 \frac{5}{6}$ inches represents $10 \frac{1}{2}$ miles, and $1 \frac{1}{8}$
or the township is $10 \frac{1}{2} \mathrm{mls}$. by 9 mls .,
which is equivalent to $94 \frac{1}{2} \mathrm{sq}$. mls.
$640 \mathrm{ac} . \times 94 \frac{1}{2}=60480 \mathrm{ac}$. in township.
7. The use of $\$ 35$ for $3 \frac{1}{3} \mathrm{yrs}$. or 40 mons is $\$ 7$.

| $"$ | $"$ | $\$ 1$ | $"$ | $"$ | 40 | $"$ | $\$ 1$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $"$ | $"$ | $\$ 1$ | $"$ | $"$ | 1 | $"$ | $\$_{2} \frac{1}{0}$ |
| $"$ | $"$ | $\$ 8750$ | $"$ | $"$ | 1 | $"$ |  |
| $\$ 8750$ |  |  |  | or | $\$ 43.75$. |  |  |

8. $\frac{1}{4}$ mile $=\mathrm{I} 320 \mathrm{ft}$. length of sidewalk.

Length and breadth ( 8 ft .) $=10560 \mathrm{sq}$. ft. if the walk were I inch thick or 21120 sq . ft . when inches. The scantling are each 1320 ft . long, and if placed side by side are equal to four inch boards each I ft . wide or 5280 sq . ft . Total number of feet of lumber $=26400$ at $\$ 17$ per thousand equals $\$ 448.8 \mathrm{o}$.
9. By adding the amounts vertically and horizontally and then adding the results, the result is \$ilifiti.
Problem.--To find sets of whole numbers which represent the sides of right-angled triangles.
NOTE.-This problem was discussed in previous numbers, see June and Oct., 1887, and Feb., 1888. The following solution is taken from Prof. Dupuis' Synthetic Geometry, to which we recently referred in this column.

This problem is solved by any three numbers, $x, y$ and $z$, that satisfy the condition $x^{2}=y^{2}+z$ Let $m$ and $n$ denote any two numbers. Then since
$\left.\left(m^{2}+n^{2}\right)^{2}=\left(m^{2} \cdots n^{2}\right)+2 m n\right)^{2}$ is identically true, the problem will be satisfied by the numbers denoted by $m+n, m^{2}-n^{2}$ and 2 mn . We may by giving $m$ and $n$ any values construct the following table, which can be extended at pleasure :-

|  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 5 | 10 | 15 | 26 | 37 | 50 | 65 | 82 | 101 |
|  | 3 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 |
|  | 4 | 8 | 17 | 24 | 35 | 48 | 63 | 80 | 99 |
| 2 |  | 13 | 20 | 29 | 40 | 53 | 68 | 85 | 104 |
|  |  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
|  |  | 5 | 12 | 21 | 32 | 45 | 60 | 77 | 96 |
| 3 |  |  | 25 | 34 | 45 | 58 | 73 | 90 | 109 |
|  |  |  | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
|  |  |  | 7 | 16 | 27 | 40 | 55 | 72 | 91 |
| 4 |  |  |  | 41 |  |  | 80 | 97 | 116 |
|  |  |  |  | 9 | 48 | 56 | 64 | 72 | 80 |
|  |  |  |  | 40 | 20 | 33 | 48 | 65 | 84 |
| 5 |  |  |  |  | 61 | 74 | 89 | 106 | 125 |
|  |  |  |  |  | 60 | 70 | 80 | 90 | 100 |
|  |  |  |  |  | 11 | 24 | 39 | 56 | 75 |

Mr. W. S. Howell, of Sombra, gave a solution of this problem in the Dec. number of 1887 . He sends us a new and improved solution, which runs thus :-In every right-angled triangle $\mathrm{B}^{2}=\mathrm{H}^{2}-\mathrm{P}^{2}$ Let $\mathrm{H}-\mathrm{P}=\mathrm{d}, \therefore \mathrm{B}^{2}=2 \mathrm{Pd}-\mathrm{d}^{2}$, or $\mathrm{B}^{2} \div \mathrm{d}=2 \mathrm{P}-\mathrm{d}$ i.e., $\mathrm{B} \div \mathrm{d}=\mathrm{P}+\mathrm{H}$. For instance, with 12 as base we derive in integers $20,15,25 ; 20,21,29 ; 20,48$, $52 ; 20,99,100$; and in fractional numbers we get $20,199 \frac{1}{2}, 200 \frac{1}{2}$, etc. The application of the formula seems a little obscure
W.A.M., Watford, sends the following :- "The product of four consecutive numbers is 73440 ; find them." This has been solved several times be fore, but as it is often sent we repeat the solution from Feb., $1888: 73440=2^{5} \times 3^{3} \times 5 \times 17$. Thus 17 or some multiple of 17 must be one of the consecutive numbers, and we easily arrange the factors $15 \times 16 \times 17 \times 18$, the only combination possible.
One correspondent says, "You complain that teachers do not respond sufficiently to your requests for solutions to the problems given in the Journal." This is a mistake; we receive a large number of solutions where only one can be printed and we do not always consume space in giving the names of all who send solutions. This friend kindly adds, "I am sure it cannot be that teachers do not sufficiently appreciate your work. The work you give us is well laid out, and is as interest ing as possible." Our aim is to make this column useful to working teachers, and we constantly request them to keep us well posted in regard to their special wants.

Mr. J. Malcolm sends a clever discussion of No. 67, which is held over till the necessary diagram can be obtained.

Mr. J. B. Reynolds, Enfield, has solved most of the questions in Oct. number; R.G.L., Binford, asks for a solution of one of the 3 rd class ques tions, which he thinks contains insufficient data.

Mr. F. A. Bartlett, Tweed, solved three of the problems in last issue.
Dominie sends No. 79. What will be the proceeds of a note, face value $\$ 150$, due in three months, bearing int. © $6 \%$, discounted 15 days from the date of maturity @ $4 \%$ ?
J.B.R., Enfield, proposes No. $80:-$ If $a^{2}+b^{2}=$ $c^{2}$, prove that abc is a multiple of 60 .

Sax adds No. 8I
Find the sum of $\frac{1}{3.6} \cdots \frac{1}{6.8}+\frac{1}{9.10}-n$, to

## terms.

And No. 82 :-Find the present value of an annuity of $\$ 154$, which has 19 years to run © $5 \%$ compound interest.

## For Friday Afternoon.

## TRUE HEROISM.

A STORY FOR REPRODUCTION BY PUPIIS
THERE are heroes among the pupils. Here is an instance among many that might be written :
Two boys were in a school-room alone together, and exploded some fireworks contrary to the mas ter's express prohibition. The one boy denied it The other, Ben Christie, would neither admit nor The other, Ben Christie, would neither admit nor
deny it, and was severely flogged for his obstinacy. deny it, and was severely flogged
When the boys got alone again-
"Why didn't you deny it?" asked the real of fender.
"Because there were only we two, and one of us must have lied," said Ben.
"Then why not say I did it?"
"Because you said you didn't, and I would spare the liar."
The boy's heart melted. Ben's moral gallantry subdued him. When school re-assembled the young culprit marched up to the master's desk, and said:
"Please, sir, I can't bear to be a liar-1 let off the squibs." And he burst into tears.

The master's eyes glistened on the self-accuser, and the undeserved punishment he had inflicted on the other boy smote his conscience. Before the whole school, hand in hand with the culprit, as if he and the other boy were joined in the confession, the master walked up to where young Christie sat, and said, aloud :
"Ben, Ben, lad-he and I beg your pardon. We are both to blame."
The school was hushed and still, as other schools are apt to be when something true and noble is being done-so still that they might have heard Ben's big boy-tears dropping on his book, as he sat enjoying the moral triumph which subdued himself as well as all the rest. And when, from want of something else to say, he gently cried, "Master forever !", the loud shout of the scholars filled the old man's eyes with something behind his spectacles which made him wipe them before he sat down again.

## Educational Meetings.

## DURHAM TEACHERS' ASSOCIATION.

The annual meeting of this Association was held at Bowmanville, on the Ioth and IIth ult. In the absence of a fuller report of proceedings we take the following from the Bowmanville Sun.

Many interesting. lectures were given-those of Mrs. Hughes and Messrs. Boyle and Cringan, of Toronto, specially engaging the attention of the Association, while the discussion of the several subjects introduced by Messrs. Philp, Purslow, L.ee, Fenwick and Tilley could not fail to be of great value to the teachers. As a result of the discussion of the subjects presented by Messrs. Lee and Cringan, the following resolutions were unanimously carried :

1. That in the opinion of the teachers of Durham the book at present authorized as a Püblic School History is wholly unsuitable for the purpose for which it was intended, in language, method, style, arrangement and compass ; and that we request the Minisbooks.
2. That in view of the adaptability of the tonic solfa system of musical notation to the requirements of both pupils and teachers in our Public schools, it be resolved:-That in the opinion of this Association it is highly desirable that the tonic sol-fa system be placed on an equal footing with the common staff system; and that in order to secure this, the Minister of Education be requested to authorise the series of text-books known as "The Canadian Music Course."

It was thought desirable to bring the County Association into closer connection with the Provincial
body, and Messrs. Keith and Wood were appointed body, and Messrs. Keith and Wood were appointed delegates, their expenses being paid out of the funds in the Treasurer's hands.
The officers-elect for $1889-90$ are as follows :President, R. A. Lee; Ist Vice-President, R. D. Davidson; 2nd Vice-President, M. M. Fenwick; Secretary, Miss Haliday ; Treasurer, J. Gilfillan.
Bowmanville Sun.

## RENFREW TEACHERS' ASSOCIATION.

Condensed from Mr. Barclay's Report in the Arnprior Chronicle
The meeting of the Teachers' Association of the County of Renfrew was held this year in Arnprior on Thursday and Friday, Sept. 26th and 27th.
PRESIDENT'S ADDRESS.

Mr. McDowell gave a very suggestive address on the position and duties of the teacher. He pointed out the improvement that had taken place in the
teacher's position of recent years, and showed that teacher's position of recent years, and showed that
the importance of his duties and his fitness generally the importance of his duties and his fitness generally of a learned profession. Pedagogy, he said, was indeed the highest of the professions, on account of its direct bearing on the development of the child, and consequently on the character of the man in the various relations of life, social, political and religious.
How necessary was it, then, that the teacher should How necessary was it, then, that the teacher should
fit himself for his most responsible duties. How fit himself for his most responsible duties. How
could he best fulfil these duties? By developing all his faculties, bodily and mental, by striving towards an ideal manhood, and by using every influ ence in his power for good. Mr. McDowell concluded an able address by giving some good practical advice as to how a teacher should conduct him-
self in his dealings with the world around him, both self in his dealings with the world around him, both
for his own interests and for the interests of those committed to his charge.

AFTERNOON SESSION.
Mr. C. M. French, of Renfrew, then took up "Literature" to a fourth class, selecting for the lesson "The Landing of the Pilgrims." Mr. French advised getting the theme and scope of the whole lesson before proceeding to detailed analysis. After the explanation who the pilgrims were, had been given, he dealt with the force and value of descriptive epithet, the selection of poetic terms, and the supplying of synonyms to develop the critical and selective faculty. He then collated, or caused the children to collate, the results of the examination in such a way as to present to their minds as vivid a picture as possible of the subject of the poem.
Mr. Wm. Mott questioned the use of transposition in the teaching of literature. Mr. T. C. Smith approved of it as likely to lead to a fuller compre-
hension of the thought. hension of the thought.
Kindergarten Songs
Kindergarten Songs-Miss Lester, of the Arnprior Public school, next put a large class of children through the Kindergarten song-drill ; and the excellent way in which the little ones responded to her, illustrating with corresponding motions the sentiments of the various songs, was admirable, and Mr. T. C. Smith, of Renfrew, followed with paper on English Grammar. Mr. Smith first discussed the usual definitions of grammar, and concluded that they were generally too comprehensive. In dealing with this subject he looked at it from two points of view, the Etymological and the Logical. Under the Etymological he considered the different classes of words and their functions. Under the
Logical he treated the sentence and its various eleLogical he treated the sentence and its various elements, necessary, subordinate and independent. He then showed that language was so classified as the result of the laws of mental activity, which laws result in our baving in the first stage, nouns, verbs, adjectives, adverbs, etc., and in the next stage the various kinds of propositions. Proceeding, he dealt with inflections as resulting from the necessity of expressing relations. He wound up his treatment
of the subject proper with a brief but excellent of the subject proper with a brief but excellent
résume of the history of English Grammar The work history of English Grammar.
officers. Mr. T. C. Smith, Renfrew, was election of officers. Mr. T. C. Smith, Renfrew, was elected
President for the ensuing year, Mr. Lapp of President for the ensuing year, Mr. Lapp, of Pem-
broke, Vice-President, and Mr. Campbell, of Arnbroke, Vice-President, and Mr. Campbel
prior, was re-elected Secretary-Treasurer.
The morning session of Friday opened with Mr, Wm. Mott's "Grammar to a class of Beginners." Mr. Mott defined the object of grammar to be "to speak well and clearly." What is necessary for speech ? First, something to talk about, and then something to say about it. Thus, beginning with the simple elements of the sentence and filling up as was necessary, he brought the class to realize that when they have combined words to express clearly a thought, they have the sentence.
Mr. Mott, having dismissed the class, set for answer or discussion several questions, such as, "Isit better to introduce modifiers of the subject or predicate first?" "Would you introduce the technical terms of the cases at first, or merely have the pupils understand their relations?" etc.

Mr. J. C. Hardie, of Pembroke, followed, taking for his subject "Periods of Growth of English." He treated it under the four periods of OId English, Early English, Middle English, and Modern English, giving dates and characteristics in grammar and Vocabulary of each period. He then discussed the difference between an analytic and a synthetic
language, using in illustration the Old English language, using in illustration the Old English article, definite form of the adjective and noun; with English. He next went on to show that the forms of the Midland dialect prevailed over the Northern and Southern (i) because the district in which the language was spoken was larger than either of the other two and the population much
greater ; (2) because the Midland was, in a mangreater ; (2) because the Midland was, in a manner, a compromise between the Northern and the dialect in which Chaucer wrote the Canterbury Tales.
The next paper was a study of the Trial Scene in "The Merchant of Venice." The paper was not a minute rhetorical analysis of the scene, but an attempt to indicate the kind of thought that should guide the teacher at least, even if not the pupil, in dealing with literature of this high order.
The last paper of the morning session was Mr. Yeo's paper on Composition. Mr. Yeo began by
pointing out that children, when they first come into bad hands of the teacher, have language, good or bad, as home influences decide. The first thing the teacher has to do is to make children talk; then, to make them talk properly. As they go on, give them new terms. Object lessons give one opportunity of teaching them new terms. Other means are, to make them write sentences on the board by asking a question requiring a corresponding answer, or by requiring them to describe a picture, to recast a sentence, etc. A valuable exercise is the writing of sentences for different uses, interrogative, assertive, etc., and of different forms, simple, complex, etc. Then the pupils are to proceed to the formation of paragraphs, after which the matter is
in their own hands. in their own hands.
In the afternoon of the second day came the reports of Messrs. Lapp and Campbell, the delegates to the Provincial Teachers' Association. Mr. Lapp not being present, his report was read and presented by Mr. Corbett. Mr. Campbell, in presenting his report, said that unless conventions remote from Toronto sent a full force of representatives, the control of the Association would be, as it was now, monopolized by a few teachers around Toronto.
An important feature of the meeting was the delivery of Dr. McLellan's lecture on "The Training of the Language Powers," of which a full and appreciative report is given by Mr. Barclay, the reporter of the Convention. Dr. McLellan also deLivered a public lecture in the evening on "English
Literature: its Value in Education."

## CATARRH, CATARRHAL DEAFNESS, HAY FEVER.

## A new home treatment.

Sufferers are not generally aware that these diseas s are contagious, or that they are due to the presence of living parasites in the lining membrane of the nose and eustachian tubes. Microscopic research, howe ver, has proved this to be a fact, and the result is that a simple remedy has been formulated whereby catarrh, catarrhal deafness and hay fever are perma ently cured in from one to three simple applications made at home by the patient once in two weeks. N. R.-For catarrhal discharges pamphlet females (whites) this remedy is a specific. A of ten cents by A. H. Dixon \& Son, 303 West King St., Toronto, Canada. - Scientific American.

Sufferers from catarrhal troub'es should carefully read the above.

## NOTICE TO TEACHERS.

A Teacher required for the proposed Union School, Moose Jaw. Must be a University Graduate. Apply to Wm. Grayson, Sec.-Treas.

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