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The Educational Journal.

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

VOL. I.

TORONTO, FEBRUARY 1ST, 1888.

No. 18.

The Educational Journal.

Published Semi-monthly.

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

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

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

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Rates of advertising will be sent on application.

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

PUBLISHED BY

THE GRIP PRINTING AND PUBLISHING CO.
TORONTO, CANADA.

JAMES V. WRIGHT General Manager.

Table of Contents.

	PAGE.
EDITORIAL NOTES.....	277
EDUCATIONAL THOUGHT.....	278
SPECIAL PAPERS—	
Spelling Reform.....	279
HINTS AND HELPS—	
A Suggestion.....	280
Sayings of Experienced Teachers.....	280
A Few Simple Rules for Young Teachers.....	280
Mathematical Geography.....	280
MATHEMATICS—	
Solutions, Problems.....	281
Dr. Willard's Method of Extracting the Square Root.....	281
SCHOOL ROOM METHODS—	
A Device for Teaching Fractions.....	282
Common Sense Language Lesson.....	282
A Development Lesson in Greatest Common Divisor.....	282
Sense in Arithmetic.....	282
How to Use Picture Cards.....	282
In Primary Reading.....	282
EXAMINATION PAPERS—	
Drzwing, Arithmetic, Geography, English Grammar, Dic- tation, Book-Keeping.....	283
EDITORIAL—	
Pea Soup as a Moral Renovator.....	284
The Color Line in Chatham.....	284
A New Application of an Old Theory.....	285
CONTRIBUTORS' DEPARTMENT—	
How to Regulate the Supply.....	285
BOOK NOTICES, REVIEWS, ETC.....	285
TEACHERS' MISCELLANY—	
Notes on Language.....	286
A Terrible Despotism.....	286
Mr. Balfour at St. Andrew's.....	286
Encouraging for Unsuccessful Writers.....	286
Was.....	286
The Examination.....	286
Every Lesson a Language Lesson.....	286
LITERATURE AND SCIENCE—	
A Commonplace Life.....	287
A Scottish-American Poet.....	287
QUESTION DRAWER.....	287
EDUCATIONAL NOTES AND NEWS.....	287

Editorial Notes.

THE Michigan *School Moderator* says "There are 5,000 teachers in this State who take no educational journal," and adds "there is a chance for missionary work for the 10,000 that do take them." A good suggestion for Canadian teachers who take the JOURNAL, and have the missionary spirit.

THE Humane Society of Toronto is engaged in an educational work of the most valuable kind. In no respect is its influence more beneficial than in encouraging the formation of Bands of Mercy. It would be a grand thing to have one of these Bands formed in every school, in city or country. The only pledge required for membership is a promise to be kind to all living creatures. These societies have a total membership of about 400,000 in the United States. The members wear a small badge. They are said to take great delight in the work and aim of the society, and are often heard begging teamsters in the street to stop beating their horses. Kindness and mercy to all living things are characteristics of the bravest and manliest natures. It is a noble work to save the poor animals from needless suffering, and a still nobler one to train up human souls for thoughts and deeds of mercy.

APROPOS of the subject of private *versus* public schools, we note that the statistics of the Toronto schools for the month of December last give the numbers in some of the classes in each of twenty-five schools as ranging from 70 to 133. The average number in 46 classes enumerated was 82! This is a plain violation of the law, which provides that not more than 50 shall be allowed in any one class-room or division. Fancy one despairing teacher vainly struggling to keep himself or herself in living contact with the untrained minds of 133 restless children. It realizes Sir Walter Scott's famous picture of one against a host indeed! Poor teacher, we pity you, and we pity your pupils still more. After some experience both in teaching and in noting results of others' teaching, we should prefer having a child under fifteen two hours a week with a competent private tutor, rather than sending him to a public school to make one in a class of even fifty, under the best teacher.

DR. MCCOSH, late President of Princeton College, who is one of the foremost educators of the day, once expressed the opinion that children ought not to be sent to school before the age of six years, and that a boy should be ready for college at sixteen. With the first part

of the opinion all thoughtful teachers will agree, if by school is meant the organized public school, with its long hours and rigid programme. The kindergarten comes in here to supply a felt want. From the second part of the opinion we are strongly inclined to dissent. There are, however, so wide diversities in the degrees of maturity of boys at the age mentioned that no definite rule can be laid down, but our experience and observation incline us to the view that, in the majority of cases, the college course will be much more profitable if not entered upon before the age of eighteen or nineteen. This question has an important bearing upon that of the minimum age for teachers, discussed elsewhere in this issue.

WE should be glad to have the views of teachers of experience on the matter treated of in Mr. Lent's article in our Contributor's Department. Nor shall we deny the certificated minors an opportunity to be heard in their own defence. If it be the fact that the supply of teachers in Ontario is so largely in excess of the demand, it is needful, in the best interests both of the profession and of the work, that some remedy be found, else the appeal to the poverty or parsimony of school boards will prove too strong, and we shall see able and experienced teachers crowded out to make room for juveniles who are willing to accept infinitesimal salaries. So far as we at present see, the method proposed is one of the best, and is not inconsistent with others, such as raising standards, etc. It is true that the rule, like most the rules which draw hard and fast lines, would work badly in certain cases, as some minds are better matured at eighteen than others at one-and-twenty. But the same objection lies against the present rule. Some are more mature at fifteen than the majority at eighteen.

WE remark in another paragraph upon the excellent influence of the Bands of Mercy societies, both in preventing cruelty to animals and in ennobling the children. Another, and still more admirable phase of the work done by the juvenile members of these societies, is caring for the neglected waifs of their own kind to be found in the alleys and gutters of the cities and towns, and too often even in the country villages. To enlist the sympathies of children in early life, on behalf of their destitute and suffering brothers and sisters, and thus to inspire them with some of the "enthusiasm of humanity," is not only to teach them to become helpful to their fellow-creatures, practical philanthropists, but to exert an influence of the happiest and most elevating

kind upon their own characters. It has taken long to learn the lesson that education is something more than "doing sums" or parsing, but many in these days are conning it. When it comes to be fully and generally understood that the proper work of the schools is the development of all that is best and highest in child-nature, the world will soon become much better than it is.

VOL. I, No. 1, of "Monographs of the Industrial Education Association of New York," contains two noteworthy articles. The first is, "A Plea for the Training of the Hand," by D. C. Gilman, LL.D., President of John Hopkins' University; the other a paper on "Manual Training in the Public School," by H. H. Belfield, Ph.D., Director of the Chicago Manual Training School. Both papers are able and valuable contributions to the discussion of an educational movement which is making wonderful progress, and is clearly destined to work a great, almost radical, change in the methods of public school instruction. Both writers insist upon the fact that manual training is in itself a part and an important part of education. We are inclined to think that even more stress might be laid upon the point that a sufficient amount of attention to the training of the hand is not only not incompatible with a mental training as thorough as has hitherto been imparted, but may even be made an important auxiliary in such training. The question is not one of less brain and more muscle training, but of a more thorough and harmonious development of both brain and muscle.

AN exchange says that private schools are becoming so much more popular in Massachusetts than public schools that the Governor of the State has felt it to be his duty to refer to the matter in his message. The Governor thinks the State should exercise some sort of supervision over the private institutions now, for, as he explains, the future of the country depends largely, if not solely, upon the character of the education the children are receiving. We are inclined to think such solicitude quite unnecessary. Parents who provide private schools for their children have usually a reason for so doing and may be trusted not to provide an inferior article. We have no doubt that as the country grows older and parents understand better the nature and value of true education and their own untransferable responsibility, they will take the matter more and more into their own hands. The fact is, that in the average public school the classes are much too large to admit of the best educational work, no matter how able the teacher. He must be a poor educator, indeed, who cannot do more for each of six or ten children in private than the best public school teacher can do for each of forty or fifty, not to say a hundred.

A GOOD deal is being said and written just now about the evil involved in the turning away

of so many young men in the country from farming and other industrial pursuits to city and professional or mercantile life. There is, it is to be feared, some truth in the oft-repeated assertions that the under current of influence in our high schools and colleges sets strongly in the latter direction. This is wrong. The moral influence of the schools and courses of study should be thrown, as far as possible, upon the other side. Teachers should aim to impart truer conceptions of the dignity of manual—our pen slipped into "manly," and we should, perhaps, have let it stand—labor, and above all, of tilling the soil. The land is the source of all our wealth. To develop its rich resources to the utmost, is a work demanding and worthy of the highest intelligence. Agriculture, horticulture, stock raising, etc., are really scientific pursuits. Poets and men of refined and elevated natures have always delighted in the sights and sounds, and often in the occupations, of rural life. Only a higher standard of taste is required to make farming one of the most popular and fashionable, as it is always one of the most independent and healthful of pursuits. Teachers and professors should do much to cultivate this taste.

THE following advice, once given by Emerson, is excellent:—"If your pupil, in a proper manner, doubt the correctness of your statement or opinion, and a discussion follow, never attempt to silence him by your mere assertion, but hear his reasons patiently and pleasantly. Welcome the doubting spirit and the zeal in arguing that prove the thinker. Encourage his enquiries, and if he convince you that you are wrong and that he is right, acknowledge it cheerfully, and—hug him." That teacher must be very insecure in his position who cannot afford to admit the possibility that he may be in error on some point of fact or logic. The true educator will welcome, as Emerson says, "the doubting spirit," provided always that the "zeal in arguing" gives evidence of being, in some measure at least, the offspring of love of truth, not mere fondness for cavilling. It is a too common mistake of the teacher, especially the young teacher, to think it would never do to let the pupils know he was wrong. Such an idea does little credit either to the judgment or to the moral sense. It also greatly underrates the average pupil's shrewdness. If the teacher is wrong in a disputed matter the sharp pupil is pretty sure to find it out, and to let his fellow-pupils know it. The loss of prestige in such a case is vastly greater than any which could result from a frank admission of doubt. The latter, too, often becomes an excellent lesson in candor and conscientiousness, setting before the school, as it does, a concrete example of the spirit in which truth should be sought and revered. But the average school-boy in these days will hardly be got to believe in the teacher's infallibility, nor is it desirable that he should.

Educational Thought.

THE primary and fundamental qualification for teaching is generous scholarship, a confirmed love for the scholarly vocation, and a high degree of intellectual training.—*Prof. Payne.*

"THAT which every gentleman desires for his son, besides the estate he leaves him, is contained in these four things:—*Virtue, Wisdom, Breeding, Learning.* . . . I place *Virtue* as the first and most necessary of those endowments that belong to a man or a gentleman, as absolutely requisite to make him valued and beloved by others, acceptable or tolerable to himself."—*John Locke.*

THE empire of this country is no longer in the hands of the large cities, if it ever were. It is in the hands of those large country towns where the best men lead the town, direct its education, its local government, and give tone and courage to its people; towns without rings, towns not governed by bar-rooms. It is the men from these towns who are pushed forward into important public life, and loyally sustained by the American people.—*Edward Everett Hale.*

CHILDREN are very much what their teachers make them. I find plenty of deleterious and detestable influences at work, but they are influences of journalism in one place, in another influences of politicians, in some places both the one and the other; they are not influences of teachers. The influence of the elementary teacher, so far as my observation extends, is for good; it helps morality and virtue. I do not give the teacher too much praise for this; the child in his hands so appeals to his conscience, his responsibility is so direct and palpable. But the fact is none the less consoling, and the fact is, I believe, as I have stated it.—*Matthew Arnold.*

IF, then, we can not contain long the information we receive, what is the use of acquiring it? The answer is, that the man is greater than his memory. Even though the memory let slip the fact, it has made its impression for ever upon the man himself. Hence the value of all miscellaneous reading, of running through all sorts and conditions of books on history, travel, geography, science, biography, philosophy, and religion. It is not necessary for me to keep in my mind that the population of China is three hundred and sixty millions, or that the death rate of that vast empire is a million a month; but it is very advisable that I should once have looked at that figure, pondered it for a moment, as it went by me on the page, and allowed its significance to sink into my mind. Now it exists for me not as a mere number, but as an impression of vastness, solemn and terrible. It has not gone into the mathematical part of me, but into the soul of me; and the word China has henceforth a new interest and a new awe.—*Drummond.*

"THAT 'a little knowledge is a dangerous thing' was a saying that got currency as a proverb stamped in the mint of Pope's versification—of Pope, who, with the most imperfect knowledge of Greek, translated Homer; with the most imperfect knowledge of the Elizabethan drama, edited Shakespeare; and, with the most imperfect knowledge of philosophy, wrote the 'Essay on Man.' But what is this little knowledge that is supposed to be so dangerous? What is it 'little' in relation to? If in relation to what there is to know, then all human knowledge is little. If in relation to what is actually known by somebody, then we must condemn as 'dangerous' the knowledge which Archimedes possessed of Mechanics, or Copernicus of Astronomy; for a shilling primer and a few weeks' study will enable any student to outstrip in mere information some of the greatest teachers of the past. . . . I say, then, that so far from a little knowledge being undesirable, a little knowledge is all that on most subjects any of us can hope to attain, and that, as a source not of worldly profit, but of personal pleasure, it may be of infinite value to its possessor."—*Mr. Balfour, St. Andrew's.*

COURT the fresh air, day and night. "Oh, if you knew what was in the air."—*Iowa School Journal.*

Special Papers.

SPELLING REFORM.

A FEW years ago, Prof. Zupitza, of the University of Berlin, in the course of his lectures on English Philology, having fully discussed the origin and development of all the old English or Anglo-Saxon vowels and consonants, before proceeding to the next division of his subject, used the following remarkable words:—"I shall now proceed, at once, to deal in the same way with Modern English sounds, as I have been doing with Old English, passing over entirely the period known as Middle English, for the simple reason that Middle English and Modern English orthography are practically identical." On another occasion the professor told his students that English pronunciation had so greatly changed since Elizabeth's time that, if Shakespeare and Lord Tennyson could meet in the streets of London, and should speak English as they had respectively been taught to speak it in the schools of their day, they would scarcely understand each other. And yet Lord Tennyson's orthography is almost exactly the same as Shakespeare's. In other words, the same spelling, symbolizing, in one age, one system of articulate sounds, is made, in another age, to represent what, as far as mere sounds are concerned, is almost an entirely new language.

If the spelling of Shakespeare's time represented even fairly well the English language as it was then spoken, how can it do so to-day when, as eminent scholars assure us, the pronunciation is so much changed that Shakespeare would scarcely recognize it?

Again and again, when struggling with those terrible consonantal combinations of the German language, I was told to pronounce exactly as the words are written, and to write them exactly as they are pronounced. What if an English teacher should give the same instructions to a foreigner learning our language? German is really a difficult language for Englishmen to acquire, yet we never hear them complain of its orthography. Even in French, difficult as pronunciation seems at first, spelling presents no serious difficulties to foreigners. Dictation exercises are frequent in all French schools, but it is a well known fact that these are almost solely intended to secure correctness and rapidity in applying the numerous rules of concord. There was a time—long, long ago, alas!—when Englishmen too, wrote their language as they spoke it, and gave to every letter they wrote its own distinct pronunciation. But, unfortunately, as the language changed, and especially as it developed from the stage known as Middle English into the language of Spencer and Shakespeare, it never seems to have occurred to anyone that corresponding changes should be made in the written language, otherwise the new pronunciation would soon outgrow it, as a growing lad does his clothes,—the old orthography, which once served its purpose tolerably well, would no longer do so, and men, instead of writing simply as they spoke, would be obliged to spell in the most irregular and arbitrary manner. As we have already intimated, no attempt was made to adapt the spelling to the current pronunciation; men have clung rather to the old and time-honored symbols, giving them new values with almost every decade, until to-day the result is that, while the English language is the one language in the world best fitted to become the commercial speech of every nation, it has probably the most arbitrary and inconsistent orthography this wicked world has ever seen. The question is often asked, Can nothing be done to ameliorate this unfortunate state of affairs? Are we to go on perpetuating a system of spelling that costs our best pupils so many years of mental drudgery, and that many a grey-haired sire has failed to master in a whole life-time, a system which is daily bringing upon our noble English tongue the deep-muttered anathemas of foreign students in every land, a system, too, which familiarizes our children with deception from their first day in school, for they soon learn that, as far as spelling is concerned, things are not what they seem to be; are we, I repeat, to go on with our absurd system of spelling, without once stopping to inquire whether anything can be done to reduce it to a state of fitness and simplicity in

harmony with the age of enlightenment and progress in which we live? I am glad that the time has come when Englishmen everywhere are beginning to feel that this kind of thing has gone on long enough. We have already, for example, practically discarded the useless *u* of the old affix *our*, in spite of the protests of many who never cease to cry that the new spelling is at once American and barbarous. Even the *London Times*, having discovered that its persistent adherence to the extra letter of the old spelling *our*, costs it about \$2500* a year, is about to give it up and come over to the majority.

Intelligent men everywhere, men, too, who know best the value of time and mental energy, are constantly asking why it is necessary always to write *are*, *bade* (verb), *vineyard*, while we may write *bar*, *bad* (adj.), *tinpan*; why it takes dough to spell *do*, bough to spell *bou*, tough to spell *tuf*, and Gough to spell *gof*, when we always write *so*, *bow*, *ruff*, *off*; or why again, we are compelled to learn and remember that, though we may write *fur*, *concur*, *urchin*, etc., we must, however, always write *her*, *fir*, *labor*, *vinegar*, *courage*, *amateur*; or in other words, why a certain sound may be symbolized not only by any of the five vowels, but also by several combinations of vowels? Why not cease to write all phonetically useless letters, and give up the useless habit of symbolizing the same sounds in a variety of ways? Why not make up our minds that, if the simple phonetic symbols *so*, *bow*, *bad* are and have been, for a long time, sufficient to represent the words *so*, *bow* and *bad* in certain significations, they can just as well stand for the same sounds in all their significations? "That would never do," we once heard Dr. Daniel Wilson say; "it would completely change the appearance of our time-honored written speech. When I was at college" he continued, "our library society received an English weekly paper published according to a phonetic system of spelling, and I remember that our janitor always placed it among the foreign journals."

This may be all quite true, but is it after all such a serious objection? Such a system would have to be introduced gradually. Educated people would get accustomed to it in a short time, and even poor readers would probably not find nearly as much difficulty in learning the new orthography as they found in learning our new decimal currency a few years ago. When in Berlin, I frequently had to read grammar books and periodicals printed phonetically, yet, though at first the absence of certain letters made many words seem unfamiliar, it was only for one or two readings; after that the useless absent letters were never missed. Much less difficulty, if any, should we have with our own language written phonetically.

Another objection to phonetic spelling is that the next generation, knowing only the new orthography, would be unable to read the old, and that our great libraries would be useless to them. It does not, however, follow that the next generation, having adopted the new orthography, would be unable to read the old.

The child that had learned to read and write the new orthography, would soon learn unaided to read the old; just as our children now have no difficulty in reading the grinning orthography of Josh Billings; but, always using the new and easily acquired method themselves, they would never trouble themselves to learn to spell or write by the old method.

On mentioning the matter of spelling reform one day to one who is looked upon as a leading advocate of enlightened methods of teaching, the principal of a training school, in fact, I was surprised to find him stoutly opposed to any change in this direction. He admitted that our spelling was bad, full of irregularities and perplexities. To my remark that our present system in constantly presenting needless difficulties to the child, in its being a mediæval system that had long since ceased correctly to symbolize our spoken language, was a system utterly out of harmony with the spirit of enlightenment and progress of our age, he replied that, in his opinion, a child learns what combination of letters symbolizes a given word just as it learns what picture represents a given object; that having from our earliest years learned to associate our present word-signs with the words themselves, we really do not feel the need of the changes proposed. In other

words, he had always been accustomed to write as we do at present, and so had his father and grandfather before him; words in their new dress would look like strangers, and hence he would cling to the associations of childhood. On the same ground precisely, Prince Bismark rejects every proposal to discard the antiquated German text in favor of the almost universal Latin character. He does not like the looks of the Latin letters; he has always used the German national script himself; and, therefore, he strenuously opposes any change whatever. It is for the same reason that the Hindoo street-sweeper constantly uses a short-handled broom, that compels him to bend his back into a fatiguing and uncomfortable position, instead of the long-handled European article which he may have for the asking. His father always used a short-handled broom, and so did all his ancestors, and he is not going to use any other.

It is frequently said that it would be unwise to adopt a phonetic system of spelling, because it would obscure the derivation of a great many words. That this objection has, however, no foundation will be readily admitted by all who know anything of the methods of philological investigation. The philologist does not care much how a word is spelt now, provided he knows how it used to be written and pronounced. This he can always learn for any given period, from extant books and manuscripts of that period. As a matter of fact, English scholars have so thoroughly studied the history and development of our language, that they know how most of our words have been spoken and written, from the days of King Alfred and the Saxon Chronicle, down through the ages of Chaucer and Wyclif, Spencer and Shakespeare, until the present, and have carefully embodied the results of their researches in a series of grammars and dictionaries, to be used as the basis of further investigations. They have learned that the pronunciation is of more value than the spelling; that the latter is of real historical value only so far as it indicates the pronunciation of a given period, while in many cases it is actually misleading. Thus the *w* in *whole*, is not only phonetically useless, but it obscures the derivation of this word which is a doublet of *hale*; while on the other hand we are told that the real origin of the simple word *goth* cannot certainly be ascertained, because the proper pronunciation is doubtful.

Philologists, then, have nothing to fear from the introduction of a simplified orthography, while the vast majority of readers, who are not philological students, have a great deal to gain by it. They have barely time to learn the current use of words, and should be allowed to write in the simplest and most convenient manner possible. Where our words have come from, what various changes they have undergone, from time to time, during centuries of constant use, what great historical events are intimately connected with these changes, are all matters, which, however interesting they may be to students of history and philology, in reality lie far outside the circle of interest of ordinary readers. The few who desired to know these things, would not find their task rendered more difficult by a phonetic spelling, as the old spellings would all be given in their etymological dictionaries. There is, therefore, no more reason why, on philological grounds, the memories of the great bulk of readers and writers should be taxed to retain phonetically useless letters, than that every farmer should be compelled to leave a piece of bark at the end of his fork or rake handle, in order that the identity of the parent tree might more readily be established.

Some opponents of spelling reform object particularly to a uniform spelling of all words alike in sound. The fact that we have so long retained these orthographical distinctions between words alike in sound but different in meaning, proves conclusively, they say, that we need them, while it is true that we never misunderstand a speaker, probably are never even conscious of any difficulty in grasping his meaning whether he says, "who sent you," "who gave you the cent," or "he scents the battle from afar." Still would not many of us be just a little puzzled at first should he, while leisurely reading, come unexpectedly upon the question "who scent you," or the sentence "they sent the battle from afar?" The ear, apparently without any aid whatever, never fails to discriminate be-

tween words of this kind, but the eye, on the other hand, does seem to need more than mere collocation of words to enable it to take in at once the meaning of the writer in any particular case. Hence it is, we are told, that ever since the days when Norman influence had ended by throwing off most of the old English inflectional terminations, leaving words simpler in form and more convenient for use, but very largely monosyllabic, and in too many cases alike or nearly alike in sound, the English, in order to obviate, to some extent, the inconvenience resulting from the existence in their vocabulary of so many homonyms, have felt constrained to preserve, wherever they found them, such orthographical distinctions as remained in consequence of different derivations. Now whether the eye really needs such assistance, or whether its apparent need of it is very largely, if not entirely, due to the habit of constantly depending upon it, may be a question for discussion. When a student begins the study of German, the antique characters, the close resemblance between some of the letters, especially *f* and *s*, the practice of writing all nouns, proper and common, with initial capitals, are all constantly sources of difficulty. In course of time, however, these difficulties vanish, the student even becomes so familiar with the foreign type that he dislikes to see German words in any other dress. He always knows where *f* and *s* ought to come, and rarely confounds them. In the same way if publishers should begin to print all English homonyms just as they are pronounced, though readers would, probably, for a time be liable to confound them, yet we believe this difficulty would gradually disappear, when once we had learned to depend upon the context alone to indicate the signification.

It ought to be a source of gratification to all students of our noble English tongue, to all who desire to see it speedily become the universal language of commercial intercourse, to know that the ablest scholars in England and America have for years been making our spelling a subject of profound study, and seeking the simplest and most effective way of removing the multitude of needless difficulties that meet at the very threshold and tend to discourage every one who tries to learn our written language. After years of labor, English and American philologists have agreed upon a series of reforms, formulated by them in twenty-four rules which were given by Mr. Wm. Houston in the *Educational Weekly* of June 26, 1886. It will be seen on reference to these rules, that the aim of all of them is to remove as far as possible, all phonetically useless letters, and to spell words as they are pronounced. As Mr. Houston says, "These rules, though they would still leave irregularities, would nevertheless greatly enlarge the area of constant orthography, and go far to facilitate the work of teaching children the use of our written language."

This being the case, I see no valid reason why these rules, drawn up and agreed to by scholars of such high authority as the English Philological Society and the American Philological Association, should not be put into practice in all our schools, and our children taught to spell in a manner that does not contradict their common sense at every turn. That this could easily be done is shown by the fact, that similar orthographical rules have recently been enforced with success in Germany. Cheap books containing the changes proposed, were put by the Minister of Education in the hands of every teacher, who was required to introduce the reformed system into his school. As a result, nearly all German pupils and students, and many of the best publishers now use the new orthography, and say it is a long step in advance. The next step will be to discard the old German letters. Why cannot spelling reform be just as easily introduced into our schools? It needs only instructions from the Minister of Education to that effect, and permission to be given to candidates for the departmental examinations to write according to the rules of the associations, and our ancient orthography will speedily vanish.

Again and again changes have been made in our methods of teaching, and teachers have had practically to re-learn many subjects they had been teaching for years. In almost every other department of the teacher's work, there has been quite a revolution in methods of instruction; but we still cling to our mediæval orthography.

Some time ago Mr. Houston requested of the proper authorities that the reformed spelling of the English and American Philological Associations should be accepted at the examinations, but his request was refused. The consequence is that every teacher and every pupil in the land, no matter how much he may have become dissatisfied with a system which compels him to waste his energies in remembering and his time in writing a host of useless letters, is still compelled to follow that system on pain of being rejected at every examination as a bad speller. How long is such a state of things going to last? The teachers have the remedy, to a certain extent, in their own hands. Let it once be known at the Educational Department, that the teachers are determined to insist on progress in spelling commensurate with what has been done in other directions, and I doubt not that steps will speedily be taken to meet their wishes, and do for the improvement of our written language what older and slower countries have already done for theirs.

Hints and Helps.

A SUGGESTION.

BY MISS BUSYBODY.

THE teacher will find the following device, which I learned from an old German teacher, to be a great saving of noise and confusion in the school room. In place of having the pupil raise his hand, making it necessary for the teacher to ask what is wanted, let them designate what is wanted by the number of fingers raised, thus:

- 1 finger—may I come to you?—the teacher.
 - 2 fingers—may I speak?
 - 3 fingers—may I pass to some part of the room without speaking, to pass a book, get a drink, etc.?
 - 4 fingers—may I leave the room?
- The little tots soon learn it and you cannot fail to be pleased with the plan.—*Popular Educator.*

SAYINGS OF EXPERIENCED TEACHERS.

- GOVERN by quiet signals as far as possible.
Be slow to promise, but quick to perform.
Pull forward and not back, and lend a hand.
Do not be satisfied with one correction of an error.
Be courteous; do not gossip, especially about other teachers.
Never find fault without showing why, and indicating the better way.
Study to acquire the art of aptly illustrating a difficult subject.
In all things set before a child an example worthy of imitation.
Do not encourage pupils to report each other for misdemeanors.
Give due credit to those who work with and for you for what they do.
Do not continue recitations beyond the regular time appointed for them.
If you cannot make study attractive to your pupils quit the profession.
Other things being equal, the most intelligent are the most industrious.
Never deprive a child of anything of value without returning it at the proper time.

A FEW SIMPLE RULES FOR YOUNG TEACHERS.

BY MISS BANCROFT.

- NEVER come before your school with a cross or vexed look on your face.
Always, if possible, have a pleasant word for your school at the opening of each session.
Never punish a scholar with an air of satisfaction. Try to reprove him pleasantly; or, if obliged to use severity, do so as though the circumstances of the offence and the welfare of the school demand it, and not your own wishes or inclinations.
AS far as possible believe in the goodness of each individual scholar.
Always conduct yourself toward each scholar as though you expected him to obey the rules of school, and if possible have faith that he will.

Never allow yourself to say disagreeable things of your school to any one except to gain advice.—*The American Teacher.*

MATHEMATICAL GEOGRAPHY.

C. CLARKSON, SEAFORTH, ONT.

The following problems are types of questions in "Mental Geography," intended to secure a constructive comprehension of the subject not attainable by the mere reading and recitation of the pages of any text book:—

1. Suppose everything else to remain as it is now, but that the earth suddenly ceased to revolve on its own axis, how many days would then constitute one year?
2. Suppose that the earth should revolve on its axis only once during its course round the sun, how many days would then make a year? (Two answers.)
3. What is the actual number of revolutions on its own axis the earth now makes in the course of 365 days and nights?
4. If the earth began to revolve on its own axis from east to west and made only one such revolution during its course round the sun, how many days and nights would make a year in Canada?
5. Suppose that the sun and the earth both began to revolve in the same time round a common centre, say Venus, and everything else remained as at present, would there be the same number of days in a year as we have now?
6. Two ships leave New York on the same day. The first doubles Cape Horn, the other Cape Hope. The latter returns from Hong-Kong to New York by Cape Horn, the former by Cape Hope. They land about the end of February and when the captains compare notes, one declares that he had only three Sundays in February while the other maintains that he had kept five Sundays in the same month. How could both be correct? Was there any mistake? The harbor-master of New York asserted that both must be wrong as he had kept only four Sundays. Were they all wrong, or all right?

7. The earth's axis remains parallel to itself and the north pole always points in the direction of the Polar Star. Suppose that it began to point continuously towards the sun, how would this affect the seasons in Ontario? How would the seasons be altered in Australia? Which would then be the hottest part of the world?

8. Imagine the earth revolving round the sun exactly as at present, but suppose the sun gradually rises above the plane of the earth's orbit from September to March, and gradually sinks below the plane of the earth's orbit from March to September, so that in each case the rise or fall is about 28°, how would this affect the seasons of Ontario?

9. If the earth ceased to rotate on its axis, but continued its course round the sun as usual, how many seasons should we have in Ontario? How long would each last measured by days?

10. Imagine the sun to revolve round the earth once while the earth turns on its axis once. Show that if both turn in the same direction there will be neither day nor night, nor change of seasons. What will be the effect if they turn in opposite directions?

11. Suspend upon a hook in the ceiling a large pumpkin fastened by its stem to a twisted cord, to represent the sun. Suspend from the same hook a small citron in the same way to represent the earth. Twist the doubled cords, and carry the citron round the pumpkin holding the cord parallel to itself. Let the pumpkin turn thirteen or fourteen times while the citron completes its orbit. Mark a chalk line on the citron to denote the equator. Let two boys stretch a string from the pumpkin to the citron to represent the perpendicular ray of the sun. Pause four times in the course of the circuit of the pumpkin. Note how the ray falls at the equator, at the tropics and at each pole.

12. If the earth became luminous like the sun and the sun became dark like the earth, how many days and nights would make a year for the sun? Show that one side of the moon would never be lighted at all.

DON'T overeat. Don't starve. "Let your moderation be known to all men."—*Iowa School Journal.*

Mathematics.

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

SOLUTIONS.

1. 5 doz. oranges + 7 doz. lemons.
= 100 apples + 105 apples = 205 apples.
2. In 10 seconds boat goes 100 yds.
∴ in 5½ days it goes $\frac{100 \times 5\frac{1}{2} \times 24 \times 60 \times 60}{10 \times 1760}$ = 2700 miles.
3. Int. for 1 yr. = \$7.50; 146 dys. = $\frac{2}{3}$ yr.
∴ int. = $\frac{2}{3}$ of \$7.50 = \$3.00.
4. For 121 repaid 100 was borrowed.
∴ " 847 " 700 " "
5. ½ sq. inch represents 640 sq. ac.
∴ 1 " " " 640 × 4 = 2560 sq. ac.
6. 1st charges \$2.25 for 6 hrs. work.
2nd " \$2.33½ " " "
Wages of 1st for fortnight = \$27.00.
7. 11 cub. ft. of ice weigh the same as 10 cub. ft. of water.
∴ 11 cub. ft. of ice weigh 10,000 ounces.
1 cub. ft. of ice weighs 909 $\frac{1}{11}$ oz.
8. Bought 1000 yds. @ 60c.
Sold 400 yds. for the cost of 520 yds.
" 500 " " " 600 "
" 100 " " " 80 "
" all " " " 12,00 yds. = \$720.

9. Length of walls = 308 ft.
Cub. contents = 308 × 8 × 2 = 4,928 cub. ft.
10. House and lot = house and $\frac{3}{4}$ house.
= $\frac{7}{4}$ house = \$2,100.
∴ House = \$1,200, and lot = \$900.
11. Cistern contains 5 × 5 × 5 = 125 cub. ft.
= 125 × 1,728 cub. inches.
∴ No. gals. = (125 × 1,728) ÷ 277.274 = 779

PROBLEMS.

(1.) The three sides of a triangle form an A.P., a being the shortest and c the longest. If the distance between the centres of the inscribed and the circumscribed circles is x, and the diameter of the nine-point circle is d, prove that $ac = 3(d^2 - x^2)$
 Solution:—a, b, and c are in A.P. ∴ 2b = a + c, and ∴ 2s = 3b, i.e. 2ac = 3abc.
 Hence $2Rr = 2 \left[\frac{abc}{4S} \times \frac{S}{S} \right] = \frac{abc}{2S} = \frac{ac}{3}$
 But $x^2 = R^2 - 2Rr = d^2 - \frac{ac}{3}$
 i.e. $ac = 3(d^2 - x^2)$

(3.) Given the series 1.1 + 3.5 + 5.13 + 7.25 + n terms.
 Prove (1) the sum is a perfect square; (2) the square root is 1+3+5+..... to n terms; (3) each term is the product of two numbers that may be taken to represent the shorter side and the hypotenuse of a right-angled triangle; (4) if unity be added to the Nth term it is divisible by 2n, and if unity be subtracted it is divisible by n-1; and (5) all the terms are odd numbers.

Solution:—The Nth term = (2n-1)(2n^2-2n+1), and since 2n-1 is odd, the product is odd (5); also (2n-1)(2n^2-2n+1)-1 vanishes when n=1, and (2n-1)(2n^2-2n+1)+1 vanishes when 2n=0, ∴ n-1, and 2n respectively are factors (4). Again if 2n^2-2n+1 be the hypot., and 2n-1 the base of a right-angled triangle, then the perp. = (2n^2-2n+1)^2 - (2n-1)^2, and this reduces to 4n^2(n-1)^2 which is a perfect square, hence (3).

REMARKS.—This suggests another quite independent solution of problem 16. See June number, and problems 18, 19, 20, 21 in October number 1887. The formulae for the three sides will then be (2n-1), 2n(n-1), and (2n^2-2n+1) and they appear to be the simplest and most concise that have so far appeared in these columns. Putting 2n^2-2n+1 in the form 2n(n-1)+1, and n=2, 3, 4, 5, 6, 7, etc., in succession we get the triangles 3, 4, 5; 5, 12, 13; 7, 24, 25; 9, 40, 41; 11, 60, 61; 13, 84, 85; 15, 112, 113; 17, 144, 145; 19, 180, 181; 21, 220, 221; 23, 264, 265; 25, 312, 313; etc. It may be observed also that n may be any fraction > 1; thus if n=3½, the triangle is 6, 17½, 18½; if n=2½, the triangle is 3½, 5½, 6½. And as each triangle supplies any number

of multiples by multiplying the sides by any numbers whatever, these fractional sides may be turned into whole numbers e.g. 3½, 5½, 6½ gives 28, 45, 53 on multiplying through by 8; 56, 90, 106 on multiplying thro' by 16, etc., and these will be found all different from those obtained by putting n=any integer, so that on the whole the supply of right-angled triangles with rational sides is practically unlimited and very easily obtained from the formulae (2n-1), 2n(n-1), and 2n(n-1)+1.]

The sum of the series is = n^4, an the sum of 1+3+5+...+n=n^2, ∴ (1) and (2). NOTE.—The sum of the series is most easily obtained by the method of differences, thus:
 1st order of diff'ces = 1+15+65+175+369+671+etc.
 2nd " " " = 14, 50, 110, 195, 302, etc.
 3rd " " " = 36, 60, 84, 108, etc.
 4th " " " = 24, 24, 24, etc.
 ∴ Sum = n(n-1) + $\frac{n(n-1)}{1.2}(14) + \frac{n(n-1)(n-2)}{1.2.3} (36) + \frac{n(n-1)(n-2)(n-3)}{1.2.3.4} (24)$

$$= n \left\{ 1 + 7n(n-1) + 6n(n-1)(n-2) + n(n-1)(n-2)(n-3) \right\}$$

$$= n \left\{ 1 + (n-1)(n^3-1) \right\} = n(n^3) = n^4.$$

(4) Prove that (1)

a+b-c,	4a,	6a,	4a.
4b,	a+b-c,	4b,	6a.
6b,	4b,	a+b-c,	4a.
4b,	6b,	4b,	a+b-c.

$$= (a+b-c)^4 - 8(a+b+c)^2(bc+ca+ab) - 128abc(a+b+c) + 16(bc+ca+ab)^2$$

= the result of rationalizing a½ + b½ + c½ = 0; and hence (2) that the determinant is symmetrical with respect to a, b, c.

Solution:—Let b = m^2 a; then c = a(1+m)^2, or a + b + c + 4am + 6am^2 + 4am^3 = 0. Multiply successively by m, m^2, m^3 and substitute b/a for m, and four linear equations in m, m^2, m^3 result. Eliminate these variables, and required determinant = 0.

Otherwise:—Let S1 = a+b+c, S2 = bc+ca+ab, S3 = abc.
 ∴ S1 = a+b+c = 2b½ c½ +, etc. S1^2 = 4 { bc + ca + ab + 2a½ b½ c½ (a½ + b½ + c½) }
 ∴ (S1 - 4S2)^2 = 64 S3 (a+b+c + 2b½ c½ + + ...)
 = 64S3 S1 + S1 = 128S1 S3.

(6.) In the Western Football Association suppose there are 64 competitors for the championship. They are drawn in pairs, then the winners are drawn in pairs, and so on. Find the chance of Seaforth playing Berlin (1) in the final, and (2) at any part of the contest.

Solution:—The chances of winning and losing are equal. Hence the probabilities for the several drawings will be

That S. plays B. That both win without meeting.

1. $\frac{1}{63}$
2. $\frac{1}{63} \times \frac{1}{31} = \frac{1}{1983}$
3. $\frac{1}{63} \times \frac{1}{15} = \frac{1}{945}$
4. $\frac{1}{63} \times \frac{1}{7} = \frac{1}{441}$
5. $\frac{1}{63} \times \frac{1}{3} = \frac{1}{189}$
6. $\frac{1}{63} \times \frac{1}{1} = \frac{1}{63}$

Hence the first chance = $\frac{1}{1983} + \frac{1}{945} + \frac{1}{441} + \frac{1}{189} + \frac{1}{63} = \frac{1}{189}$, and the second = $\frac{1}{63} + \frac{1}{189} + \frac{1}{441} + \frac{1}{945} + \frac{1}{1983} = \frac{1}{189}$.

(7.) In any acute-angled scalene triangle tan A tan B tan C > 3√3.

Solution:—Since tan A, tan B, tan C are all unequal and all positive, their arithmetical mean > their geom. mean:

i.e. $\left\{ (\tan A + \tan B + \tan C) \div 3 \right\}^3 > \tan A, \tan B, \tan C.$
 But $\tan A + \tan B + \tan C = \tan A \tan B \tan C$
 ∴ $\tan^3 A \tan^3 B \tan^3 C > 27 \therefore$ etc.

(8.) A and B are two points on the diameter of a circle equidistant from the centre. AP and BQ are any two parallels meeting the circumference. Find the locus of the points of intersection of the tangents at P and Q.

Solution:—Let T be the point where tangents meet, C the centre, CT = r, TCQ = φ, < TCB = acute < = θ; then we have r = a sec φ. 2a sin φ = c sin θ;

$$\frac{a^2}{r^2} + \frac{c^2 \sin^2 \theta}{4a^2} = 1; \text{ i.e. } \frac{c^2 y^2}{4a^2} + a^2 = x^2 + y^2.$$

NOTE.—In writing to this column always send the problem as well as the reference. If a prompt answer with full explanations is desired, write promptly to the Editor who gives instruction by correspondence.

DR. WILLARD'S METHOD OF EXTRACTING THE SQUARE ROOT.

To the Editor of the EDUCATIONAL JOURNAL.

SIR,—Being entertained with easy mathematics, I read this evening on receiving my JOURNAL on page 266, "Extraction of the Square Root" by Dr. Samuel Willard, Chicago, and find that his "method verifying the work, and of getting the square of the root as far as found" verifies only the subtraction's performed during the extraction of the root, and and that it does not detect any error made in multiplying, or in the use of a wrong figure, or in the omission, or insertion of a figure in the root. I think his method of finding the trial divisor a good one. Yours etc., WM. S. HOWELL.

SOMBRA, Ont. Jan. 18, 1888.

THE teacher should be identified with every good work. In some things he ought to be regarded as a leader. We do not insist upon his being a church member or even an attendant, but we do insist upon his always being counted with those who are on the side of morality, temperance and humanity.—Central School Journal.

A MOST detestable vulgarism, which has come to be coolly printed as if it were perfectly proper, is "most" for almost. "When I was most well," is one instance out of half-a-dozen (no, dear friend, I decline to write "a half-dozen,") in a fairly well written American novel put into the mouths of persons supposed to be well bred.—Franc-Tireur, in Halifax Critic.

IN a letter from a father to his son who had just been appointed principal of a school, he says:—"Be sure and take educational journals and read educational books." Here spoke a far-sighted man who had been a successful teacher although now a lawyer. He saw the great advantage papers and books would be to his son and acted accordingly.—N. Y. School Journal.

THE "Pilgrim's Progress" has been translated into Japanese, and appears with—to European eyes—most comic illustrations by native artists. Christian has a close-shaven Mongolian head; Vanity Fair is a feast of lanterns, with all the popular Japanese amusements; the dungeon of Giant Despair is one of those large wooden cages well known to Eastern criminals; and the angels waiting to receive the pilgrims on the farther side of the bridgeless river are dressed after the latest Yokohama fashion.

THE bi-lingual difficulty is beginning to develop itself in Ontario, where the Government insists on English being taught effectively in all schools receiving Government aid. We think that every effort should be made without Government pressure that both languages should be taught in all the schools of this Province. Nothing could do more to elevate the educational standard than such a requirement. The teachers would need to be superior to what they generally are, and would, doubtless, need to be better paid, and the scholars would leave school with much better developed minds, as no kind of study is more useful for mental improvement than the transference of ideas from one language to another. In the McGill Normal School several of the subjects are now taught in French, and it would do the young people in the country a great deal of good if some of their text books were in French.—Montreal Witness.

ANOTHER American pet affectation of recent years, is the perpetual use of the participle "gotten" instead of "got." It cannot be called incorrect, at least in most instances, but sounds absurdly pedantic. As an example of its clumsy awkwardness, I read, recently, in a story in the New England Farmer, this instance:—"I had just gotten off my horse." One is continually reminded of its burlesque use in one of the Ingoldsby Legends—

"And none of the crew may venture to hint Our skipper hath gotten a sinister squint."
 Which half conveys the ludicrous idea of the "skipper" having obtained his squint by his own will or endeavor, or "by some mysterious accident" begotten it. And, as usual, Canadian writers allow themselves to fall into any slipshod provincialism of which awkward American writers set them the evil example. Such and such a book is "well gotten up," is as frequent as it is unpleasant.—Franc-Tireur, in Halifax Critic.

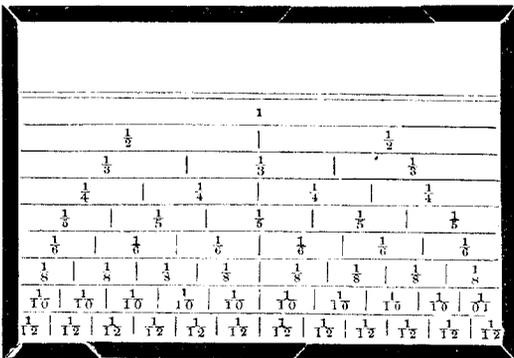
School-Room Methods.

A DEVICE FOR TEACHING FRACTIONS.

BY H. L. CLAPP, MASTER GEORGE PUTNAM SCHOOL.

THE figure below represents a device for teaching fractions which has been used in our school during the past year. It consists of a box two feet long and nineteen inches wide, inside measure, containing blocks $1\frac{1}{2}$ inches wide, and of the length indicated in the figure, the longest block being two feet in length. The blocks are painted blue and white alternately, for convenience in counting across the room, and each block has large black figures stencilled upon it. Above the first block is a shelf used in specializing and comparing the blocks of different sizes. The advantages of this device are:—

1. It is objective.
2. It is as well adapted to class as to individual instruction.
3. The blocks have a definite place and the kinds needed can be taken at once without lifting other kinds.
4. The comparative view of different sized blocks is never lost by covering one block with another.
5. The pupil can make his own reductions by following the division lines vertically above or below those of the blocks which he intends to use.



Examination Papers.

DECEMBER EXAMINATIONS, 1887.

HIGH SCHOOL ENTRANCE.

DRAWING.

Examiners: { M. J. Kelly, M. D., LL.B.
John Seath, B.A.

NOTE.—Only two questions are to be attempted.

1. Draw a side view (no perspective required) of a penknife with the handle vertical, lower blade wide open, and the large blade open at right angles to the handle.

2. Give a perspective drawing of a book, 4 inches long, 1 inch thick, and 2 inches wide. Be particular about dimensions.

3. Draw a circle 2 inches in diameter, divide its circumference into five equal parts; connect these points by straight lines. What is the name of the figure thus made?

4. Give the drawing of the section of a common drawer.

ARITHMETIC.

Examiners: { W. H. Ballard, M.A.
J. E. Hodgson, M.A.

NOTE.—Only 7 questions are to be attempted. A maximum of 5 marks may be allowed for neatness.

1. Ten cents will buy 3 oranges, 4 lemons or 5 apples; how many apples are worth as much as 5 doz. oranges and 7 doz. lemons?

2. A man can run 100 yards in 10 sec. How many miles will a steamboat go in 5½ days at the same rate?

3. Find the interest on \$150 from the 16th of July to the 9th of December, at 5 per cent. per annum.

4. A person borrows money for 6 years at 3½ per cent. and repays at the end of the time, as principal and interest, \$847; how much did he borrow?

5. A map is drawn to a scale of half an inch to a mile; how many acres are represented by a square inch on the map?

6. One workman charges \$3 for a day's work of 8 hours, and another \$3.50 for a day's work of 9 hours. Which had I better employ and how much shall I have to pay him for work that he can do in a fortnight, working 6 hours a day?

7. Water, in freezing, expands 10 per cent. If a cubic foot of water weighs 1,000 oz., find the weight of a cubic foot of ice.

8. A merchant bought 1,000 yards of carpet at 60 cents a yard, and sold two-fifths of it at a profit of 30 per cent.; one-half at a profit of 20 per cent., and the rest at a loss of 20 per cent. How much did he receive for the carpet?

9. A piece of land is surrounded by a stone wall 8 ft. high, and 2 ft. thick; the land inside the wall is 100 ft. long and 50 ft. wide; how many cubic ft. of stone does the wall contain?

10. A house and lot are together worth \$2,100; one-fourth of the value of the house is equal to one-third of the value of the lot; find the value of each.

11. A cubical cistern is 5 feet deep; how many gallons of water will it hold if 277'274 cubic inches make a gallon?

GEOGRAPHY.

Examiners: { W. H. Ballard, M.A.
J. E. Hodgson, M.A.

NOTE.—Only six questions are to be attempted. A maximum of 5 marks may be allowed for neatness.

1. Account for the formation of rivers, rain, clouds, and glaciers.

2. What separates Ontario from Quebec? From Manitoba? From Kewatin? From Minnesota? From Michigan? From New York?

3. Name the manufactures and exports of Ontario and tell where they are produced.

4. Give the boundaries of British Columbia; describe its physical features; name and give the location of its capital.

5. What is the Gulf Stream? Trace its course. How is it caused? What benefit results from it?

6. Draw a map showing the relative position of Mexico, Central America, Cuba, Hayti, and the Gulf of Mexico and Caribbean Sea, with the coast

lines that form their northern and southern boundaries.

7. Select any two of the following rivers and tell where each rises, the mountains that determine its course, the directions in which it flows, the countries through which it passes, the cities on or near it, and where it empties:—Amazon, Mississippi, Nile, Danube.

8. Through what waters would you pass in sailing along the coast line of Asia from the Gulf of Aden to the Gulf of Tonquin?

9. Name the largest cities in each of the following countries, tell what it is noted for and describe its situation:—Canada, United States, Scotland, Egypt, Italy, British India.

ENGLISH GRAMMAR.

Examiners: { John Seath, B.A.
M. J. Kelly, M.D., LL.B.

NOTE.—Only four of the first seven questions are to be attempted; all candidates will take questions 8 and 9. A maximum of 5 marks may be allowed for neatness.

1. Classify, as far as possible, the words in the following sentence, as (1) names, (2) words that assert (or state), (3) words that modify (or qualify), and (4) words that connect:—

Oh! how my father longed to punish for deceiving him the dissatisfied man and woman whom he had so often befriended!

2. Form sentences to show that each of the following words and phrases may be used with the value of different parts of speech, and name in each case the part of speech:—

brave, what, by his side, seeing him.

3. Give all the inflected forms of each of the following words, and explain the grammatical value of each inflection:—

brother, he, weave, hope.

4. Name the different classes of pronouns, and classify the pronouns in the following list:—

that, these, their, theirs, you, one, two, where, which, every, any, neither, few, some, latter, mine.

5. Form

(1) adjectives from the following nouns:—

fire, water, winter, plenty;

(2) nouns from the following adjectives:—

pure, civil, broad, green;

and (3) adverbs from the following adjectives:—

brave, true, late, much.

6. Distinguish the meanings of the sentences in each of the following sets:—

(1) *I saw him; I have seen him; I did see him;*

I had seen him; I was seeing him.

(2) *I shall see him; I shall have seen him.*

(3) *He may go home; May he go home! May he go home?*

7. Explain, in your own words, the meanings of Case, Mood, Participle, Tense and Gender; giving as many examples of each as possible from the following sentence:—

The dew was falling fast; the stars began to blink; I heard a voice; it said, "Drink, pretty creature, drink."

8. Correct the errors in any four, and not more than four, of the following sentences, giving in each case the reasons for your corrections:—

(1) Let you and I go; James and he can stay.

(2) His sisters-in-law left for the fair grounds, but Aggie and her ma staid home.

(3) Whom do you think has burst the door in this morning?

(4) He was real glad when he seen us lay down, although we had lain down some already.

(5) When a man talks like that, they aren't fit to teach school.

(6) The effort was one of the most determined that has ever been made.

(7) Write me to say if you got home safe.

9. I know not how others saw her,

But to me she was wholly fair,

And the light of the heaven she came from

Still lingered and gleamed in her fair.

(1) Classify and give the relation of the subordinate clauses in the foregoing stanza.

(2) Analyze "to me she was wholly fair."

(3) Parse the words in italics.

(4) Show, by means of examples taken from the

foregoing stanza, the chief difference between verbs of the Old and the New (or the Strong and the Weak) Conjugation.

DICTIONARY.

Examiners: { M. J. Kelly, M.D., LL.B.
John Seath, B.A.

NOTE FOR THE PRESIDING EXAMINER.—This paper is not to be seen by the candidates. It is to be read to the candidates three times—the first time, to enable them to collect the sense; the second time, to enable them to write the words; and the third, for review.

A maximum of 5 marks may be allowed for neatness.

The lumber trade has an organic place in the development of Canada's resources, in the growth of towns and cities, in the general increase of wealth, and in the evolution of literature and art which always occurs at periods of commercial prosperity. Everywhere northward and westward from the frontier, the lumber mill, the lumber depot, and hamlets connected with them, pierce the unbroken forest, and lead the steady advance of civilization. Villages arise, and become towns and cities, while the continual recession of the trade northward develops in its wake the growing resources of the country.

Part of the salary was devoted to the purchase of celery and cauliflowers.

The symmetry of the statue was remarkable when compared with others in the cemetery.

He was one of the crew in the "Cruise of the Midge."

BOOK-KEEPING.

Examiners: { Cornelius Donovan, M.A.
J. J. Tilley.

NOTE.—80 per cent. of the Book-keeping and Writing to constitute a full paper.

1. "The Gazette Printing Company (Limited)". Briefly explain.

2. I commenced business with a capital of \$300. At the end of three months my books exhibit as follows: Cash on hand \$356.28; James Henry Dr. \$325, Cr. \$140; Peter Dodds Cr. \$28.40; Wm. Hicks Dr. \$175, Cr. \$250; goods on hand worth \$500. Make out in proper form a statement showing my present worth and my net gain or loss.

3. What is meant by Taking Stock? Negotiable Paper? Days of Grace? Staple Goods? Tariff? Business Transaction? Blank Credit?

4. You are living in Montreal and acting as agent for W. P. Stirt, of Hamilton, who sends you 1,500 bbls. flour to sell on his account and risk. You dispose of the flour as follows: June 10, 1880, Sold Andrew Wiley, on his note @ 30 days, 500 bbls. at \$6.75; June 15, Sold Peter Curphy, for cash, 500 bbls. @ \$5.60; June 20, Sold John T. Radigan, for cash, 500 bbls. @ \$6.45. You paid charges: May 1st, Freight and cartage \$1,275; storage and insurance, \$57.30; your own commission \$246.25. Make out an Account Sales from above data, and write a letter, to accompany the same to your employer.

5. Derive the Day Book entries from the following Ledger Account:—

Dr.		MERCHANDISE.		Cr.			
1886	Feb. 1	To Robt. Johnson	\$ 9,800.00	1886	Feb. 5	By Bills Receivable	\$ 6,150.00
	15	" Cash	12,350.00		9	" Geo. King	8,275.00
					12	" Cash	9,400.00

6 (a) Write out in full the following draft: St. Catharines, May 12, 1887; Amount, \$500; Payee, Richard Jepson; Time, at Sight; Drawer, Yourself; Drawee, Wm. Tremlett, Toronto.

(b) You have just commenced business in the Boot and Shoe line. Write a circular letter intended for public distribution.

7. Journalize:

(a) Bought of Zealand & Co., on credit, 400 lbs. lard @ 13c., 140 lbs. soap @ 7c., and 1,000 lbs. pork @ 10c.

(b) Sold Sharp & Swift, on their note @ 60 days, 2,100 lbs. sugar @ 6c., and 540 lbs. tea @ 55c.

(c) Renewed Sharp & Swift's note for 3 months, charging them \$5 interest for that time.

8 Post a and b items of No. 7.

BUSINESS NOTICE.

WE direct attention to the advertisement, 16th page, of the "Concise Imperial Dictionary," It is our intention to handle this Dictionary in connection with the JOURNAL, and we offer it in the best binding, and the EDUCATIONAL JOURNAL for one year, both for \$5.50, plus 14 cents for postage. Subscribers who are paid in advance may deduct the amount they paid for one year, send the balance, and have the book at once.

TORONTO, FEBRUARY 1ST, 1888.

Editorial.

PEA SOUP AS A MORAL RENOVATOR.

AN unostentatious but grand work of philanthropy has for a year or two past been carried on in connection with the public schools in some of the poorer sections of London and other great English cities. Wise and practical Christian charity has taken to feeding the starving bodies of thousands of gaunt, famine-struck children, as a common sense preliminary to supplying their mental needs. The amount of suffering from actual hunger amongst the pupils who are every morning swept into the schools, has been found on investigation to be heart-rending. Thousands of the poor little wretches, it is learned on inquiry, have had no breakfast; many nothing since an early hour the day before.

Philanthropy, under the intelligent direction of Science, has made wonderful discoveries, too, as to the trifling cost at which substantial meals can be furnished. Healthful and satisfying dinners are furnished for a halfpenny and even a farthing each. The halfpenny dinner is made not only to cover expenses, but actually to yield a profit to be added to the "Cheap Dinner Fund." The farthing more than pays the cost of materials, but falls short of meeting current expenses. The halfpenny dinner furnished by the Birmingham Committee, who have the matter in hand, consists of half a pint of good pea soup with a round of bread weighing about the tenth of a pound and spread with a quarter ounce of jam. Some of the descriptions of the scenes to be witnessed at these dinners are extremely touching. Many incidents reveal a degree of unselfish generosity not often found in those circles in which genuine hunger is an unknown sensation.

The Birmingham Managing Committee and the teachers generally, have made another discovery still more astonishing to many than the extent of the destitution, or the small cost at which it can be relieved. They have found out that a succession of good dinners has a wonderful moral effect on perverse child-nature. Here is what is said in one report:—

"The dinners have resulted in a very marked and almost universal improvement in the appearance, spirits, and health of the children, and are especially noticeable in the increased power to resist illness. There has been more regular attendance, amounting in poor schools to an

average increase of at least 6 per cent. The most unexpected result, however, is the effect on the moral nature of the children. It has been found that ill-tempered, disobedient, and untruthful children have been cured of their faults in a few weeks; vicious and revengeful children have become docile; notoriously greedy children ask to be allowed to share even a farthing dinner with a brother or sister."

We quote this for the valuable hint it conveys to parents, teachers, and all others who have the management of children. How often are mothers, whose powers of thought and observation are not sufficiently exercised, puzzled and perplexed by unaccountable freaks of "naughtiness" in their children. Even the best natured among the little ones seem to be overtaken by moods of contrariness and fits of ill-temper, which convert them for the time into obstinate little pests, whom nothing seems to pacify, and who, too often, it may be feared, suffer undeserved chastisement when the maternal patience is exhausted. The thoughtful, judicious parent recognizes the same symptoms, but traces them at once to their source. She remembers that the child took but a slight breakfast, or that it has been so many hours since lunch, and hastens to administer the moral antidote required, in the shape of a saucer of porridge or a good slice of bread and jam. In a few moments the storm subsides, the clouds break away, and the sun again shines forth from the happy child face.

Now, we do not suppose the Canadian teacher often knows what it is to have a starving pupil to deal with. But we do expect him to be capable of generalizing. And it will require no very long series of observations, and no very profound act of generalization, to reach the truth, that there is a very intimate connection between the bodily health and comfort of a child, and his mental and moral condition. We talk much of "good" and "bad" children, too often forgetting to ask how much of the goodness is the outcome of mere physical health, and how much of the badness, of physical discomfort or pain. We are not questioning the doctrine of "total depravity," or the power of conscience eventually to overcome all bodily infirmities. We are simply stating a psychological fact. The causes of youthful discomfort, and through it of youthful depravity, are many in the school-room. Hard, badly-shaped seats, cross lights straining the eyes, fatigue of body or brain through too lengthy exercises, and above all, bad air, through want of ventilation, are fruitful sources of disorder and perverseness. Nor must it be forgotten that these same causes often affect the teacher as well. While the inexperienced or unthinking strives vainly to quell the tumult by force of will or muscle, and after enduring hours of purgatory, at last dismisses the school and goes forth with a humiliating sense of failure, the more observant and knowing one sets about finding out and removing the cause of the trouble. By throwing open a window, changing the occupation, taking a few moments for rest and recreation, starting a lively school song,

having a few turns of marching up and down the aisles, telling an amusing story, or some one of a hundred other devices, a diversion is created, the excess of electrical energy is drawn off from the surcharged nerves, the tired backs or heads are rested, and peace and smiling industry again reign. We need not point the moral. A word to the wise, etc.

THE COLOR LINE IN CHATHAM.

FROM a spirited editorial in a late number of the *Chatham Banner*, it appears that the School Board of that town have made a regulation requiring all the colored children to attend the same school. This involves, of course, an unnecessarily long walk for many of the children. Worse than that, it involves, as the *Banner* well shows, the vicious principle, utterly repugnant to the spirit of free Canada, of a discrimination against a certain class of pupils on the ground, not of their character or attainments, but of their color. The *Banner* shows that the regulation in question is in direct violation of a resolution unanimously passed by the Public School Board of the town fourteen years ago, which has never been rescinded, providing that "no child of school age, whether white or colored, is to be excluded from any of the public schools in this town provided the average attendance at any such school as shown by the registry book will according to law warrant their admission."

The *Banner* further points out that the plea of "no accommodation" will not avail in the face of another by-law, which makes it the duty of the Board "to provide adequate accommodation according to the regulation of the Education Department, for *all the children* between the ages of five and twenty-one, resident within the municipality," etc.

The accommodation can scarcely be called adequate so long as certain classes of the children are required to walk from all quarters of the town to the one school on King street.

There can, further, be little doubt that the setting apart of one school for colored children and forbidding them to attend any other, contravenes the spirit if not the letter of Sec. 6 of the Public School Act, which provides that "all public schools shall be free schools and every person between the ages of five and twenty-one years shall have the right to attend some school."

The *Banner* says:—"Colored students are admitted to the Collegiate Institute and make a good showing. At that height in the educational scale prejudice against any pupil on the ground of color seems to have been educated out of both pupils and teachers. It ought to be the same in the public schools. As with a man, so with a child; not his country, his color, or his coat, but his character and attainments, should fix his position in the community and regulate his admission into society and its institutions."

These sentiments are manly, Canadian, and Christian. We were not before aware that any one was excluded from any public institution in

Canada, of any kind, for no better reason than the color of his skin. We hope the School Board of Chatham has taken the *Banner's* lecture to heart, and turned from its evil ways, or rather those of its predecessors.

A NEW APPLICATION OF AN OLD THEORY

EDUCATORS of the better class have always insisted that education should be regarded an end in itself, rather than as a means to an end. From this point of view it is antagonistic to the true idea of education to regard it as a preparation for what the Germans call a "bread-and-butter" pursuit. And yet this is the direction in which the school work of our day is being irresistibly forced. Industrial training, commercial schools and courses, modern language drill, etc., are fast crowding out the old styles of training in mathematics, language, and philosophy. What is to be done? It would certainly be a reproach to our civilization should the whole tenor of our educational system become such as to impress upon pupils and students the narrow idea that to fit one for earning a living, or making money, is the sole or paramount aim of all education. But on closer thought it will be seen that it is not after all the fundamental idea that is undergoing change so much as the mode of its application. To regard as we have been accustomed to do, the public school as a preparation for high school, the high school for the university, and the university for professional life, comes to the same thing in the end, so far as the principle is concerned, but is much narrower in scope of application. Nor, again, can the hard, stern facts of human life and its necessities be ignored. School life must be made more and more a preparation for world life. The educational problem of the future will be to combine the two ideas into one, and to show that courses and methods of study and teaching may be so improved as to be made at one and the same time the best preparatory training for active life, and the best culture of all the higher faculties of the soul.

Can this be done? We believe it can. We see no reason why the study of those branches of language and mathematics and science which can be reduced to practice in every day life may not be made most efficient instruments for sharpening the intellect. All observation proves that they have this effect in actual business. So, too, let the idea of industrial education be elevated to its true position as the training of the senses and perceptive faculties, and it becomes at once a very important factor in all true education. We have not now space to enlarge or illustrate, but the idea can be easily followed out to any extent desired.

THE following resolution is being debated by the members of the Young Men's Liberal Club of Toronto:—Resolved that in the opinion of this club the time has come when, to prevent the perpetuation of sectarian hatred, the abolition of separate schools should be decided upon and the secularization of education carried out.

Contributors' Department.

HOW TO REGULATE THE SUPPLY.

BY D. H. LENT, BRADFORD MODEL SCHOOL.

FOR some time the question of the best means of improving the condition of our profession has been revolving in my mind. We have been striving for years to improve ourselves professionally by means of teachers' institutes, educational journals, etc., etc., and doubtless much has been accomplished in the matter of mental equipment. Yet we now find ourselves face to face with the fact that, notwithstanding the increased difficulty of examination papers, and greater stringency in the requirements in several respects, the general excellence of our high and model schools has been shown in the licensing 500 more teachers last month than the needs of the schools demanded. What will be the inevitable outcome? Just what any one would expect—a rapid exodus of the best talent of the profession. What can be done? The standard of the non-professional examinations may be raised somewhat perhaps, and heavier fees may also be required at entrance to our model schools, but that will not remedy a very serious defect. It seems to me there is a better way, one that will do more real good to the profession, the pupils, and the community at large.

The law says that a person shall not be able to control the property left him by inheritance till he is 21 years of age. A person may not have a vote till he is of age. Now, why? Because the judgment of the average individual is not matured till he reaches that age. Yet here we have the anomalous state of matters that any one possessing the requisite literary training may be placed in charge of thirty or forty little activities when he is 18 or she 17. Just think of it! It is a notorious fact that the judgment of the average individual is not matured at that age, yet these, who are but larger children in judgment and experience, may be placed where they will have to be the sole arbiters in the score or more of difficulties, disputes and delicate matters that must be settled every day. What confidence can a child have in another child's judgment? Is the care of property of more importance than the care of *mind*? To your own knowledge how many sad errors of judgment have been made by your teacher, affecting more or less the whole future of the child? Here we have one of the weakest points in our profession. As the Inspector of Peel county put it not long ago, our schools are in the hands of legal *infants*. My suggestion is, fix the minimum age for taking sole charge of a school at 21. In other words, let no master or mistress certificate be granted to any one under that age. "What a hardship!" say some. To whom, pray? Assuredly not to the pupils. Admitting that some candidates may feel such a change detrimental to their financial interests, we must not forget that the greatest good to the greatest number must always prevail; and in this matter the interests of

the children are supreme. Besides, it will ultimately be to the advantage of the genuine candidate, for he will go on with his non-professional work, climbing from 3rd to 2nd, and from that to 1st C., perhaps, if not even higher, till he reaches the minimum age, and he will thus be all the better equipped from a literary standpoint. For those who intend to use their certificates merely as a means to lift them to some other position, I have little sympathy. The profession can well afford to dispense with the services of such, and a long step in the direction of permanency will be taken. The great surplus of teachers points to the present as an expedient time to make such a change.

Let us hear the views of others on this matter.

Book Reviews, Notices, Etc.

BOOK NOTICE.

AN OLD ENGLISH GRAMMAR. By Edward Sievers Ph. D., of the University of Tübingen, translated and edited by Albert S. Cook, Ph. D. (Jena), Professor of the English Language in the University of California. Second edition, revised and enlarged. Boston: Ginn and Company.

Messrs. Ginn & Co., in placing in convenient form within the reach of American students of the English Language, the results of the labors of the most eminent Old English scholars of Germany, are doing a work which, we feel sure, will be richly rewarded. To many excellent works already published, they have recently added an excellent translation of Sievers' grammar of the Old English Language, a book which among German students deservedly ranks as a work of the highest authority. It is, of course, too elaborate a work for beginners, but students who wish a complete guide to the study of Old English Phonology and Inflection, will find in this work of Prof. Sievers, a grammar embodying the best results of German scholarship in a department in which it has no successful competitors. We are pleased to see that the translator has adopted through out the term Old English, in preference to the antiquated Anglo-Saxon, and retained the now well-understood German terms *Umlaut* and Ablaut, rather than substitute such weak translations as Sweet's *Mutation* and vowel-gradation.

OUR EXCHANGES.

Lippincott's Magazine has started in its February number a series of one hundred questions in literature and matters of current interest, for the best answers to which a prize of one hundred dollars is offered. This is essentially a woman's number, and exhibits the better half of humanity in a number of the avocations which the present age throws open to women; as, translator, novelist, lawyer, poet, and literary critic. The contributions are Mrs. A. L. Wister, Belva A. Lockwood, Helen Gray Cone, Sarah M. B. Piatt, Amélie Rives, Edith M. Thomas, Ella Wheeler-Wilcox, Agnes Repplier, etc.

WE have received the initial number of *The Health and Home Library*, a quarterly, published by the The Health and Home Company, of Chicago. Notwithstanding the overflowing supply of periodical literature, we are inclined to think this magazine has before it a field of usefulness in some measure peculiar to itself. In the "Literary Department" it can hardly hope to rival the larger periodicals which make that department their specialty. But in its "Health Department" and its "Home Department," which make up a large and important part of the volume, it gives promise of rendering excellent service. The article on "Woman: Her Ailments and Her Sorrows," by the editor, in the present number, is full of information which should be of the greatest service to many a feeble and suffering woman. The abounding recipes will be duly appreciated by those who preside over the mysteries of the culinary and other operations of the household.

Teachers' Miscellany.

NOTES ON LANGUAGE.

ON the subject of *style*, Southey once wrote to Allan Cunningham:—"There may be secrets in painting, but there are none in style. When I have been asked the foolish question what a young man should do who wishes to acquire a good style, my answer has been that he should never think about it, but say what he has to say as perspicuously as he can and as briefly as he can, and then the style will take care of itself." Again, to a friend he said, "People talk of my style! I have only endeavored to write plain English, and to put my thoughts into language which everyone can understand."

E. M. Hardinge offers this remark in the *New York Epoch* (January 6, p. 429):—"Cultivated Americans, and the gentry of England and Ireland, differ not so much in their modes of pronouncing words as their manner of intoning sentences. In the speech of Irish people we hear a fall in the voice at the close of almost every phrase or sentence. The first words are spoken in a higher musical pitch than the last. Americans, on the contrary, speak with a rising inflection towards the close of the phrase or sentence. The English speech, except when impassioned, is comparatively a monotone." Monotone and the rising or falling inflection are not a matter of nationality, but as severely individual as is the voice itself. Indeed, intonation and inflection are the most infallible betrayers of a speaker, provided one knows how to judge these things, and the speaker is proceeding unconsciously.

Mr. Andrew Lang calls attention to a point in Gibbon's style (see *Longman's Magazine*, December, 1887, pp. 237-8):—"Has anyone ever noticed a peculiar trick of Gibbon's prose, the trick which makes his style so monotonous? He finishes far too many sentences with a genitive case, if one may say so—with 'of' so and so. I open him absolutely at random, and find that, in consecutive sentences, the conclusion is 'the curiosity of the reader'; 'a crowd of patients of the most eminent rank and most distant climates invited or visited the physicians of Salerno'; 'the merit and value of a philosopher'; 'the writings of the pupil of Avicenna'; 'the praises and rewards of industry'; 'the source of opulence and freedom'; 'the supremacy of the Greek emperor'; 'objects of precious luxury.' Then a sentence ends 'to their ingenuity or good fortune,' and the next two sentences finish with 'the privileges of independent citizens,' and 'the palaces of royal merchants.' Thus, out of eleven sentences in one paragraph, and that the first one opens on, ten conclude in precisely the same form. The previous paragraph had five sentences, every one of them ending in the same manner. It seems curious that a writer so careful as Gibbon dropped unconsciously into such an overmastering habit. In a very long work doubtless the labor is lightened by running the thought into one mode of expression, but the result cannot but appear mechanical."

Macmillan's Magazine for January contains a defence of Dr. Johnson's style, by Dr. G. Birkbeck Hill, who thinks that the mannerisms occur chiefly where Dr. Johnson had to write against space, especially in "The Rambler." Dr. Hill adds:—"It should not be forgotten that Johnson, in the midst of all his big words, is entirely free from one fault which is common to some of the greatest and the most contemptible of writers. If he forces foreign words into the language he never forces foreign idioms. He protests, both by words and by example, against 'the license of translators, whose idleness and ignorance, if it be suffered to proceed, will reduce us to babble a dialect of France.' He charges Milton with 'forming his style by a perverse and pedantic principle. He was desirous to use English words with a foreign idiom.'" Dr. Hill intimates that Macaulay's best style is in close harmony with Johnson's best.

It is well to apply the word *moral* to individual, and the word *ethical* to social virtues.—*The Beacon*.

A TERRIBLE DESPOTISM.

THE Russian Government has for some time been discovering that despotism is incompatible with education; which discovery recently led to a re-

trograde attempt to restrict the use of the elementary schools by the children of the poor, and is now leading to a gradual extinction of the universities. Every now and then news leaks out of Russia to the effect that there has been a disturbance among some group of students, and that, in consequence, the institution attended by them has been closed. The concealment and suppression habitually practised by the Russian Government generally make it very difficult to understand exactly what has happened. But a clue to the usual process is to be obtained from the account of that which occurred not long since at Moscow. There, as elsewhere, the students have for some years been subjected to the most vexatious rules on all manner of unimportant details, such as the cut of their hair, the style of their clothes, and the choice of their friends. Certain of the officers of the university were also members of the police, and acted in this dual capacity. At a Sunday concert one of these officials reprimanded a law-student, and, during the wrangle that ensued, received from him a box on the ear. The following day another of the officers, at the end of a speech in defence of his colleague, was soundly hissed, and left the place, vowing vengeance. The same afternoon the students held a meeting in one of the boulevards of the city, and the next day in the quadrangle of the building. The police were at once fetched on the scene, and surrounded the quadrangle, while a regiment of Cossacks was brought down to disperse another body of students who had not succeeded in getting into the place. Then the names of those within were taken, and they were ordered to separate, which they refused to do till they had laid their grievances before the Rector. These amounted to a demand for the withdrawal of the police from the university. Of course the Rector had no power to promise anything of the kind; and the only result of the movement was to double the police in attendance, in order to prevent any possible assembling of the students. Since then the agitation for greater freedom has spread from one college to another, and has at length reached St. Petersburg, where protests against the existing restrictions have been extensively signed. This was met in the usual way by the appearance of the police, and the expulsion of the students. All the universities of Russia are, according to the correspondent of *The Times*, now closed, except one at Kieff. The students as a body are not in sympathy with Nihilism, and their action is only the fruit of Liberal aspirations.—*The Christian World*.

MR. BALFOUR AT ST. ANDREWS.

MR. BALFOUR's rectorial address to the students of St. Andrew's on the pleasures of miscellaneous reading, and especially on the large part which the gratification of curiosity plays in the satisfactions of every educated man's life, was an exceedingly amusing one, but hardly calculated to satisfy the ambitious ideal of learning, as it is cherished in the minds of the professional class. We imagine that some of his audience must have mentally accused him of poking fun at systematic study, and have felt more sympathy with that severe doctrine of Mr. Frederic Harrison,—that reading should be thorough, and confined to the most excellent books,—than with the taste for easy, skipping, skimming, slipshod, honey-sucking reading, which Mr. Balfour defended with so much humour, and, let us add, with not a little persiflage. For, after all, a University is not precisely the place where you should learn to suck the brains of a book that has both brains and platitude in it, and to evade the "padding" with as little waste of time on it as possible. Is not that rather the accomplishment of later life? At the University, we take it, what a man has to learn is the art of reading so as to discipline the mind, and not for the mere purpose of feeding the curiosity. What Mr. Balfour said was really in the nature of supplementary advice to men who, after acquiring their mental discipline at the University, are entering upon life with something, perhaps, of the artificially induced humility of pupilage, and without the *savoir faire* of the man of the world. But we have some fears that it would be accepted by many of the students of St. Andrew's as a serious suggestion for sipping Homer without making a toil of a pleasure, and perhaps even for skimming the cream off Euclid and the Latin syntax.—*The Spectator*.

ENCOURAGING FOR UNSUCCESSFUL WRITERS.

SOMEBODY in England who wrote something which nobody would publish, partly for a joke, partly for revenge, took the trouble to copy Milton's "Samson Agonistes," gave it the title of "Like a Giant Refreshed," and sent it the round as if a new and original poem. It was sent to publisher after publisher, editor after editor, and not once was it recognized. Publisher No. 1 said the market was flooded with sensational stories, and that he must decline to publish it, although a work of considerable merit. No. 2, in declining, said the poem was clever, but its reflections were trite and the meaning occasionally obscure. No. 3 said it was bright and clever, and that he would publish it if the author would take half the risk. No. 4 said he would publish it, but only at the entire risk and expense of the author. No. 5 said the work was not without merit, but he had so many important books coming out that he had no room for anything not first class! Then the magazines were tried. One editor said the poem was suggested by Rider Haggard's works! Poor Milton. The general opinion seems to have been that the poem was too long, and the gentleman who tells the story came to the conclusion that in some magazines you could get in anything if it was short enough. It seems almost incredible that Milton's famous sacred drama should be unknown by these prominent publishers and editors, but as several of their letters have been printed, we cannot do otherwise than believe such to be the case. A more ludicrous story than this has seldom come to light.—*Polites in Montreal Star*.

WAS.

BY EDWARD S. GOULD.

THE use of the past for the present tense, when the writer or speaker wishes to express an *existing* fact, is a blunder common to every man, woman, and child who uses the English language. These are familiar instances:

"The truth *was*, that James struck him first."

"I told him that the Mississippi *ran* southerly."

"Did you tell him you *were* John's brother?"

"They ascertained that the Great Pyramid *stood* on the bank of the Nile."

There is no end of examples that might be given; but here is one from Mr. Moore, in one of his criticisms on Mr. Marsh, in the *Round Table*:—

"That no doubt *was* what he intended to do, but certainly *it was* not what he did."

In all these, as in all other cases like them, the verb should be in the present tense:—the truth *is*, the river *runs*, you *are* a brother, the Pyramid *stands*, etc.—*Good English*.

THE EXAMINATION.

THE following are *bona fide* replies to questions of a written examination in geography in the secondary grade of a public school in Pennsylvania.

Question—"Tell how many oceans there are in the world and name them?"

Answer—"There are six oceans—the Atlantic, Pacific, Arctic, Antarctic, Indian and *Adjacent* Ocean."

Question—"Give in your own words the difference between a cave and a mountain?"

Answer—"One is a bump in and the other is a bump out."

Question—"Tell in your own words how a river is represented on the map and then give the definition of one?"

Answer—"When you see a black thing on the map like a lot of angle worms all together, that's a river, but a real river, of course, is water instead of angle worms."—*Harper's Bazaar*.

EVERY LESSON A LANGUAGE LESSON.

IN teaching language teachers frequently forget that to do their work well every recitation must be, in one sense, a language drill. Full sentences must be given in answer to questions, correct pronunciations must be secured, kind criticism must be allowed. The right word in the right place at all times ought to be the motto of every one.—*Supt. L. E. Bonebrake*.

Literature and Science.

A COMMONPLACE LIFE.

BY SUSAN COOLIDGE.

A COMMONPLACE life, we say, and we sigh;
But why should we sigh as we say?
The commonplace sun in the commonplace sky
Makes up the commonplace day.

The moon and the stars are commonplace things,
The flower that blooms and the bird that sings,
But sad were the world, and dark our lot,
If flowers failed, and the sun shone not;
And God, who sees each separate soul,
Out of commonplace lives makes His beautiful whole.

A SCOTTISH-AMERICAN POET.

UNDER the heading "A Scottish-American Poet," the *Home Journal* contains an extended and appreciative review of the poetical writings of Dr. John M. Harper, a Canadian educationist and author of deserved repute, who is now the literary editor of the *Educational Record* of Quebec, as well as Inspector of Superior Schools for the Province, Secretary of the Board of Examiners for teacher's diplomas, Secretary-treasurer of the Protestant Board of School Commissioners and Superintendent of the Quebec city schools. Following is an extract from the article in the *Home Journal*, giving some samples from Dr. Harper's poems which may whet the appetite of the reader for more. The article is by John D. Ross:—

Glancing over the smaller poems in the group, "To a Sprig of Heather" comes peeping forth, sweet in its simple beauty, and charming us with its fragrance of other days.

TO A SPRIG O' HEATHER.

My bonnie spray o' pink and green,
That breathes the bloom o' Scotia's braes,
Your tiny blossoms blink their e'en,
To gie me glimpse o' ither days—
The days when youth o'er-ran the hills,
A-daffin' wi' the life that's free,
'Mid muirland music, and the rills
That sing their song o' liberty.

Your wee bit threads o' crimpit fringe
Ance shed their fragrance in the glen,
Whaur silence hears the burnie brinige,
And o'er the scaur its prattle sen':
And now your bonnie flow'rets blink.
To mind me o' the burnie's sang,
To move my heart perchance to think
O' mirth that thro' the byegane rang.

Erewhile the hillside breezes kiss'd
The dew drops frae your coronet,
Or made you smile as thro' the mist
The peep o' day dispelled the wet:
And now your bloom's the token sweet
O' freenship in a brither's heart,
That smiles to see our cares retreat,
When freenship acts a brither's part.

Nor must we overlook another little poem which is hidden behind the "Sprig of Heather." It is entitled "Woo'd and Wed," and it is seldom that we come across a piece so brief and yet so daintily clothed in poetical language:—

The east wind blustered in her ear.
The daisy shuddering drooped her head,
Such wooing pinched her heart with fear,
She closed her eye and said:
"No lover true would think to harm
A wee bit thing like modest me;
I'll crouch me down and keep me warm
Till summer sets me free."

The zephyr whispered through her hair,
The daisy blushing, coyly smiled,
She thought to say, "How do you dare?"
His sighs her thoughts beguiled.
He kissed her crown, and crimson lips,
Her tresses trembled on his crest,
But dewdrops stained her petal tips
When Æol drove him west.

The bloom of autumn woo'd her heart,
The daisy gave her heart away.
Such loves as their's true joys impart,
Their life was golden day,

No thought how long such love could last,
'Twas his upon her breast to lie,
Her matron hopes no shadow cast
That love would ever die.

Among Dr. Harper's more serious pieces we have a special liking for the one entitled "The Old Graveyard." There is something of the quaintness and pathos of Wordsworth embodied in each verse, and the poem altogether is a masterly production. We select a few stanzas:—

The summers day is sinking fast,
The gloaming weaves its pall,
As shadows weird the willows cast
Beyond the broken wall.
And the tombstones gray like sentinels rise
To guard the dust that neath them lies.

The moon deciphering virtue's claims
To deeds of duty done,
Illumes anew the graven names
That time hath not o'ergrown,
Though the deeds of all are in the book
Where time hath never dared to look.

And oft 'tis here we learn to die,
As sorrow sifts the soul,
When love's sweet longings seem to sigh,
And with our griefs condole,
To make us feel what joy it is
To know that death makes all things his.

For if tradition reads its lore
In lines of dismal light,
Our higher hopes the fints restore
To dissipate the night,
And courage us to think of death,
A change beatified by faith.

[(1) Candidates for a First Class Non-Professional Certificate, Grade C, are examined in the subjects prescribed for a general course in Form III, of the high school courses. Arithmetic and mensuration are not enumerated in the course. (2) We presume so. Reg. 119, provides that at the departmental non-professional examinations in botany, candidates writing for a certificate of any grade, will be required to describe and classify any Canadian flowering plant belonging to one of the orders specified in the course of study, which may be submitted to them by the examiners. Any good work should cover this ground. (3) Yes, at the high school at which the candidate has studied, or at such other place as the Minister of Education may designate. (4) Five dollars. (5) Consult the science master in the nearest high school.]

(2) WHAT change has been made in regard to the number of entrance examinations during the year?

(2) What is the 4th Class literature for the next examination?

(3) What book, or books on drawing are to be used? U. P.

[(1) They are now semi-annual instead of annual as formerly.

(2) and (3) see below.]

WILL the Educational Department grant a Second Class Non-Professional Certificate to a candidate on passing Senior Matriculation Examination in Toronto University? H. F.

[No. Must pass the prescribed examination.]

PLEASE publish a list of the literature lessons for entrance examination, July, 1888. Also the drawing required for same. W. H.

[The following selections from the Fourth Reader comprise the literature for the next High-School entrance examination:—

1. The Face Against the Pane..... p.p. 74-76
2. The Discovery of America..... " 115-119
3. Lady Clare..... " 128-130
4. To a Skylark..... " 187
5. The Gulf Stream..... " 131-136
6. The Conquest of Bengal..... " 221-228
7. The Demon of the Deep..... " 266-271
8. After Death in Arabia..... " 272-274
9. The Forsaken Mermaid..... " 298-302

For drawing, Drawing Book No 5, of the drawing course for public schools is prescribed.]

Educational Notes and News.

THE people of Markdale are taking steps to secure the establishment of a high school in their town.

GREEK is no longer a compulsory subject for entrance in Winchester, Harrow, and Marlborough, three of the great English public schools.

A PARSEE girl, named Sorabji, has just been graduated in the University of Bombay in the "first-class," a distinction won at the same time by but five men.

OWEN'S COLLEGE (Eng.), has received from Mr. Abel Haywood a gift of £10,000, "for the purpose of making proper provision for the instruction of women and girls."

THE next regular meeting of the West Middlesex Teachers' Association will be held in the basement of the Front Street Methodist Church, Strathroy, on Thursday and Friday, Feb. 16th and 17th, 1888.

A MEMBER of the Separate School Board of Toronto has given notice of a motion to petition the Legislature to give separate school supporters their right to vote by ballot for the election of S.S. trustees.

THE memorial of St. Paul which some Americans propose to set up in his native city of Tarsus, will take the practical shape of a training school for orphans, of whom there are a great many in Cilicia. About £500 a year have been pledged, a sum sufficient to support fifty children.

Question Drawer.

To whom does the work of promotion of classes in a graded school belong? W.

[To the Principal as a matter of course, with the aid of his assistants.]

WHO should regulate the number in each division of such a school? W.

[The Principal, certainly.]

WHAT is your opinion of the utility of a trustee who acted in the following manner:—On the last day of the school year, the children were assembled, mainly for the purpose of making a present to one of the teachers. Before the closing exercises a class was being taught their lesson and a ridiculous answer was given by one of the pupils causing a boy in his seat to give a quite audible laugh. On hearing it the trustee gave an authoritative "Whisht," and later, being called upon to make an address, produced the following:—"Well, I think you might be a little quieter as you was. Some boys thinks it's nice for to laugh, but I don't think it's nice. That's all I got to say." W.

[We cannot say that the man's influence as a trustee is gone, for evidently it has never been. It certainly is non-existent. We do not, however, so much blame the man, who, no doubt, did his best according to his light, but the rate-payers who could elect such a man to such a position.]

Is *ax* or *axe* the correct spelling of the word? In the "Ontario Readers" it is spelled "*ax*," and in the most of the dictionaries, Chambers among the number, it is spelled "*axe*." D.

[The answer depends upon how far you are willing to go in the direction of spelling reform. Prevailing English usage no doubt favors *axe*, but the *e* is phonetically useless, and is not even justified by the Anglo-Saxon derivation.]

PLEASE say if (1) arithmetic and mensuration are down for 1st Class C. examination work; (2) if Spotton's Botany covers the work in botany; (3) if the examination for 1st C. is held anywhere outside of Toronto; (4) what is the fee for trying the examination; (5) what books cover the Physics, etc., of the course? F.L.

THE Board of Trustees of McMaster University has decided to call a meeting of the Baptist Convention at Guelph on March 27th, to discuss and decide the question as to whether McMaster University shall remain independent or federate with Toronto University. The location of the institution will also be decided.

AN attempt to tyrannize young women has just been made in lower Austria. The heads of schools there complained that young school mistresses all went and married just as they were getting experienced and useful, and that the nuisance could not be borne. A bill was actually introduced into the Legislature in favor of enforcing celibacy among female school teachers. The bill was rejected after an interesting and very humorous debate. The friends of the school mistresses contended that it was with the hope of marrying that lots of good girls went into the school teaching business, and that to cut off the bright hope of marriage would be to keep many bright girls out of the school-room altogether.

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His recitals have received high encomiums from Professor Plumtre, (Lecturer on Elocution at King's College), as well as many others engaged in Educational Work, while the English Reviews unanimously agree that he is one whose name should stand alongside of Bellew, Vandenhoff and other famed ones.

Educationists would do well to make a note of this.

Mr. Belford is open for engagements during February, March and April.

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AND
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The next Entrance Examination to High Schools and Collegiate Institutes will be held on July 4th, 5th and 6th, 1888.

TIME-TABLE OF THE EXAMINATIONS.

FIRST DAY.	
1.30 to 3.30 P.M.	Literature.
3.40 to 4.10 P.M.	Writing.
SECOND DAY.	
9.00 to 11 A.M.	Arithmetic.
11.15 to 12 NOON	Drawing.
1.00 to 3 P.M.	Composition.
3.10 to 3.40 P.M.	Dictation.
THIRD DAY.	
9.00 to 11 A.M.	Grammar.
11.15 A.M. to 12.30 P.M.	Geography.
2.00 to 3.30 P.M.	History.

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

Extracts from the Official Calendar of the Education Department for the year 1888.

FEBRUARY :

1. First Meeting of High School Boards and Boards of Education. [H. S. Act, sec. 22.]
2. Teachers' Institute Meetings—Lincoln and Dundas.
9. Teachers' Institute Meetings—Frontenac and Stormont.
16. Teachers' Institute Meetings—W. Middlesex and Grenville.
23. Teachers' Institute Meetings—E. Middlesex and Prince Edward.

MARCH :

1. Minutes of County Council to Department, due. [P.S. Act, 128.]
Inspector's Annual Report to Department, due. [P.S. Act, sec. 183 (6.)]
Auditor's Reports on the School Accounts of High School Boards and the Boards of Cities, Towns, Townships and Villages to Department, due.
Teachers' Institute Meeting—N. Victoria and Peel.
8. Teachers' Institute Meetings—N. Simcoe and Waterloo.
29. Closing of High, Public and Separate Schools for Easter holidays.
30. GOOD FRIDAY.

NOTE.—The Minister of Education is distributing the Revised School Acts and Regulations through the Inspectors—one copy for each school corporation. Extra copies are charged for at 50 cts. each.

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The attention of teachers is respectfully called to this new work, designed for use in the public schools. It is placed on the programme of studies under the new regulations, and is authorized by the Minister. It will be used in three forms. The object of the book is to impart to our youth information concerning the properties and effects of alcohol, with a view to impressing them with the danger and the needlessness of its use.

The author of the work is the celebrated Dr. Richardson, of England; and this book, though somewhat less bulky, being printed in smaller type, contains the whole of the matter of the English edition, slightly re-arranged, as to some of the chapters, to suit the requirements of our public school work. It is, however, but half the price of the English edition.

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During the last two months I have taken every possible opportunity of testing the accuracy and the usefulness of **The Concise Imperial Dictionary**, and I am now convinced that for general use it is the best dictionary extant.

In *Orthoepy*, it is about equal to *Stormonth*, which is saying a great deal; and it is superior to *Webster*, both in giving the present usage of cultured Englishmen and in employing a notation, which, unlike *Webster's*, can be understood by everyone.

In *Etymology* **The Concise Imperial** is far superior to all its rivals, its editor, Dr. Annandale, having taken full advantage of the labors of Skeat and other late philologists. In this department it quite distances *Stormonth*, whose editor, by his Celtic crochets, has been led into some strange errors, and *Webster*, which begins to need remodelling. In **The Concise Imperial** I have noticed but one derivation to which I would seriously object, that of Huguenot, in which Dr. Annandale has allowed the authority of Ritter, I suppose, to influence him in favor of the old explanation in spite of its phonetic difficulties.

In connection with the *teaching of English literature* I have found **The Concise Imperial** very helpful, especially in explaining words used in unusual senses. Of course I do not say that it will supersede such special works as *Schmidt* for Shakespeare study: but it gives more in this way than I thought would be found in a book of its size. Scientific terms are defined in their present acceptance, which cannot be found in any dictionary published even a few years ago; and in many cases there is added to the definition an amount of useful information that supersedes reference to an encyclopædia.

I may add that our Board of Trustees has, on my recommendation, furnished each of our class rooms with a copy of **The Concise Imperial**. MESSRS. BRYANT & Co. are doing good service to English study by circulating this excellent book.

J. W. CONNOR.

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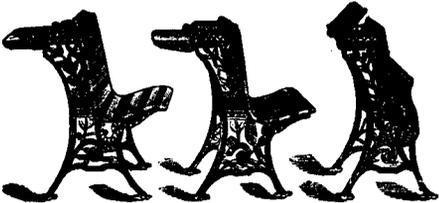
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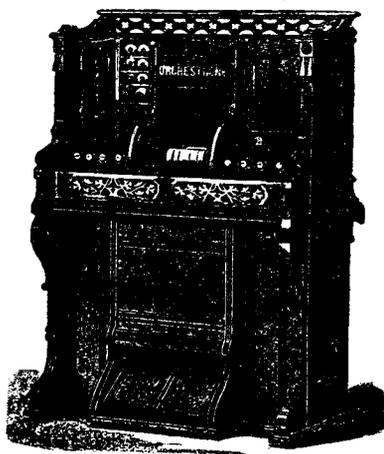
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