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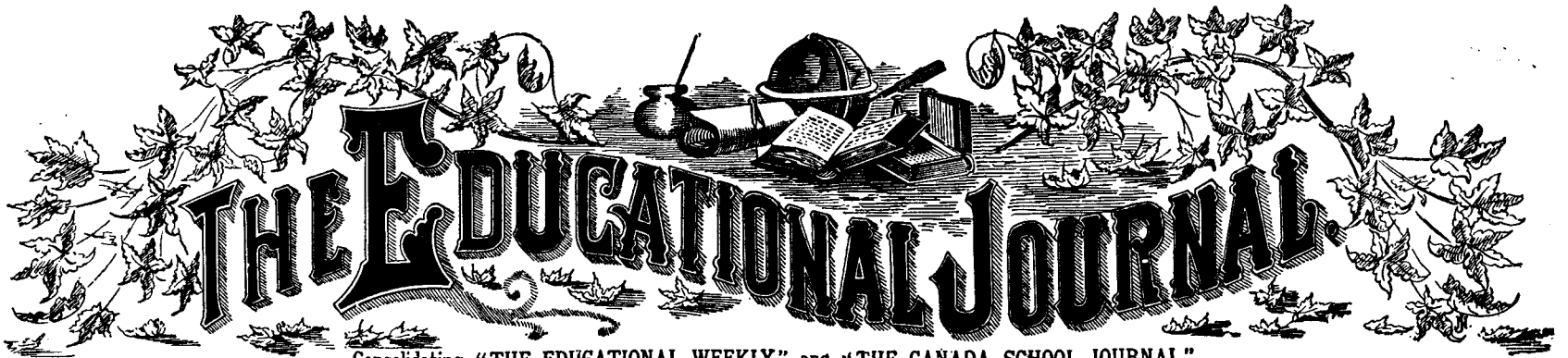
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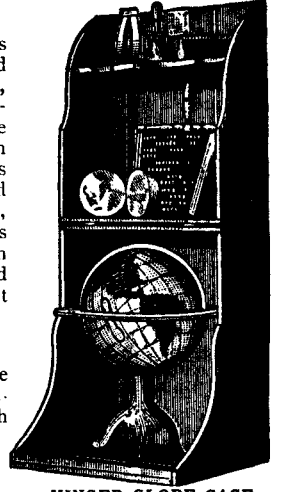
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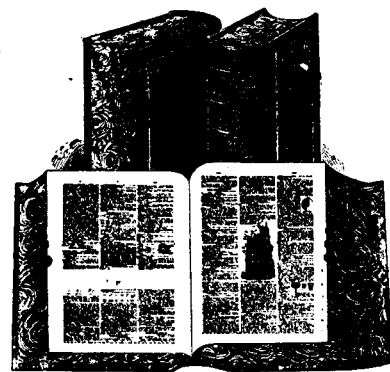
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TORONTO, MARCH 2, 1896.

Vol. IX  
No. 20.

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## Editorial Notes.

THE bitter cry of suffering Armenia reaches, we cannot doubt, the very heavens. It should reach the heart of every man and woman in every Christian land, and meet with such response that the fear of starvation should no longer be added to all the other unspeakable woes which Turkish misrule and Moslem fanaticism and savagery have brought upon this most unhappy people.

THE crisis of the Manitoba school difficulty is apparently near. After having been, doubtless, the chief cause of a temporary upheaval in the Dominion Cabinet, and of a thousand discussions, *pro* and *con*, in the press and from platforms and pulpits, all over Canada, the Government Remedial Bill is now before Parliament. No doubt the discussion there will be long and warm. The issue it seems impossible to predict with any degree of confidence.

THROUGH some delay the "copy" for the Mathematical Department did not reach us in time for this number. Look for this department in next issue. Meanwhile its place will, to some extent, be well supplied by the useful and instructive article which has been very kindly given us by Mr. Douglass on "Actuary Calculations." By it the leading principles underlying calculations which, though of the utmost practical moment, are gener-

ally considered too abstruse for ordinary pupils, are made clear to the comprehension of school boys in their teens. Mr. Douglass' article will, we are sure, be read with much interest. Why should not this subject have a place in our school text-books in arithmetic?

IN our Entrance Department we have placed an interesting sample of an observation lesson kindly sent us by Mr. Fred. A. Clarkson. The method set forth is well worth attention. Surely no teacher who uses such methods, as we hope very many do, will fail to use the excellent opportunity offered to combine with the training of the observing faculties the culture of the moral sentiments, especially the love of mercy. For instance, each member of the class was requested, in this case, to bring a fly. How many of these were careful to handle the tender creature with gentleness, and avoid causing it to suffer pain? It is obvious that experimental lessons of this kind may have either of the two opposite effects of developing tenderness, or indifference, to the sufferings of the weak things handled. We have no space to enlarge. But better a thousand times that the child should grow up with such study of the animal world as can be made without contact with the creatures observed than that closer observation should be taught at the expense of the finer and nobler sentiments of humanity. The object lesson may have either effect, as we have said. Which is the more common one?

A WRITER in the *Journal of Education* makes an earnest argument and appeal against the use of the hyphen in compounding words. He pathetically beseeches editors to "stand by the anti-hyphen (why not antihyphen?) party, and lend a hand." We strive, we trust, to preserve the attitude which makes us "easy to be entreated"; but we cannot as yet see our way clear to respond, in our own little sphere, to the appeal. To us the hyphen appears to serve a most valuable and necessary purpose in our language. In fact, we have long been of

opinion that it is sadly neglected in much of our literature, especially in our periodical literature, with the result of a distinct loss in precision of speech, and in the capacity of the language for making nice distinctions. We are, however, "open to conviction," and do not utterly despair of seeing the man who may be able to convince us, for hyphens are troublesome things, and are not, we frankly admit, pretty to look at when they appear in force on the printed page. But we cannot see, as yet, how one could express thoughts with any degree of precision without them.

VICTOR HUGO has said that the man who opens a school door closes a jail door. Some facts and figures given by Mr. Thomas Greenwood, in a book he has recently published on "Public Libraries," are quoted by an English contemporary as confirmatory of the dictum. "In 1856," he reminds us, "the number of young persons committed for what are called indictable offences was 14,000; in 1856 it had fallen to 10,000; in 1876, to 7,000; in 1881, to 6,000; and in 1886, to 5,100. And this though the population had risen from 19,000,000 to 27,000,000, so that juvenile crime was less than half what it was, though the number of children was one-third larger. The prison statistics are scarcely less satisfactory. The average number of persons in prison was, in 1878, 21,000; in 1880, 19,000; in 1882, 18,000; in 1884, 17,000; in 1886, 15,800; and, in 1885, 14,500. Indeed, our prison population is mainly recruited from those who cannot read. Out of 164,000 persons committed to prison, no less than 160,000 were uneducated, and only 4,000 were able to read and write well." This is in the United Kingdom, of course. Unhappily, there is another side to the shield, in the great increase in crime in the United States and Canada, as shown by recent statistics. This proves, not that the inference from the above facts and figures is wrong, but that powerful counteracting agencies are at work on this continent. What are they? We may return to this hard, practical question.

## English.

All articles and communications intended for this department should be addressed to the ENGLISH EDITOR EDUCATIONAL JOURNAL, Room 5, 11½ Richmond Street West, Toronto.

### SOME PHILOLOGICAL QUESTIONS.

To the Editor of THE EDUCATIONAL JOURNAL:

Will you kindly allow me space in your paper to make a note or two upon the review of my little book, "Notes on English Grammar" (EDUCATIONAL JOURNAL, February 1st)?

There are, on page 39, fifty errors, which, perhaps, would justify the addition of a list of *Corrigenda*. I refer pupils to Sweet's "Anglo-Saxon Reader." The word *alms* (p. 24) is asserted to be derived from the Vulgar Latin *alimosina*, by Pogatscher, in his "Lehnworte im Angelsächsischen." I have not asserted (p. 36) that verbs such as "teach" and "seek" formed their past tense in Anglo-Saxon by vowel change. The passage runs as follows: "A third class of verbs existed in Anglo-Saxon. The past tense of these verbs was formed by vowel change, and by adding the suffix *de* or *te*. They are called mixed verbs. This name might well apply to such modern verbs as *teach*, *seek*, etc. *She*, *her*, *they*, *them* (p. 51) should be *She*, *they*, *them*." The reviewer's remarks, with the omission of this word, concern debatable ground, though his tone is a trifle arbitrary. As regards the neuter possessive, *its* (p. 53), I say that the changes were *his*, *hit*, *it*, *its*. Of course *its* was formed by analogy. With respect to the derivation of *other* (p. 58), I wrote in my MS. *o'ther*, which was printed *o'der*, and not corrected. Your reviewer does not mention his authority for the assertion that *by* in "Whitby" is not connected with *by* in "by-law" (p. 96). The statement that my account of umlaut (p. 92) is inadequate is unnecessary; the statement that it is erroneous, without specific instances in which it is erroneous, is cheap. In the example (p. 64), "The more, the merrier," I contend that the first *the* may be regarded as a conjunction, the second *the* as an adverb. So much for my positive errors.

I take this opportunity of repeating that the philological part has been subordinated to other more rudimentary matter, and that a chief object of the book is "to enable pupils to parse fairly complete at an early stage." Your reviewer read *age*, and so was betrayed into the notion that the philological instruction was intended for those of tender years. He says that my language (with his misreading) "warns the reviewer to be on his guard"—against, I suppose, some ill-advised attempt to bring on premature brain fever, or to deceive unsophisticated infants by printer's errors.

Thanking you in anticipation,

Yours faithfully,

A. ALLEN BROCKINGTON.

B.C.S., Lennoxville, Feb. 7th, 1896.

We are glad to find that Mr. Brockington has accepted so many of our corrections, and with so good grace. With respect to those he still doubts or disputes, we may add the few words our space permits.

The derivation of "alms" is a difficult question, not set at rest even by Pogatscher in his "Lehnworte im Altenglischen," to quote the title more correctly. The usual authorities, such as Skeat, remark, "The Anglo-Saxon *almesse* is a corruption of the eccles. Latin *eleemosyna*, borrowed from the Greek." The ultimate basis is the Greek *eleemosune*. That there was a Romance basis of the Anglo-Saxon is attested by the umlaut; but this basis was probably (Pogatscher, § 75) *alimossina*; through Kluge (*Grundr.*, i. 713) holds that *almesse* may have a closer connection with old Irish *almsan* than with the continental borrowings from Romance *almosna*, Lat. *eleemosyne*.

That the author still clings to his statement that the past tense of such verbs as "teach," "seek" was formed by vowel change, is strange. They are not "mixed" verbs, because they never had any trace of the vowel changes of the ablaut verbs. The vowel change is due to the absence of umlaut in the past tense and past participle. (Sieviers, *A.S. Gram.*, p. 407.)

The relation of "they," "them," to their Norse source will be found stated clearly by Skeat (v.

"they"), Kluge (*Grundr.*, i. 789, etc.). No one debates it.

That the "neuter possessive *its* is derived from the A.S. *his*; the changes were *his*, *hit*, *it*, *its*," is obviously erroneous. How could the form *its* be derived from the form *his*, or *hit* from *his*, which is the genitive case of *hit*? *Its* is simply a newly-formed possessive on the basis of the nominative and accusative *it*, which took the place of *his* as a neuter possessive.

That the connection of *by* in "by-law" with *by* of "Whitby" is no longer held is a matter of common scholarship. See, for example, under "by-law," in the Standard Dictionary.

The erroneous character of the explanation of umlaut (p. 92) begins at the beginning of the explanation: "There appears to be a constant struggle to return to what may be called the natural order of vowels, *i, e, a, o, u*." This is not simply error, but flat nonsense. Umlaut is the accepted term to denote the modification of a stressed vowel by another following it, by which the first vowel approaches in character the second. The back vowel *a* followed by the front vowel *i* has a resultant in a middle vowel *e*, *man* (*n*), plural \**manni*=*men* (*n*). Similarly, A.S. *werold* becomes *weorold*; *wela*, wealth, becomes *weola*, etc. If the author will read Skeat's "Principles," I, pp. 190 ff., Sweet's "New English Grammar," §§ 751 ff., or Sievers' "A.S. Grammar," §§ 85 ff., he will learn something about umlaut that his little book does not teach.

Concerning the phrase, "The more, the merrier," whatever the first "the" is, it is certainly not a conjunction, from the simple fact that it does not connect. Originally it was the instrumental case of the neuter article *that*. So Alfred in his "Boethius" wrote, "thæt thu meahst thy sweotolor ongitan," etc., that you can understand the clearer. So in his preface to the "Pastoral Care," we find "hie woldon thæt her thy mara wisdom on londe wære thy we ma getheoda cuthon," they wished that here should be the (by that) greater wisdom (by that) more of languages we knew.

It will be clear from these examples that the modern usage of "the" is precisely the A.S. usage. Now the A.S. usage is the instrumental case, modifying adverbs and adjectives in the comparative degree. It is, therefore, used adverbially. The phrase, "The older the better," therefore, means simply "by what amount older, by that amount better."

### ANSWERS.

W.M.—(1) In Shelley's "Cloud" some versions give *upbuild*, in last line, while others give *unbuild*. Which is preferable, and why is it? Give meaning when "unbuild" is used.

We are unable to find any intelligible meaning for the sentence when *upbuild* is used. The reference is clearly to the "cenotaph," and the "cenotaph," in its turn, is clearly the "blue dome of air" built up by the winds (which clear the sky) and the sunbeams. This cenotaph is the tomb of the cloud, which is not within it, but in the "caverns of rain," from which it laughs at its own empty tomb, and from which it arises to *unbuild* that cenotaph by covering the blue dome again with itself, the cloud.

NOTE.—Want of room and time compels us to hold over answers to other questions before us till next number. We shall hereafter give a good deal more space in this department to the Literature for Public School Leaving Examination. Will teachers please ask questions and state difficulties freely? Perhaps we can meet their wants more effectually by answering such correspondence than by attempting, at so late a date in the school year, to annotate all the selections in order.

Few persons have any adequate idea of economy of nervous and vocal strength, while the daily and hourly waste of power in these directions is lamentable. In no place is this waste so excessive as in the schoolroom. There is no work in the world which makes greater or more incessant demands upon the vitality than that required of a teacher. There is certainly no person who should more carefully seek to protect and save herself from physical breakdown, a vast amount of which might be prevented by attention to the one matter of proper vocalization.—*The School Journal*.

## Special Papers.

### THE PENCIL IN THE PUBLIC SCHOOL.

T. F. M'LEAN, BRIDGEPORT.

(Concluded.)

Another important consideration is the habit of criticism, which must be inculcated by the teacher.

It is his duty at first to offer kindly and helpful criticism, the aim in view being self-criticism on the part of the pupil, which is a safe stepping-stone to improvement.

We all realize how easy it is to criticize, yet some of the most valued art critics have been but indifferent manipulators of the brush.

When these two stages of observation and self-criticism have been reached, give the pupil plenty of practice and he will learn to draw by drawing. Leave him to his own resources, and I warrant you he will not be idle.

The imitative impulse in children is inborn and you will soon begin to perceive evidences of it.

From the vague outline, rude and typical in character, parts and members are recognized, and then various objects of the same kind are examined with a view to seeing individual differences, while, at the same time, the process of generalization goes on in formulating rules to govern the construction of objects of the same kind. The pupil's mind views, analytically at first, and then synthetically, in stages corresponding.

No doubt all of you have an idea of what a child's conception of a human being is, and how it is drawn.

The explanation lies in the fact that the child's observations are, at first, only general and indefinite, confined merely to length and breadth in the body and a rude representation of features in the face.

As we proceed naturally from the known, and as, perhaps, the human figure is the most familiar and the most frequently presented picture in the child's sensorium, it would not be amiss to allow him to draw from nature various members of the body, such as fingers, hands, limbs, and faces.

At this stage, it may be, the precious youngster may demonstrate his attachment to the art by attempting to draw the oldest face in the room. But if a pupil caricature you, I should not advise you to vent your spleen on his devoted head.

You have the consolation that it was only intended as a mild rebuke on your personal appearance, and for this, in a great measure, you are not responsible.

Under the old régime in teaching, it was considered an unpardonable offence to be caught drawing pictures in school, and grievous were the penalties meted out to the offender if he were detected; but we hope that things have now reformed.

There never yet was a mischievous, though clever, boy who did not delight in drawing something, and I know of no more useful help in school management than the filling in of time by such a pupil, after his work has been carefully revised. Moreover, if the realm of art is not enriched by his productions, meanwhile the realm of order is under the dominancy of one of the best preservers of silence.

His precocity amounts to nothing more nor less than an irresistible impulse towards constructiveness and destructiveness, an impulse easily appeased in this way, while you shackle his mischievous propensities by appealing to a passion which is almost universal.

If, by placing good models before him, you lead him to appreciate good drawing as you endeavor to stimulate him in literature or composition, there is no question as to the character of his work.

But the question here arises—"How are we to cultivate in the pupil a taste for art and a pride in the preservation of the same?"

One axiomatic truth I have discovered in my short experience is, that there is only a step, a short, easy, and natural step, from admiration to imitation.

We grant such by our most approved methods in reading, writing, composition, and literature.

The kindling of the warmest fires of admiration for the sublime, or the beautiful, is simultaneous with the passionate desire to emulate, the fervent hope to excel, or even to surpass in merit, the immediate model.

This is the means *par excellence* of securing zeal and sustaining effort that oftentimes proves disheartening.



Teach the pupil to read a picture as he would a printed page, and you are not only impregnating his soul with ambition, but you are enlisting the service of his thinking power, for think he must, in order to fathom the artist's concealed causes and effects.

Hence we should use whatever opportunities lie in our power to present to our pupils, from time to time, good models of workmanship and neatness.

This is rendered more practicable in our day by the existence of the various art associations, whose choicest works on exhibition are widely copied and disseminated throughout the land through the medium of the press.

It is the highest aim of such organizations to educate public sentiment in the appreciation of art, and the nucleus of public sentiment is wrapped up in the rising generation under our guidance. Let us keep before them a true conception of the value of the subject, both to themselves and to mankind, and no other mental stimulus is needed.

I do not include photography as a branch of our subject, though its widespread usefulness, in science especially, must be remembered.

To become a photographer is an easy way of becoming mechanically reproductive, without paying any attention to the very faculties that make art possible. We must remember the adage, "Ars longa; vita brevis."

It seems to me that the photographer and his camera bear the same relation to the essence of art, that the Italian and his hand-organ bear to the power of music.

So, in the schoolroom, the education should be spontaneous and co-operative; pupils catch the infection and it spreads; they compare sketches and comment freely—unequivocally sometimes; yet by so doing they are developing that critical spirit which is the genesis of progression.

Let me now enumerate a class of exercises intended as a review of the literature lesson, which I should give not oftener than once a week, or, perhaps, once a fortnight.

You may ask, "Where are we to get time for any more exercises than we now have?" Exercises that admit of easy correction are no burden to the teacher, while they employ many of the moments that might otherwise be spent unprofitably.

It takes only a few moments to examine and criticize a whole series of these, and the step succeeding criticism is correction.

Allow pupils plenty of time, even if their labors extend over days; for in drawing it is the painstaking pupil that always succeeds.

I think you will agree with me that it is not a sacrifice of time, as the importance of the subject demands our attention to the extent of at least half an hour of our time in the week, while we are to remember that the pupil is bearing the burden of the entire work.

For Second Class.—In the lesson "The Lazy Frog," draw the frog, trout, sparrow, pretty pool, eyes positively goggle, etc.

For Third Class.—Show by drawings what is meant by masts, spars, battlements, turrets, monolith capitals, castle, weasel, pyramids, obelisks, the monster of the Nile, horizontal branches, thermometer. Draw the steamer *Hesperus*, the pitcher used by King Midas, the skull spoken of in "After Blenheim," flashy brink of weedy lake, marge of river wide, gloomy woods, outward bound the steamer sped, the three bannered lions of Normandy, etc.

For Fourth Class.—Illustrate, by drawing the quotations, zigzag steerer, palisade fort, they stretch in airy undulations far away, Ayr, gurgling, kissed his pebbled shore, etc., the decent church that topped the neighboring hill, dim old forest, etc. Show the different expressions on Mr. Toil's face.

We can select themes from nearly every lesson, as drawing bears a very close relation to all the subjects, and affords a means of testing the pupil's understanding.

And if you imagine they cannot do satisfactory work on any of these above exercises you are deceiving yourself, for if you have led up to this by the course outlined they can supply illustrations for many a theme which you might regard as almost too subjective.

There is another standpoint from which this subject may be viewed, and I cannot bear to pass it by. I refer to the teacher's standpoint.

Nothing can exceed in professional value the accomplishment of drawing as an auxiliary to teaching. By its employment complicated terms

are rendered more explicit, abstract ideas are given more tangible form; and, above all, interest and enthusiasm are aroused in the class.

The power of illustration is one of the prime requisites in a teacher's qualification, and if he possess this added virtue he only enriches his resources.

If you find yourself deficient in this branch, pursue the same course as you should with your pupils. Look first to your long-neglected observation, then to your memory and subtlety of touch, and skill in delineation will surely accompany earnest effort.

It is nothing short of a positive affront to pupils to place before them such diagrams and illustrations as sometimes are used.

How many teachers transform monsters into monstrosities, and diagrams into unintelligible puzzles that confound rather than explain, and still further mar the continuity of the whole by writing across the face of them the names of their component parts.

Such work enervates what little talent they possess, and begets carelessness and slovenliness in pupils. Time in the class room will not admit of a finished picture, but teachers should be so self-trained that they can present the salient features with the minimum number of characteristic strokes, according to the result desired.

Speed in this work does not necessarily imply that their work presents an unfinished appearance, but that they have become proficient enough to economize time for their pupils and effort for themselves. You all have some idea of the marvellous effects the adaptation of this subject will produce.

For instance, in teaching the transitive verb we can indicate the actor by a representation of him; the action by a line of direction, the terminus being the thing acted upon. We can develop degree of comparison in the same manner.

In geography we can indicate the slopes of a continent, the relative height of mountains, or level of lakes and rivers.

We can draw for our pupils some of the wonders of the world, such as Niagara Falls, the pyramids, St. Peter's of Rome, the Eiffel Tower, or the Pillars of Hercules.

In literature it is all-important. Scarcely a paragraph passes in which it may not be called into use. Here are two poetical passages where drawing may convey a clearer meaning than anything else:

- (1) "This life of mortal breath is but a suburb of the life Elysian," etc.
- (2) "Each shadowy island, like a silhouette, lies on the silvery ground."

In arithmetic I need not dwell on its uses.

In history, if we can but cause the pupil to look upon any such pictures as many of you have seen, you can teach him more of the spirit of patriotism, more of lofty national sentiment, and make him more attached to the biography of historical landmarks, than by a series of lectures extending over his whole school life.

This leads me to think of that canvass entitled, "The Death of Wolfe," presented to the National Art Gallery of Ottawa by the Marquis of Lorne and the Princess Louise.

To those of you who have never seen it I would I had the time and the language to describe it; its effect is emotional, yet it is not without its intellectual side.

If all Canadians were allowed to feast upon it with their eyes, the devotion of the heroes who were consigned to untimely graves to purchase our national freedom would be graven on the imperishable canvass of the national soul, there to communicate its inspiration to generations yet unborn. And what more is true education than the transmission of the best thoughts that have accumulated in the history of the world?

In physiology we can draw most of the parts of the body while teaching their functions.

Those of you who sat under that versatile caricaturist, Mr. J. W. Bengough, at our last association's entertainment, know the value of pictorial parable in teaching temperance.

They may be grotesque, it is true, but their grotesqueness only augments their force and impressiveness. Under the stratum of humor there runs a strong didactic vein that strikes conviction home. There is more temperance taught by one such picture, with explanations, than could be accomplished in a term of ordinary lessons.

Some of you may think that this work on the teacher's part savors strongly of parasitism, but we are all prone to encourage parasitic methods in the

attempt to make things easy for the teacher and pleasant for the pupil.

And now I have endeavored to point out the uses of drawing, both to pupil and teacher, as the very best training for observation, memory, and imagination, and as a means of mental culture which removes the necessity of striving to make each pupil an automaton under the teacher's control. My only regret is that I had not more space at my disposal to amplify and give more particular examples, and more of the wisdom and experience necessary in treating so worthy a subject, and one that has had so many illustrious disciples and votaries.

## A LESSON OF MERCY.

M. A. WATT.

Have you taught that gem of Leigh Hunt's, "Abou Ben Adhem and the Angel"? Do you want your class to realize its force, or are you willing to be content with the saying of the words in a pleasant tone? Are you one of those so-called teachers who teach the shell of such poems, and would blush to say a word about the softer, gentler, nobler sentiments which form the kernel? Would your class be amazed if you said to them, "I hope you are trying to do right, because it is noble and godlike"? You are missing much of the truths of teaching if this be so, and your teaching must be dry and dreary, indeed; and what of your pupils?

Thinking upon these things one Friday morning, we picked up an old copy of the *Montreal Star*, in which we found a clear account of the Red Cross Society, and we adapted it for an "information lesson." To get it firmly upon the children's minds we wrote the principal points under the following attractive title, "The Story of the Red Cross," using red crayons for proper names, and in the left-hand corner we drew a Greek cross, red on white. They copied this into their rough notebooks, to be rewritten at leisure. The facts used were as follows:

"In 1859 M. Henri Dunant saw the battle of Solferino, and was horror-stricken at the sight of the sufferings endured, without any means being used to alleviate them. He could not rest, and set to work to formulate a plan, which he submitted to one nation after another, until, in 1864, the 'Treaty of the Red Cross' was signed by sixteen nations. There are now forty names on its roll, of which Japan is the latest.

"By this treaty all stores for the sick and wounded are neutral, and may pass through the lines of any arms unmolested; all nurses and doctors, all ambulances, all sick or wounded, are neutral, and may go through any armies, however hostile. No nationality or creed is a bar to help being given; need is all that is required to secure aid of the best kind. Thus a Mohammedan may be helped by a Christian, and a Chinaman receive kind offices from a Jap. The cross is taken from the flag of the first nation who entered into this good work, the colors being reversed, and the society is broader than any sect or creed can be.

"In 1870 Miss Clara Barton saw the work of the society during the Franco-Prussian war. The contrast between the dreadful scenes of the American battlefields, from which she had just come, was a sharp one, and she rested not until the United States had joined the noble league. At the request of President Garfield, who refused the office in her favor, Miss Barton became the president of the American Red Cross Society in 1882, which position she still holds. By the 'American amendment' the society is allowed to send help to sufferers from flood, fire, and famine, and several millions of dollars have been spent in this way. Their present aim is to help the Armenian sufferers. Though the Porte is refusing to allow the Red Cross to pass through its territory, it is reported to be allowing certain persons recommended by the American Ambassador to carry aid."

These facts were condensed, of course, and the conversational method used, by which much more was told. The class were delighted with their new acquisition of knowledge, and a good spirit was shown. The reading time had come, and nothing could be more appropriate than Leigh Hunt's little parable, which was read and appreciated, very little explanation being needed. The question which closed the lesson was, "What can we do to help our fellow-man?"

"The children now are the nations of the future."

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## Editorials.

### SPEAKING AND WRITING.

THE teacher whom we admired above all others in our school-boy days used to say that fluency in speech, or what is sometimes regarded as eloquence, is by no means a proof of superior thinking power, but rather the opposite. His theory was that while the man of narrow intellectual range, having but a single set of ideas, and seeing but one side of what might be, in reality, a many-sided question, might often be able to pour forth those ideas in a smoothly-flowing stream, or even in a rushing cataract; while another, to whose profounder thinking the question presented itself in a variety of aspects, each representing but a segment of the whole circle of truth, might often suffer the embarrassment of riches, and hesitate, not for want of something to say, but because of the difficulty of making a choice on the spur of the moment amidst a variety of thoughts pressing for utterance, or even amidst a variety of words, each expressing a different but still true shade of thought, which come crowding before his mental vision. This view is certainly comforting

to the man who is slow of speech. It, no doubt, contains a considerable admixture of truth, though far from being the whole truth, seeing that it takes no account of the intenser activity of the mind of the true orator, turning out its glowing thoughts under the stimulus of an afflatus which arouses every faculty to its utmost capacity for rapid work.

It has often seemed to us that there is also a certain moral quality which, when actively present, tends often to weaken the force and mar the brilliancy of the periods of many an otherwise clever writer or speaker. It is often said that strength of feeling or conviction effectively promotes terseness and vigor in expression, whether by voice or pen. That this is true may be easily proved by observation. Whether the same causes tend to promote clearness and conscientiousness in thought and expression is doubtful. When the speech-maker or ready-writer is under the glow of excited feeling of any kind, it is clear that his expressions are much less likely to be guarded, either by sound judgment or by conscientious regard to truth. Most readers and hearers like positive, "ringing" statements. They like a terse, vigorous style—one that abounds with strong and startling generalizations. The effect upon those addressed would often be greatly weakened were the facts and arguments presented in a careful, judicious style. We are not sure that the main difference between an "orator" and a "bore" on the public platform may not sometimes, on analysis, resolve itself into a question of greater or less conscientiousness on the part of the speakers. The man who sees everything in the dry light of intellectual analysis is in great danger of becoming the man whom no one cares to listen to, or to read.

Let us not, however, disparage or underrate the value of strong conviction, or strong emotion, as most desirable as well as powerful auxiliaries in the advocacy of the right and the true. These are the natural stimuli to that forthputting of energy without which the mind can never accomplish its best work. The question resolves itself, after all, largely into one of careful preparation. The secret of a good style is largely wrapped up in that word "preparation." The orator or writer who has let his mind dwell upon a theme until he has not only reached clear and strong views in regard to it, but has permitted his whole being to become saturated with it, is, other things being equal, the man who will find it easy both to interest and to convince others. And what is true of the man is true, in its degree, of the school-boy and school-girl.

The two points which we wish specially to make are, first, that the best way of preparing for any exercise, whether written or oral, in which the pupils are ultimately expected to give the best expression to the results of their thinking of which they are capable, is that above indicated. From the purely educational point of view, such an exercise is, we believe, among the very best in which any student can engage. Within the bounds of reason, the more of it the better in schools of all grades. But the ethical effect produced is, to our thinking, of even greater importance, though it is, we fear, too often lost sight of. Such an exercise, if rightly conducted, should be one of the very best means of cultivating a conscientious care to keep the mind free from every form of bias and prejudice in thinking and investigating—in a word, of developing a passion for truth, or the nearest possible approach to it, on every subject. When clear views have been reached, and the effort is simply to present these views, with the arguments in support of them, in the simplest and most convincing manner, the style will generally take care of itself. It will be sure, at any rate, to have the prime qualities of strength, clearness, and originality. And every effort will leave the learner stronger for the next.

### MORE ABOUT SPELLING.

WE invite attention to Inspector Knight's brief remarks on "The Spelling Problem," which will be found in our Correspondence columns. We are glad that so good an authority has given us the benefit of his views upon the subject. We think it would be beneficial to our readers, many of whom are, we have no doubt, perplexed, and perhaps discouraged, by their want of success in teaching this most difficult art, if other inspectors and teachers would freely exchange views and experiences on this subject. It was chiefly to this end that we introduced the matter. The main thing is to find out, so far as we may from the experience of inspectors and teachers, what is, as a matter of fact, the most successful method of producing good spellers. We are glad that "Rhoda Lee" has taken up this question independently. Her remarks will command attention.

Mr. Knight evidently speaks directly from observation, for which an inspector's duties afford him, we should suppose, unequalled facilities. Our own experience is far in the past, and we should not think of setting our dim recollections over

against his fresh and varied observations. We have our theory, it is true, but we are not wedded to it, nor have we any interest in holding fast to it, if it can be shown that "all the facts, as well as common sense, are against it." With regard to the testimony of common sense, it would, it seems to us, be idle to argue. Common sense is an uncertain and slippery witness. We should have to depend entirely upon interpreters in taking her evidence, and there is no guarantee that any two interpreters we might choose would agree as to her testimony. But our correspondent will forgive us if we hesitate to accept without evidence the assurance that "all the facts are against it"—to wit, the theory in question. On this point we invite further testimony. The special points that suggest themselves are these: Is it admitted that, some years ago, when there was a great deal of oral spelling and very little dictation in the school, every pupil who could learn anything was a good speller? Are the antithetical statements made so unqualifiedly by Inspector Knight admitted? If his "facts" on both points are accepted, does it follow that the two parts of each of his antithetic statements stand to each other in the relation of cause and effect, or that dictation, as a means of teaching spelling, has proved a failure? May not such changes as the enlargement of classes, the great extension of the programme, with the constant reduction in the time allowed for a given subject, and the substitution, in so large a measure, of teaching by grades for individual instruction, count for something? Finally, should it, on the other hand, be found capable of proof that the method of teaching spelling through the eye rather than through the ear produces better results, does it necessarily follow that our forefathers were all fools? If so, does it not follow that if any other of the great changes which have been made in methods of teaching are real improvements, our forefathers, who used the inferior methods, were all fools—hence, by this logic, fools, anyway?

WE learn from the Education Department that it is contemplated to hold an examination for Toronto University scholarships this year at any centre where there is a Senior Leaving Examination, and that it is also intended that candidates for Commercial Specialists' certificates may write at any High School. These changes are in the right direction. A great step in advance was made when, some years ago, the plan of holding the ordinary University examinations at

various High Schools and other educational centres was first adopted by the University authorities. But the limitation which compelled candidates for scholarships still to come up to Toronto—a limitation for which it was hard to see any sufficient reason—seriously limited the benefits of the concession. We are glad to learn that those exceptions will no longer mar the otherwise liberal scheme.

WE infer, from the considerable number of notes we have received in answer to the request in our last issue, that more of the schools have fifth forms, and are, consequently, interested in the Public School Leaving Examinations, than we had supposed. We shall, therefore, gladly do all in our power to assist in the work. The literature for the Public School Leaving will be, for the most part, annotated in our English Department; all other subjects pertaining to it will be dealt with in the Entrance and Public School Leaving Department. Questions asked by subscribers will be answered in one or other of those departments as promptly as possible. They should, however, be in our hands at least a week or ten days before the date of the number in which the answer is desired. Even then we may not always be able to find space for the answers in the next ensuing number, but we will make it our aim to do so.

WE have received from many quarters statements of fact which abundantly prove that the underbidding practice is in vogue much more widely, and the consequent reduction in salaries much more serious, than we could have supposed. Many of the cases cited are astounding, and move one to indignation against both the shameless selfishness of the supplanters and the equally shameful and short-sighted littleness of the trustees. To our thinking, the danger is one of the most serious now threatening the efficiency, to say nothing of the improvement, of our Public Schools. Unless means can be found to promptly check the tendency, speedy deterioration is inevitable. It may be that the system which makes such things possible is radically wrong, that it is a mischievous mistake for the government to make a specialty of the education of teachers for their profession. But if the system is right, then the Government, which is responsible for the great excess of supply over demand, should protect the pupils and the country, if not the teachers themselves, by either fixing a decent minimum of salary as a condition of sharing in the public grants, or by at least grading the grants according to the salaries paid to teachers.

## Contributors' Dep't.

### THE EDUCATIONAL ARTIST.

BY "HOPE."

The confident boldness born of past success need not betray us into empty boasting, but we may still think and speak hopefully of the future, and bear courageously the toils and trials of the public teacher's life, if it is really our deathless ambition to write our names upon that imperishable thing—the human soul. To light in one mind the enthusiasm of literature, science, and religion is to erect a monument more imperishable than any pyramid. The mobile, plastic stage of human development is ours to mould for eternity, so that when the immovable mountains have disappeared, and the unbeginning, endless sea is no more, and the sky has been rolled together like a parchment, and this great globe itself has vanished and left not a wrack behind, our work will be still in its youth, though the last star has twinkled for the last time, and the last sun of the universe has become a cold cinder, and the last planet has long since ceased to exist.

Let us measure, then, the responsibility of our work and the glory of it, not by the amount of money we happen to receive for it, but by the æons of æons of ages through which it is destined to endure with perpetual youth and undimmed lustre. The joy of the teacher's daily work should be proportioned to the priceless value of the material upon which he operates, and the absolute indestructibility of it. No other artist works upon material that can be compared to it for incommensurable value, nor for unlimited duration of existence. When the last masterpiece of Grecian sculpture and the last triumph of the Dutch and Italian painters have been dissolved into their original elements, the true educational artists of the world will see their work living on and increasing in beauty, while the human soul continues to explore the designs of God's wisdom throughout the universe. All faithful teachers may therefore be of good courage in doing a work of great dignity and importance, that well deserves the best energies of the best minds of each nation, the most fearless consecration of the greatest talents, and the most ardent devotion of the leading spirits of every generation. Let us look behind; we are only the newest rank of a long procession of teachers, dead educators whose honored names are inseparably linked with the steps of civilization and the freedom of the human mind. Let us look ahead; our work will outlast the ravages of centuries and defy the corrosion of time. Let every teacher look up as he presses forward in his daily work, and the meagre salary will become an insignificant quantity when compared with the far greater and exceeding reward that awaits every true artist now practising the teacher's profession.

Huron, February 8th, 1896.



## High School Entrance and P. S. Leaving Department

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## DRAWING.

There is no doubt that drawing can be made one of the most interesting studies of the whole course; and, besides being interesting, it can be made educative in the proper sense of the term. It should not be taught as though it were merely an exercise of the faculty of imitation, for, although this no doubt is done, much more can be accomplished. Unless the teaching in this subject leads pupils to freely exercise their faculties of perception, memory, imagination, invention, and appreciation of the beautiful, it falls far short of what may reasonably be demanded of the study. The following paper by Mr. A. C. Casselman, instructor in drawing in the School of Pedagogy and the Toronto Normal and Model Schools, is intended to assist those who are preparing candidates for the Entrance Examination. It contains an analysis of Book V., which is the one candidate usually present for examination.

## DRAWING.

BY MR. A. C. CASSELMAN.

Drawing Book No. V. of the Public School course, or its equivalent, is the one that is required to be presented by candidates for the Entrance Examination. In this paper an endeavor will be made to show how the most may be made of that book so as to be of the greatest benefit, educationally, to the pupil of the fourth class in the Public School. The hints apply to those who have had no previous knowledge of the subject, as well as to those who have been taught drawing according to the most approved methods. Many points in the teaching are necessarily omitted, as no written explanation can take the place of illustrations on the blackboard. It is absolutely necessary that the teacher should cultivate skill in blackboard illustration, not only to be useful in the teaching of drawing, but in other subjects. It is not necessary that these sketches should be models of artistic neatness, yet this is all the better, providing it does not take too much time. Every teacher can become a fair blackboard

artist by following the rules laid down in the book reviewed in this number of THE JOURNAL.

In many schools drawing is merely copying on the lower half of the page the figures in the upper half. This copying of pictures leads to a dislike of the subject, and does not bring out fully all that is intended by the study. This dislike is due largely to the fact that this kind of drawing does not convey a single thought to the pupil.

Young children like to draw. It is their first method of expression on a flat surface. All that the teacher has to do is to foster this desire, and it will be found that no subject of study will be more popular or so productive of a healthy physical or mental development, or tending to the cultivation of taste. Drawing aids very materially in the study of geography, history, science, and mathematics. It is a manual training, and is indispensable to the artisan. Cases have come under my notice where encouragement along the line of drawing has changed for the better the career of pupils.

All can learn to draw. It can be taught the same as any other subject. If a child has any ideas to express by a drawing, he can generally express them. If his ideas of form are crude, his drawings will be crude; but if care is taken by the teacher that the pupil's knowledge of form is correct and properly organized, his expression will accurately reflect his mind. Hence it is quite necessary that the teacher should devote as much time as is requisite to the proper training of the child in the correct knowledge and appearance of form. Expression of form by language and by actual making should precede the expression by drawing.

Drawing, to be of the greatest value educationally and practically, should be studied in the following order: (1) Object drawing; (2) Constructive drawing; (3) Decorative drawing.

Drawing, as laid down in the Public School course, does not follow this order, and hence cannot be expected to produce results at all approximating to the possibilities of the subject. The representation of objects as exemplified in Book III. are positively harmful.

I have before me the drawing book of a pupil of the Entrance class of last year, and the work done therein will form the basis of the method pursued in teaching the subject to the fourth class.

Suppose that No. 1, on page 1, is to be copied in the space below as large as the space will allow. The teacher's duty is clearly to render the imitation or copying intelligent. Question something as follows. What does the figure resemble? What view of the flower? Is it the picture of a natural flower? How does it differ from a natural one? Tell them it is a conventional flower form. Explain the meaning of conventional. This is called a rosette. It is a form that is found in many historic styles of ornament. Some regard it as an attempt to conventionalize the rose, others as derived from the divisions of a circle. As a carving on wood and stone, and in plastic decoration, it is found in various positions, principally as a keystone for the centres of Romanesque and Gothic ribbed vaultings, centre-pieces of ceilings, in small panels, and on furniture, gates, doors, etc. Here it would not be amiss to tell the class that there are different historic styles of ornament, each characterized by certain well defined elements. A short description of each style, and of each country in which it showed its highest development, would not be amiss. The next thing to do is to get the pupils

to look for rosettes in actual use as ornament, and to make a sketch of the rosette. If you have interested the pupils, you will have plenty of material to analyze and compare for next lesson. Discuss with the class the suitability of any particular form of the rosette for the place it decorated. Now you are independent of the form in the book, and you can ask the pupils either to copy the form in the book or to draw the form they found decorating some place. You thus stimulate independent research, and there is no doubt that every child will mentally analyze every rosette he sees after this.

Now explain how to proceed to copy this form, if that is what is chosen to be done. Draw a vertical and a horizontal line of equal length, bisecting each other at right angles. Describe a circle having these lines as diameters. Draw two other concentric circles, having diameters one-half and one-fourth of the first circle. To divide a circumference of a circle into six equal parts, divide one diameter into four equal parts, and through the outer divisions draw lines parallel to the other diameter. The points where these lines cut the circle together with the ends of the other diameter will divide the circumference into six equal parts. Bisect each part, and draw the necessary diameters.

Draw the curves that connect the diameter and circumference. These curves are difficult to draw. They are tangent to both lines; that is, if the curve were produced, it would not cut either line. This is important, and the teacher should take special care that the pupils understand this thoroughly.

In making a copy of any drawing like this, draw all like lines before drawing any others. For instance, draw the outer curves of the larger petals first, then the inner curves of the same, etc., etc. This method will enable the pupil to compare lines of the same shape with each other. The eraser should not be used until the whole drawing is sketched in a *faint, continuous*, not a *dotted*, line. If you draw a line and you see that it is not in the proper place, don't rub it out; let it remain, it will be a guide to you to draw the line in the right place. When the drawing is sketched erase the guide lines, and lines not appearing in the finished drawing, by moving the eraser in one direction. Line-in the drawing with a bold line. Don't press so heavily on the pencil as to indent the surface of the paper. Don't wet the lead of the pencil.

Now, it is well to inquire why this is a beautiful form, and to get the class to find out and to understand the principles of ornament that are exemplified in it.

The first principle of ornament is *fitness*. This can best be taught by calling attention to the rosette in actual use. As a centre-piece for a ceiling it is raised above the surrounding surface, and sunk below in a panel. The other principles shown are *repetition*, *symmetry*, both bilateral and radial *unity*, *repose*, *radiation*, and *geometrical arrangement*. Don't shade this figure unless the pupils thoroughly understand shading. For the principles of light shade, and shadow, see Book II., High School Drawing Course.

No. 2, on page 1, should not be copied. It shows one method of arranging the ivy leaf in a square. Each pupil should be requested to bring a stem with a few leaves on it for this lesson. Discuss the stem, the leaf, and their union of some particular plant. Show the class that some leaves are better adapted naturally to be arranged on the semi-diameters than on the semi-diagonals. Show

JUST PUBLISHED.

# Hints on Teaching Arithmetic

By H. S. MACLEAN,

Assistant Principal, Manitoba Normal School; author of "THE HIGH SCHOOL BOOK-KEEPING."

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the class how to divide the square into compartments, and that, if a narrow strip runs around the outside, it gets the name of border. Frequently a space is reserved in the centre. This space may be a square, octagon, or circle. If decoration has been taught in the lower grades, the pupils will be able to make many fine borders composed of units, such as a straight line, a circle, a semicircle, a square, and a triangle, either singly or combined. Get the pupils to submit borders of their own invention, constructed from the above units. Suggest improvements, if necessary. There is practically no limit to the divisions of a square, and, if each pupil works independently, a dozen or two excellent divisions may be obtained. The pupil selects a division that is suitable for the leaf he has chosen, and adapts his leaf to the space it is intended to fill. In figures of this kind, the pupil should always be asked to explain the principles of ornament exemplified.

The second figures on pages 2, 3, 5, 6, 7, 8, 10, may be similarly treated, using in addition to the leaves any other units that are given in the plant above. In making use of any plant, the laws of growth of that plant should not be violated. No. 2, on pages 6 and 7, will give the teacher an opportunity to explain the Gothic style of ornament. As a variation, the pupil might be asked to decorate a rectangular surface, as well as a square. During all this time, see that the pupils are observing the decoration of all articles that come under their observation. Have occasional chats on such topics. Book covers, wall paper, desks, mouldings, and woven fabrics will form the bases of such talks.

No. 1, on pages 2, 3, and 4, should be taught together. Get from the pupils why these borders are similar in some particulars and different in others. Get them to draw the unit separately. This is difficult to do well. This unit is called the Greek anthemion, or palm-leaf ornament. It was painted and sculptured on the Greek temples, and painted on vases. It was an important element in Greek decoration. This form by some is supposed to be a conventional form of the honeysuckle, by others as borrowed from the Egyptians through the Assyrians. Its change of form has been largely due to the use of the brush by the Greeks instead of the drawing point.

The Grecian style of decoration was borrowed partly from the Egyptians and the Assyrians, but, unlike their style, was not bound by religious ideas; hence it was not symbolic. Art in Greece developed in a new direction, pure beauty of form, and it reached a high state of perfection. They studied and followed the natural laws of plant growth in their decoration without imitating the individuality of any plant. The Greeks developed the arts of sculpture, architecture, and painting beyond anything that had been produced previously. The culmination of Greek art was seen in the Parthenon, the most beautiful building of its class in the world.

Every historic form should be analyzed, and I cannot do better than give a quotation from "The Æsthetic Manual of Drawing," by L. S. Thompson, published by D. C. Heath & Co., Boston. I would advise every teacher to get this manual, as it gives an excellent introduction to historic ornament and the principles of ornament generally.

"The figure here chosen is a very common Greek anthemion form, whose beauty has been acknowledged for several thousand years. The object of this lesson is to inquire into some of the reasons for its beauty. In the first place, we may say that it is *regular*, or *orderly*. The human spirit loves regularity and order, but when these elements exist alone there is unredeemable sameness and tiresome monotony to the educated taste. But there is great *variety*, also, in this figure. The different parts vary in form, size, position, direction, and distance. Variety in itself is distracting; but in this figure it is governed by law. Notwithstanding the variety in shape, size, position, direction, and distance of its parts, they are symmetrically arranged and harmoniously combined so as to produce *unity*, not homogeneous unity, but *organic* unity, in which, if one part is left out, the unity is destroyed. There is *bi-symmetry*—the highest order of symmetry, because the right and the left sides are alike in form, but reversed and *contrasted* in position. There is *harmony*, because each part seems to have been fitted to every other, or to have been fashioned after some deep and unifying principle. The unity of this figure is

partly secured by *radiation*; that is, the different parts seem to have a common origin and to radiate from it. In this figure there is also *gradation*, progression, or continuity in the gradual increase and diminution of its similar parts; there is *primality* or subordination of parts, as shown by the central form exceeding the others in size and symmetry, as well as in having the most commanding position; there is *grace* or freedom expressed by the undulating curves, but no license, since there is obvious *self-restraint* or respect for law in every part."

"As a practical application of this lesson, let the pupil write out the characteristics of each figure after drawing it. In this way valuable language lessons may be united with the drawing lessons, to the great advantage of both."

This form is in common use in decoration at the present time. Ask the pupils to make a sketch, to be submitted at the next lesson, of the anthemion in actual use as decoration. This form is to be copied in one of the spaces. To fill the other two spaces make some other arrangement of the unit suitable for decorating any space for which it may be adapted.

No. 2 on the second page may be copied, or, better still, arrange the same forms so that they will be symmetrical about the *minor* axis of the ellipse instead of the *major* axis.

No. 1, on page 5, may be simplified to two semicircular bands a certain distance apart, described on lines half as long as the inner width of the border. Connect these semicircles by a band, and repeat. A device quite common in surface decoration is shown here by the half-tinted figures. Any awkward, vacant spots in a design are generally filled by a figure approximately of the same shape as the space to be filled.

No. 1, on page 6, is from a French mural painting of the thirteenth century. Explain here the wave line. The wave line is an outgrowth from the zigzag line, and, to suggest a vine, leaves and buds are added.

On the 13th page, constructive drawing is shown. The objects are too difficult for those who have never studied the representation by *plan* and *elevation* of the type solids. For a full explanation of constructive drawing see Book III. of the High School course.

In the first space on the last page, the pupils may print the name of their school, and in the second space their name and address.

The rest of the book is to be filled by drawings of objects, not copies of pictures of objects. The order and method of teaching the type solids and objects like them to the class is explained in Books I. and II. of the High School course.

The teacher should not draw on the blackboard and get the pupils to copy his work, but make abundant use of the blackboard to illustrate your explanations.

All pupils in the fourth class should practise the use of the pen and ink in drawing. Drawings made on a smooth paper with pen and Indian ink are easily reproduced by photography. Make a light sketch with the pencil first, and line-in and shade with the pen.

As the main thing is to get the pupils to draw intelligently, about as much time should be devoted to the explanation and study of any subject or form, as is devoted to the actual drawing of it. Time is not wasted by doing this, as the pupils will draw more quickly than without any explanations, and very much better.

#### GRAMMATICAL ANALYSIS.

Although much has been said against grammatical analysis as a subject of study, there is no doubt that it can be made both interesting and useful. Because it has been overdone in some quarters and treated mechanically in many others, the exercise must not be discarded as wholly valueless. The aim of every teacher should be to obtain the best possible results by rational, as opposed to rote, methods. Pupils should be led to determine the relation of a word in a sentence by first finding out its use, and not by remembering how it has been disposed of by the teacher or by the grammar. It is of no value to merely quote authorities; the reasons must in every case be understood, otherwise the exercise will be useless.

Take, for example, the sentence,

"Forward like a blood-red flag  
The bright flamingoes flew."

Before a pupil can intelligently give the relation of *like*, he must know whether the phrase which this word introduces describes the appearance of the birds or their manner of flying. When this point is once decided, the pupil will readily see that *like* is an adjective. Much confusion in the minds of pupils can be avoided by a definite use of terms, e.g., the term *sentence* should be used in one way only. It should be applied to the whole period, and not, for example, to the independent clauses of a compound sentence; also the term *principal*, applied to independent clauses of a compound sentence, is quite misleading to young pupils; and instead of giving the name "compound-complex" to a compound sentence, having complex parts, it is suggested that such a sentence be described as follows: A compound sentence, having the first, second, or third, etc., member (as the case may be) complex.

Before giving the detailed analysis of a sentence, the following facts should be stated:

(1) The kind of sentence, according to *form* and according to *composition*.

(2) In the case of a complex sentence, the dependent clause or clauses should be written out, marked (a), (b), etc., and the kind and relation stated.

(3) If the sentence is compound, the independent clauses should be indicated and marked as A, B, etc., and, if it has any part complex, the plan indicated in No. (2) is to be followed.

In writing out the detailed analysis, the following plan is recommended:

- I. Bare subject.
- II. Modifiers of the bare subject.
- III. Predicate { verb,  
                  { complement.
- IV. Object.
- V. Modifiers of object.
- VI. Modifiers of predicate.

It is necessary, especially with young pupils, that the analysis should clearly indicate the distinction between the verb and its complement, in all cases where the complement does not form a part of a verb phrase.

#### ILLUSTRATIONS—I. SIMPLE SENTENCE.

The bricklayer on the scaffold, in his haste, carelessly dropped a broken brick from his hand  
*Simple assertive sentence.*

##### *Detailed Analysis.*

- I. Bricklayer.
- II. (1) The; (2) on the scaffold.
- III. Dropped.
- IV. Brick.
- V. (1) A; (2) broken.
- VI. (1) In his haste; (2) carelessly; (3) from his hand.

##### *A Second Example.*

The sun, that brief December day,  
Rose cheerless over hills of gray.

*Simple assertive sentence.*

##### *Detailed Analysis.*

- I. Sun.
- II. The.
- III. { Verb—rose.  
          { Complement—cheerless.
- IV. (1) Over hills of gray; (2) that brief December day.

#### II. COMPLEX SENTENCE.

The distant mountains that uprear  
Their solid bastions to the skies,  
Are crossed by pathways that appear  
As we to higher levels rise.

*Complex assertive sentence.*

(a) That uprear their solid bastions to the skies.  
*Adjective clause, modifying mountains.*

(b) That appear as we to higher levels rise.  
*Adjective clause, modifying pathway.*

(c) As we to higher levels rise. *Adverbial clause, modifying appear.*

##### *Detailed analysis.*

- I. Mountains.
- II. (1) The; (2) distant; (3) clause (a).
- III. Are crossed.
- IV. By pathways that appear as we to higher levels rise.

## Clause (a).

- I. That.  
 III. Uprear.  
 IV. Bastions.  
 V. (1) Their ; (2) solid.  
 VI. To the skies.

## Clause (b).

- I. That.  
 III. Appear.  
 VI. Clause (c).

## Clause (c).

- I. We.  
 III. Rise.  
 VI. (1) As ; (2) to higher levels.

## III. COMPOUND SENTENCE.

Only one gun could be carried up the hill ; and that was not placed in position without incredible difficulty. *Compound assertive sentence.*

A. Only one gun could be carried up the hill. *Independent assertive clause.*

B. That was not placed in position without incredible difficulty. *Independent assertive clause.*  
*And*, a co-ordinate conjunction, joining clauses A and B.

The detailed analysis of clauses A and B need not be indicated.

## IV. COMPOUND SENTENCE, WITH COMPLEX PART.

When they were ordered to enter the cell, they imagined that the soldiers were joking ; and, being in high spirits on account of the promise of the Nabob to spare their lives, they laughed and jested at the absurdity of the notion. *Compound assertive sentence, having the first member complex.*

A. When . . . joking. *Independent complex assertive clause.*

(a) When . . . cell. *Adverbial clause, modifying imagined.*

(b) That . . . joking. *Noun clause, object of imagined.*

B. Being . . . notion. *Independent assertive clause with compound predicate.*

*And*—Co-ordinate conjunction, joining clause A and B.

The detailed analysis need not be given here, as it is similar to that given under complex and simple sentences, respectively.

## COMPOSITION.

The *first* requisite for writing a composition is to know the subject fully ; the *second* is to construct a plan of the composition. The plan should be brief, for if made out minutely in detail it will act as a groove to confine the writer instead of serving, as it should, merely to mark out the course. Take this as your motto ; write what you have carefully thought, and do not think what you shall write. Pupils should *first* be required to study the subject ; *secondly*, to make out a general plan ; *thirdly*, to write out the composition in keeping with the general plan ; *fourthly*, to correct carefully what has been written.

Many of the lessons in the Fourth Reader will serve as models for examination and critical study by way of preparation for a composition. Take, for example, the lesson, "The Capture of Quebec," and after the literature has been studied by the pupils, the facts stated may be used as material for a composition. In making out the plan of the composition it will be found convenient to group several of the paragraphs together ; for example, 1 and 2, 4-6, 7-11, 12 and 13, 14-21, 22-24, 25-26. At first the pupils should be assisted in the construction of their plans, and later on they may be required to make out both the plan and the composition.

Every teacher of an Entrance class should have and consult "Composition from Models," by Alexander and Libby.

It should be borne in mind that the examination in composition will consist only of a test in continuous composition. This implies three main elements—the construction of the sentence, the construction of the paragraph, the construction of the plan.

The following questions which appear on the recent Public School Leaving Examination are worthy of consideration :

Write a composition of about sixty lines on one of the following subjects, taking the topics given as an outline :

- (1) A Railway Journey. *Topics :*  
 (a) The place from which you set out, and the place visited.  
 (b) The object of the journey.  
 (c) An incident at the station before your departure.  
 (d) The appearance of the country passed through.  
 (e) A description of the place visited.  
 (f) The result of your visit.  
 (2) A Haunted House. *Topics :*  
 (a) The current story.  
 (b) Its effect on the people of the neighborhood.  
 (c) Its effect on your own mind.  
 (d) The surroundings of the house.  
 (e) The interior of the house.  
 (f) The probable origin of the story.  
 (g) Reflections on superstition.  
 (3) A Letter to a Friend. *Topics :*  
 (a) Acknowledge receipt of a letter informing you of your correspondent's success in business.  
 (b) Your pleasure at his good fortune.  
 (c) A statement of the responsibilities and opportunities arising from such success.  
 (d) A description of the way in which he should employ his opportunities.

## SPELLING.

Spelling tests should be applied regularly and frequently in all classes. They may be grouped under the following heads : (1) All transcription exercises ; (2) dictation exercises ; (3) all written answers to questions ; (4) oral tests. Pupils should be required to specially prepare the spelling of all the terms used in the different subjects of their course, e.g., literature, geography, grammar, history, etc., and these spelling lessons should run concurrently with the regular lessons in these subjects. For example, the terms in the literature and geography lessons taken during the week may be assigned for a particular day. As a rule, special words only need be given ; but in all cases their context must be read. The words should be written in a dictation book, with pen and ink. No word should be accepted unless clearly written without any alteration. If a pupil finds it necessary to alter a word, it should be rewritten at the bottom of the list and given its own number. It will be found that regularly numbering the words will enable the teacher to examine the exercise more readily. All the lists will then be alike, or, at least, those that are correct. The exercises should be examined and marked by the teacher ; but the corrections must be made by the pupils themselves. Much of the value of a dictation exercise will be lost unless the pupils are required and enabled, by being given sufficient time, to write the words as well as they possibly can. There is a very close connection between careless writing and loose spelling. The practice of placing words erroneously spelled on the blackboard for correction should be avoided.

The following list is suggested as a suitable test for an entrance class :

Sacrament,	analysis,	lymphatic,
palisade,	synthesis,	salivary,
bivouacked,	synonym,	incisors,
enconced,	antonym,	bicuspid,
harassing,	homonym,	papillæ,
persistent,	assertive,	parotid,
vacillating,	interrogative,	pharynx,
unparalleled,	exclamatory,	stomach,
battalions,	imperative,	diastase,
grenadier,	optative,	emulsifies.

## SELECTED PROBLEMS.

## SUITABLE FOR ENTRANCE.

1. What is the least number, which, as a factor of 60, will give a product that will be a multiple of 75? Ans. 5.  
 2. The sum of three numbers is 24 ; and six times the first, three times the second, and twice the third, give the same result. Find the numbers. Ans. 4, 8, 12.  
 3. A merchant sells all his goods by weight, but gives only 15 oz. for a pound ; find (1) the customer's loss per cent., (2) the merchant's gain per cent. by this means. Ans.  $6\frac{1}{4}\%$  ;  $6\frac{3}{4}\%$ .  
 4. A sold a lot to B and gained  $12\frac{1}{2}\%$ . B sold it to C for \$306 and lost 15% ; how much did the lot cost A? Ans. \$320.

5. A merchant sold two articles for equal sums of money ; on one he gained 25%, on the other he lost 25%, and on the whole he lost \$9.60. Find the cost of each article. Ans. \$57.60, \$96.  
 6. Find the interest on \$750.00 for 4 years and six months at  $7\frac{1}{2}\%$ . Ans. \$253.12 $\frac{1}{2}$ .  
 7. Find the interest on \$750.00 from June 1st to December 16th, 1895, at 6%. Ans. \$24.41 $\frac{2}{3}$ .  
 8. What is the amount of the following bill :  $3\frac{1}{2}$  yards print at 17c ;  $8\frac{1}{4}$  yards cotton at  $9\frac{1}{2}$ c.  $15\frac{1}{8}$  yards tweed at \$1.18 ; 16 yards silk at \$2.12 $\frac{1}{2}$  ;  $\frac{1}{8}$  yard velvet at \$9.50 ; 43 buttons at 25c. per dozen? Ans. \$55.30 $\frac{3}{4}$ .

## NOTES AND ANSWERS TO QUESTIONS.

The following books will be found suitable for supplementary reading in primary classes :

(1) "Nature Readers, Seaside and Wayside," by Julia McNair Wright. Published by D. C. Heath & Co., Boston.

(2) "Beautiful Joe," by Marshall Saunders. Published by the Baptist Book Room, 19 Richmond street west, Toronto.

(3) Hans Andersen's Stories—Part I. and Part II. Published by Houghton, Mifflin & Co., Boston.

(4) "Aims and Objects of the Toronto Humane Society." Published by William Briggs, 78 and 80 King street east, Toronto.

For general use in all classes the following is recommended :

Patriotic Recitations and Arbor Day Exercises. By the Hon. George W. Ross, LL.D. Published by Warwick Bros. & Rutter, 68 and 70 Front street west, Toronto.

## THE KEY TO SUCCESS.\*

Success in teaching depends upon a great many conditions, such as opportunity, support, and co-operation, executive ability, skill in method, etc. ; but ultimately it depends upon yourself. I do not mean that it will depend upon your effort or your will, as that phrase commonly goes. One may try hard enough ; he may will earnestly enough and not accomplish what he tries and wills to do. It will depend upon the quality of your personality, upon what is in you and of you. Your success will be no greater than you are, or than you become. Otherwise it will not be your success, but only your accidental fortune.

The power of teaching is not in the matter or the method so much as in the quality of its source. How far it goes will depend upon the energy of the source that sends it forth. Method in teaching is very important, but it is not so important as the quality of the mind and heart from which it comes. A man may use a telephone and send his voice a hundred miles, but his words gain no worth or power from the mechanism that has merely transmitted them ; but let the words come forth from the soul of Phillips Brooks and they will go round the world ; their effect will never cease.

Teaching is not merely transferring thought from one head to another ; it is not imparting ideas ; it is energizing, it is moving to life and action. The teacher must be a source of energy. What he does efficiently must come out of his own soul.

But this putting forth of influence, this generating of mental life, which is the teacher's best function, is expensive for the teacher. Energy, like money, is one of those things which you cannot spend and still have. There is no more exhausting work than teaching, and where can you find a more profitless performance than a tired teacher pretending to give instruction to a class of listless children? An exhausted mind, a fatigued brain, has no teaching power in it. Nor is there any teaching power in the brain that has never been charged up with the energy that can propagate itself. The greatest part of the preparation for teaching is not in learning how to prepare and present material, how to formulate instruction, and how to develop the child's thought ; it is to get the soul well alive and charged up with power.

This view of the matter, which is surely the true one, suggests that self-culture of the most liberal sort is a constant necessity of the teacher who is really ambitious to succeed. Even if the teacher is abundantly prepared in health, character, scholarship, and training, she must still constantly

\*From Principal W. E. Wilson's address to the graduating class of the Rhode Island State Normal School.

nourish her own life and generate the power which she must constantly apply. Do not forget, then, that the common requirements of hygiene lie at the basis of your success. Your power depends upon the right ordering of your physical life in reference to your food and drink, your manner of respiration, the free action of all the organs of life, the due alternation of vigorous exercise and repose.

Then your mental life will still require nurture, and discipline, too. Be liberal with yourself these coming years. Continue to put into your minds the best that literature, and art, and nature offers you. Provide yourself with the best books and read them well, see as much as possible of the noblest art and the finest scenery, and hear the best music and the most eloquent speaking. Travel as widely as you can, and with your eyes and ears open. As far as may be proper, seek to put yourself in contact with men and women of strength and refinement.

You will find in your educational periodicals and books an abundance of material which will be convenient and helpful in teaching. Use it freely. But do not confine your professional study to the details of teaching. Keep reading also the discussion of the deeper and larger educational questions. Enter with earnest appreciation into the educational life of the time, and take a part in some of the very interesting educational movements now in progress.—*The School Journal*.

#### A CRITICISM OF DR. HARRIS.

In an article on "Elementary Education," contributed to the *May North American Review*, Dr. William T. Harris tells the following about what he calls pedagogic craze for novelty.

While the old education in its exclusive devotion to will-training has slighted the intellect and the heart (or feelings), the new education moves likewise towards an extreme as bad, or worse. It slighted direct will-culture and tends to exaggerate impulse and inclination or interest. An educational psychology that degrades will to desire, must perforce construct an elaborate system for the purpose of developing moral interests and desires. This, however, does not quite succeed until the old doctrine of self-sacrifice for the sake of the good is reached.

"Our wills are ours to make them thine."

The philosophy of the *Bhagavad Gita* holds that the goal of culture is to annihilate all interest and attain absolute indifference; this is adopted by Buddhism in the doctrine of Nirvana. Indian renunciation reaches the denial of self-hood, while the Christian doctrine of renunciation reaches only to the denial of selfishness and the adoption of altruistic interests. However this may be, the pedagogic impulse to create devices for awakening the interest of the pupil becomes sometimes a craze for novelty. Change at any price and change of any kind is clamored for. It is a trite saying that change is not progress. It is more apt to be movement in a circle, or even retrogression. An amusing example was lately furnished in educational circles. A superintendent of rural schools defended their want of classification as an advantage. It was "individual instruction," and, as such, an improvement over that of the graded schools of the cities. His reactionary movement received the support of some of the advocates of educational reform, on the ground that it was a new departure. This happened at a time when one-half of the school children in the United States are still taught, or rather allowed to memorize their text-books, by this method! The subcommittees on training of teachers and on the organization of city school systems have brought forward, in their respective reports, the latest devised measures for the perfection of normal schools and the procurement of expert supervisors for city school systems. The importance of the recommendations regarding schools for the training of teachers is seen when one recalls to mind the fact that the entire upward movement of the elementary schools has been initiated and sustained by the employment of professionally trained teachers, and that the increase of urban population has made it possible. In the Normal School the candidate is taught the history of education, the approved methods of instruction, and the grounds of each branch of study, as they are to be found in the sciences that it presupposes.—*The School Journal*.

#### A PRINCE OF THE BLOOD.

"I say, Martin, stop that, now! How's a fellow going to drink with Niagara Falls coming down on him?"

Louis Ray, or "Rufus," as the boys called him, rose up angrily, with a face as red as his head.

"All right," said Martin Stone, laughing! "Go ahead and drink; I'll pump easy for you."

Louis bent over again, and put his thirsty lips to the spout. This time his tormentor moved the pump handle about as fast as the hour hand of a watch, and about three drops trickled out.

"Pump, will you?" cried Louis.

"O yes! I will," roared the other, and that instant Louis was sputtering in a perfect rush of the bright water, while the group of boys exploded with laughter.

This was too much for Louis' fiery temper, and he sprang at Martin, shaking his wet head like a Newfoundland dog, and grappling him fiercely. But, after all, it was only a friendly tussle. Louis had far too much sense to take the rough joke seriously, and by the time he and Martin had rolled about on the grass for awhile, each trying to get the other under; by the time they had thumped one another a time or two, in boyish fashion, the bell rang, and they all went back into the schoolroom as good friends as ever.

But something had happened in that sham-battle, unknown to anybody except Bustle, the pug, and even he did not know much about it. Martin's bag strap gave way in the scuffle, his books tumbled out on the ground, and a closely written sheet of paper, caught by a breeze in search of a playfellow, began to play hopscotch over the grass. Bustle gave chase at first, but soon came to the conclusion that the thing had no wings, and went back to bark his interest and applause at the wrestling match. Away went the paper across the school's tennis court, through the iron fence railings out into the road, there to be trampled deep into an early grave by a great drove of cattle passing that way.

Meantime the school routine went on, and presently the teacher said; "Put up your books, boys; I am going to let you decide now who shall get the English prize for the quarter. Martin and Louis—as some of you know—got the same mark on examination, so I gave them each a composition to write last night, and I am now going to read them to the English class, without the name of course, and let the class award the prize."

There was great excitement among the boys, much shuffling of feet, embarrassed coughing, conscious grinning, while Louis got his paper ready, and stood waiting to march up to the desk with Martin.

But where was Martin's paper? You and I know that it was being trampled under dusty hoofs, but Martin was perfectly sure that it was in his algebra. No. Well, then, in his History of the United States; and so he went through every book in his desk, of course without finding it, while Major Price's brow grew darker every minute.

Now, the major, having received a military education, thought carelessness a much more serious matter than stupidity, and perhaps he was right. At any rate he was patient with dullness, but carelessness always met with prompt punishment.

"Well, well," he said, shortly, "where are the papers?"

"I have lost mine, sir," said poor Martin, wishing that boys were allowed to cry like girls.

"Then there will be less trouble about awarding the prize," said the angry teacher. "Louis, where is yours?"

There was an instance of silence in the schoolroom; everybody in the class held his breath. Louis turned red and then pale; then with a quiet air of determination, he tore his paper slowly across the middle, and said in a respectful tone:

"I have none to hand in, sir."

Instantly the class broke into irrepressible applause.

"Silence!" thundered the major, and Louis braced himself against the desk behind him. These boys were tolerably afraid of the major, and if he took this as an indication of insubordination he would be severe. For some reason the

teacher did not speak for a minute, and then he said in a tone they had never heard him use before:

"Boys, I would rather see a generous thing like that among you than to have a prince of the blood in my school! That is what I call loving your neighbor as yourself, and you know who gave us that command and set us the great example."

You may be sure that the boys applauded long and loud after that.—*Morning Star*.

#### THE HOUSE-FLY.

FRED. A. CLARKSON.

Every Friday afternoon, Miss Preston, who was a very busy teacher in a country school, found time to have a talk with her class on interesting subjects about which the pupils had little accurate knowledge. In this way they had learned something of the wonders of the animal kingdom, and were at the present time studying insects, having in the two previous lessons observed what they could of the butterfly, the moth, and the grasshopper. On Thursday, just before closing, the teacher asked each scholar to provide himself with a common fly for their object-lesson on the morrow. Here are some of the questions she asked:

To which of the kingdoms does the fly belong? The animal kingdom. Why? Because it has life, and can move. Into how many parts is it divided? Three. And how many legs? Six. What other animals do you know like it in these respects? The moth and grasshopper. What name do you give to such animals? Insects. Is the fly an insect?

Notice the first division of the body. What is it called? The head. What are those large, black spots on the side of the head? The eyes, which are compound, like those of the butterfly. Observe the black thing between its eyes. Move it with a pin. In which direction does it move? Downward. Press it as far down as you can. What do you think it is? Its trunk, or proboscis. Draw a picture of it on your slates. How does it differ from a butterfly's trunk? It is shorter, and the butterfly coils his up when it is not in use, while the fly carries his between his eyes.

Now, look closely at the second division of the body—the thorax. What do you find attached below? Six legs. How many joints in each leg? Draw a leg. What is attached above? A pair of wings. How do the fly's wings differ from those of the butterfly? The wings of the latter were covered with small scales, which come off on the fingers, but the fly's wings are bare. Now, use your eyes, to see if you find anything else attached to the thorax, immediately behind the wings. Those little things are called the balancers. Suppose we clip one of them off this fly, and let it go. What happens? It "goes all on one side." Why do you think nature has provided this insect with balancers? To aid it in flying.

What is the length and color of the abdomen? Anything you notice about it? It is covered with fine hairs. Draw a picture of it.

If the fly is like other insects you know, through how many forms has it gone before it became what it now is? Three. Name them. First, the egg; then, the larva; and, third, the cocoon, or chrysalis. The fly *does* pass through these stages. You sometimes see the eggs on tainted meat. If they hatch, what do you call the animal? The maggot. This is the common name of the larva of the fly.

Finally, Miss Preston asked her class if flies were of any use. One boy thought they were good to keep people awake in church. Another said that they were food to some animals, such as the toad, frog, and some kinds of birds. A bright girl thought they helped to purify the air, because they ate up "scraps," and, when they were in the form of maggots, they consumed large quantities of decaying matter.

The teacher closed the lesson by writing on the blackboard the various things that had been learned.

Make use of time, if thou lovest eternity; know yesterday cannot be recalled, to-morrow cannot be assured; to-day only is thine; one to-day is worth two to-morrows.—*Enchiridion*.



## Primary Department.

### SPELLING.

RHODA LEE.

I wonder how many primary teachers are satisfied with their method of teaching spelling, and find its results all that could be desired. I happen to know a number who are dissatisfied, and who attribute, in a great measure, their failures and apparent waste of time to the system so commonly used—that of giving lists of isolated words as a lesson. We find children able to spell these words when dictated in the order assigned for study, but when they come to use these same words in story writing, or other forms of composition, frequent mistakes occur. This is discouraging when one has spent the time allotted to spelling in several days over, it may be, these very words. Experience in primary classes has led me to conclude that much of the teaching of spelling of isolated words is of little or no value, and that if we really wish to make the best use of the time we must dictate the words in sentences.

It may not be possible always to give a spelling lesson of this kind, but whenever time will admit this should be the method employed with little ones. A few words well impressed are of far more value than long lists that are forgotten a few days after they have been taught.

Spelling is apt to be considered one of the easy subjects to teach. It is far from that. It requires more patience, persistence, and care than almost any other subject. Without doubt, the best way of impressing the spelling of words is through the sight medium. Frequent copying strengthens the impression; but the only way of fixing the words is by practice and usage. I think that the poor spelling in some of the higher classes can be traced to the fact that we attempt too much in the lower grades. If we taught fewer words, and made the children more familiar with them, they would be better prepared for the advanced work.

Before leaving the subject I would like to add a word or two in regard to the teaching of homonyms—that is, words which have the same sound but are spelled differently. They are constant stumbling-blocks. One plan followed was to teach the words in pairs, distinguishing the meanings, and then connect, when possible, the form with the thought. But this method with the little folks was not very satisfactory. Words and meanings got hopelessly mixed, and the correct use was, in many instances, the result of a good guess.

Another plan is to separate instead of associating the words, and by frequent use in short sentences fix the form so well as to render mistakes well-nigh impossible. Instead of teaching *meat* and *meet* together, and trying to make reason fix their use, let usage do the work. Take for a lesson the words *meet*, *grate*, and *week*. Dictate any number of short sentences, or phrases, such as:

- (a) *I will meet you.  
Meet me there.*

- Meet the car.  
I cannot meet her.*  
(b) *Light the grate.  
See the grate fire.  
There is a fire in the grate.  
Come near the grate.*  
(c) *Seven days make one week.  
Come next week.  
A week from to-day.  
A week from Monday, etc.*

Leave the teaching of the other forms until these have been so well impressed that they cannot be confused with the first.

Frequent reviews of spelling and work of this kind are necessary. Constant drill and the utmost thoroughness are indispensable.

Words presenting unusual difficulties should be kept on the blackboard, and whenever a few minutes spare time can be had some little practice may be taken with them.

Since writing the above the last number of THE JOURNAL has reached me, containing a most suggestive and timely editorial on the subject of spelling. The incident of the "oral speller" is true to life, although we thought that type was almost, if not altogether, extinct. If, as we have said, the dictating of long lists of isolated words be a poor use of time, what can be said of the oral spelling of the same? In primary grades it is worse than useless. In the higher classes occasional oral spelling, recitations, and any other variety may be held with advantage, but a consideration of the relative importance of being able to write a word correctly and spell it orally should regulate the frequency of the exercise.

We are glad to see the subject in the hands of the editor, and hope to hear it still further discussed, as it is a matter of no small importance.

### GRANDPA'S GLASSES.

My grandpapa has to wear glasses,  
'Cause his eyesight is not very strong,  
And he ca'ls them his "specs," and he's worn them  
For ever and ever so long.  
And when he gets through with his reading  
He carefully puts them away,  
And that's why I have to help find them  
'Bout twenty-five times in a day.  
But at night when we sit 'round the table,  
And papa and mamma are there,  
He reads just as long as he's able,  
And then falls asleep in his chair.  
And he sits there and sleeps in his glasses,  
And you don't know how funny it seems;  
But he says that he just has to wear them  
To see things well in his dreams.

—December Ladies' Home Journal.

### DESK WORK—A LANGUAGE EXERCISE.

(The answers are to be written neatly on slates or paper.)

#### MONTHS AND SEASONS.

1. How many months are there in a year?
2. What are their names?
3. How many seasons are there?
4. What are their names?
5. What is the first month in each season?
6. What season is this?
7. What is the name of this month?

8. In what month does Thanksgiving Day come?
9. In what month does Christmas Day come?
10. In what month is New Year's Day?
11. In what month is Valentine's Day?
12. In what month is All Fools' Day?
13. In what month is Independence Day?

Fill these blanks:

1. — Day comes in the fall.
2. — Day comes in the summer.
3. — Day comes in the spring.
4. — Day, — Day, and — Day, all come in winter.—*Prim. Educ.*

### THE CAT'S CONSULTATION.

All the cats consulted!

What was it about?

How to catch a little mousie

Running in and out.

Pussy with the long claws, she made this remark,  
"I shall eat the mousie up because my nose is dark."

Pussy with the long claws curled with pride her lip,

"You can only snip snap, I'm the one to grip,  
And I'll stretch my long claws,  
And I'll hold mousie tight,  
Then with my strong jaws  
Whisk her out of sight."

Little mousie listened,  
Heard all that was said,  
Felt her limbs shake with affright,  
Thought she'd soon be dead.

But time may be wasted, if cats have much to say,  
And while they consulted mousie ran away.

—Anon.

### THE EXHIBIT BOOK.

BY MINNA C. DENTON.

An incentive which I have found very useful toward individual improvement in form and quality of work is the "exhibit book," which appears in evidence upon visitors' days, or upon the entrance of patrons or visitors into the school. This consists of a number of sheets of nice white paper in a dainty cover of blotting-paper or cardboard, tied together with a bit of ribbon, a bright picture, or an appropriate motto in quaint lettering, perhaps, on the outside. Herein are copied, in the handwriting of the small author, some of the best of the written work, compositions, arithmetic exercises, spelling lists, etc., from the daily lessons. There are a number of leaves of drawing-paper, too, which afford opportunity for the display of the best work in drawing, and for illustrations to some of the compositions. As additional material is prepared, new leaves are added to the book, so that it grows in interest from time to time.

Of course, it is the ambition of every child in the room to do something well enough and neatly enough to go into the exhibit book." Of course, too, the teacher sees to it that, in the course of time, every pupil gets a chance.

Other pages contain the teacher's record of the names of those pupils who have not been absent or tardy during the month, of those who have not missed in spelling, or have had perfect deportment, or have been specially worthy of honorable mention in some other direction. A teacher can do



much towards correcting a fault in discipline or habits by promising to those who shall fulfil her requirements in this respect a place on her "Roll of Honor." If these records are beautifully penned, and daintily ornamented, it will add to the eagerness with which children will prize the reward of their efforts.

How many parents will be induced to visit the school in answer to eager importunings to "Come and see my story in the book," or with how great interest they will scan these records of their children's progress, one who has not tried it cannot guess.

As for the teacher, it is a relief to one, so large a share of whose time is spent in looking after the errors and weak points, to be occasionally reminded of the best side of the results of her labors.—*American Teacher*.

NOBODY'S KITTY.

Nobody's kitty was out in the snow,  
Nobody's kitty had nowhere to go.  
Nobody's kitty cried: "Miew, miew, miew!"  
Somebody pity me. Do, do, do!"

So somebody peeped from a window high.  
She saw little kitty and heard her cry.  
Somebody pattered down stair by stair,  
With blue, blue eyes and with golden hair.

Somebody gathered the wanderer in,  
Nobody's kitty, so cold and so thin.  
Nobody's kitty was somebody's pet.  
Ha! ha! my tale is not ended yet.

Somebody's doggie barked, "Bow, wow, wow!"  
So I'm to be nobody's doggie now!"  
"Fie!" said his mistress; "fie! that is not true;  
I've room in my heart for kitty and you."

—Our Dumb Animals.

School-Room Methods

ACTUARY CALCULATIONS.

W. A. DOUGLASS, B.A.

In Canada there is a large number of insurance companies and a small army of insurance agents, so that the parties who are interested in the intricate calculations of life insurance are by no means few. One would imagine, therefore, that a subject in which so many people are interested would receive some consideration in our educational institutions; and yet in all my experience in school or college, even in the honor mathematical course, I have no recollection of ever coming in contact with any problems beyond the fixed annuities, and a trifle of probabilities, that would give any hint how to calculate a premium or to value a policy. We were taught how to work out the formula for the asymptotes of a curve, which we would never have to apply—mathematical curiosities; but the insurance calculations that men meet every day we never touched.

I purpose giving a few examples, necessarily very simple, illustrating the methods of solving some of these beautiful and useful problems.

Suppose that five men insure their lives for \$1,000 each, payable at death, and that one dies every year, what premium should each pay?

If each is to pay down the premium at once, and no interest is to be allowed, then evidently each man will pay just \$1,000.

But as the first claim for \$1,000 is payable at the end of a year, the second at the end of two years, and so on, we must make an allowance for interest. Assuming four per cent. to be allowed, then the account will stand as follows:

The present value of

1,000 in 1 year =	$1,000 \div 1.04 =$	\$961.53
1,000 in 2 years =	$961.53 \div 1.04 =$	924.56
1,000 in 3 " =	$924.56 \div 1.04 =$	889.00
1,000 in 4 " =	$889.00 \div 1.04 =$	854.80
1,000 in 5 " =	$854.80 \div 1.04 =$	821.93

Total p.v. of death claims = \$4,451.82

Therefore, the single premium to be paid by each =  $\$4,451.82 \div 5 = \$890.36$ .

If, however, instead of paying the \$4,451.82 at once they pay equal annual premiums, then we must find what five payments made now, four to be made at the end of one year, three at the end of two years, two at the end of three years, and one at the end of four years, are equivalent to a present payment of \$4,451.82.

\$5 due now	=	\$5.00
4 due in 1 year =	$4 \div 1.04 =$	3.85
3 " 2 " =	$3 \div (1.04)^2 =$	2.77
2 " 3 " =	$2 \div (1.04)^3 =$	1.78
1 " 4 " =	$1 \div (1.04)^4 =$	.85

Tot. pres. val. 15 prem. of \$1 each = \$14.25

Then the annual premium that is equivalent to a present payment of \$4,451.82 =  $\$4,451.82 \div 14.25 = \$312.41$ .

The Combined Experience Mortality Table gives the following figures:

Age.	Living.	Dying.
95	89	52
96	37	24
97	13	9
98	4	3
99	1	1

The death claims will be 52 at the end of the first year, 24 at the end of the second, and so on, being 89 in all.

The premiums will be 89 at the beginning of the first year, 37 at the beginning of the second, 13 at the beginning of the third, 4 at the beginning of the fourth, and 1 at the beginning of the fifth; 144 premiums in all.

If the whole fund were paid down to meet these claims, allowing interest at 4 per cent., the amount would be estimated as follows:

52,000 ÷ (1.04) =	\$50,000.00
24,000 ÷ (1.04) <sup>2</sup> =	22,189.35
9,000 ÷ (1.04) <sup>3</sup> =	8,001.00
3,000 ÷ (1.04) <sup>4</sup> =	2,564.40
1,000 ÷ (1.04) <sup>5</sup> =	821.92

Total . . . . . \$83,576.67

Therefore,  $\$83,576.67 \div 89 = \$939.06$  single net premium.

To convert this into equal premiums, we proceed as follows:

89 premiums of \$1 each paid down	\$89.00
37 " " " " in 1 year	$37 \div (1.04) = 35.58$
13 " " " " 2 years	$13 \div (1.04)^2 = 12.02$
4 " " " " 3 " "	$4 \div (1.04)^3 = 3.56$
1 " " " " 4 " "	$1 \div (1.04)^4 = .85$

Total present value of premiums of \$1 each = 141.01

The annual premium, therefore, to pay to each a loss of \$1,000 =  $\$83,576.67 \div 141.01 = \$592.70$ .

In this case, obviously, some receive more than they pay and some receive less.

The man who dies the first year paid	\$ 592.70
" " second year "	1,185.40
" " third " "	1,778.10
" " fourth " "	2,370.70
" " fifth " "	2,963.50

The man dying the first year receives nearly double his premium; the man who pays the full term pays nearly three times the policy.

By adding the interest and deducting the losses we can show the value of the policies at the end of any year.

Total value of premiums . . . . .	\$83,576.67
Add 4 per cent. . . . .	3,343.06
	86,919.73
Deduct the death claims . . . . .	52,000.00

Leaving net value of policies end of first year . . . . . \$34,919.73

Add four per cent. . . . . 1,396.78

36,316.51

Deduct death claims . . . . . 24,000.00

Net value end of second year . . . . . 12,316.51

Add four per cent. . . . . 492.66

12,809.17

Deduct death claims . . . . . 9,000

3,809.17

Net value end of third year . . . . . 152.36

Add four per cent. . . . . 6.09

158.45

3,961.53

Deduct death claims . . . . . \$ 3,000.00

Net value end of fourth year . . . . . 961.53

Add four per cent. . . . . 38.47

1,000

Deduct death claim . . . . . 1,000

By dividing the net values shown above by the number of the survivors we obtain the net value of each man's policy at the end of each year, thus:

\$34,919.73 ÷ 37 =	943.77 = Net value end of 1st year
12,316.51 ÷ 13 =	947.42 = " " 2nd "
3,819.17 ÷ 4 =	954.80 = " " 3rd "
971.52 ÷ 1 =	961.53 = " " 4th "

It will thus be noticed that an insurance company must charge annual premiums, so that the first premiums collected, with their interest added, must leave an excess called the "net value," or "reserve." This "reserve" is very different from the "reserve" of a bank or a loan company. In the latter case it means only reserved on individual profits belonging to the shareholders. The insurance company's "reserve" is just the opposite; it belongs not to the shareholders, but to the policyholders.

At 21 years of age 683 die out of 92,588, or 1 out of every 135, but at 99 years of age all die in the year. If, therefore, a company carried no reserve, a man at 21 to insure for \$1,000 should pay a premium of \$7.09, and every year a larger premium, until 99, when his premiums ought to be 135 times as great as at 21. It is the oversight of this fact that causes many people to decry the enormous "reserves" carried by insurance companies. The company must either charge an increasing premium yearly or carry a reserve. The company that does not provide enough reserve is bankrupt. It is not an excessive or individual profit, but an "asset" to meet a coming liability.

Correspondence

THE SPELLING PROBLEM.

To the Editor of THE EDUCATIONAL JOURNAL:

SIR,—I find the following under the above heading: "We have of late been astonished to find to how great an extent the practice of prescribing lists of words for oral exercises still exists in the schools. We fancied that it had been superseded twenty-five years ago, but are led to believe that it has now been to a considerable extent restored."

But why should teachers cling to a theory, when all the facts, as well as common sense, are against it? Some years ago there was a great deal of oral spelling and very little dictation. At that time if a pupil could learn anything at all he was a good speller. Of late years there has been a great deal of dictation and very little oral spelling, and now there are said to be plenty of good scholars who cannot spell. Does not this prove that dictation, as a means of teaching spelling, has proved a failure? As a means of examining spelling it is a very good test, but it is not infallible, because many of the pupils would spell the same word in a different way five minutes later if they had the chance. If the words are spelt correctly, it is considered all right; but, if not, the pupils must write the words until they know how to spell them. Now, will not a little reflection show that, with a live teacher, ten minutes' oral drill on the change; a word undergoes, long and short, hard and soft sounds, silent letters, and so on, will do more than half an hour of silent writing? When will some of our modern teachers admit that our forefathers were not all fools?

As to the strange spelling at the Entrance, pupils cannot be expected to spell words they have never met before. If teachers drill on the Literature selections, and neglect the rest of the book, the same thing will happen again.

J. H. KNIGHT,  
P. S. Inspector.

Lindsay, Feb. 21, 1896.

Work for some good, be it ever so slowly;  
Cherish some flower, be it ever so lowly.  
Labor! all labor is noble and holy;  
Let thy great deed be thy prayer to thy God.  
—F. S. Osgood.

## Question Drawer.

All questions for this department, like all communications for any other department of THE JOURNAL, must be authenticated with the name and address of the writer, and must be written on one side of the paper only. Questions should also be classified according to the subject, i.e., questions for the English, the Mathematical, the Scientific, and the general information departments should be written on separate slips, so that each set may be forwarded to the Editor of the particular department. If you wish prompt answers to questions, please observe these rules.

J.F.M.—(1) The cities of Ontario are: Belleville, Brantford, Chatham, Guelph, Hamilton, Kingston, London, Ottawa, St. Catharines, St. Thomas, Stratford, Toronto, Windsor.

(2) The districts are: Algoma, Manitoulin, Nipissing, Rainy River, Parry Sound, Thunder Bay, Muskoka. We think these are all, though we have no official list before us. In a recent enumeration we omitted Algoma.

(3) This question is answered in the foregoing.

(4 and 5) These questions, touching the imports and exports of Canada, whence derived and whither sent, would require too much space to be answered fully here. We shall try to arrange for an article on the subject at an early date.

(6) Central America is not one country, but includes five Spanish American republics, each of which has, of course, its own capital. The capitals of Greenland are Godhaven and Godhaab. Alaska is inhabited chiefly by Eskimos and Indians, who lead a wandering and barbarous life. Hence the country can hardly be said to have a capital.

(7) See above.

(8) See answer to (4 and 5).

The remaining questions will be answered in another number, either in Question Drawer or in articles.

J.J.T.—The zodiac is the name given by the ancients to an imaginary belt or band of about sixteen degrees in width, extending around the celestial sphere, and having the ecliptic, or apparent path of the sun, as its central line. It was originally fixed at the width named with a view, no doubt, to the inclusion of the orbits of the sun and the five planets then known (Mercury, Venus, Mars, Jupiter, and Saturn). Some of the planets subsequently discovered, having their axes at a greater angle to the plane of the ecliptic, wander beyond the zodiac, and are hence called *ultra-zodiacal* planets. The stars within the zodiac were divided into twelve constellations or "signs," to each of which thirty degrees, or one-twelfth of the whole zodiacal circle, was assigned. Why the fanciful names and figures (Aries, Taurus, etc.) were given to the respective constellations, or, rather, to the divisions of the zodiacal belt to which these constellations were assigned, has not, so far as we know, yet been discovered. The scheme dates at least as far back as the Egyptians and the Babylonians, probably even farther. Consult the word "zodiac" in a good encyclopædia, if such is accessible. Such a work should be in every school library.

R.S.—This correspondent would like to have those who know anything of the successful enforcement of the Truant Act, in any part of the Province, write THE JOURNAL. We should be glad to be placed in possession of definite information of the kind indicated.

E.O.P.—"Composition from Models," by Alexander and Libby, is among the best.

## Book Notices.

PROBLEMS IN ARITHMETIC, pp. 185; PUBLIC SCHOOL ALGEBRA, pp. 187. Toronto: Gage & Co.

As formerly stated in these columns, the Teachers' Editions of these handy volumes save overworked teachers a great deal of labor. The Public School Algebra has been authorized for the schools of the Northwest Territories, and is winning its way to favor.

A MENTAL ARITHMETIC, pp. 190. Boston: Ginn & Co.

Here is a book that is full of suggestions, well graded, ten or fifteen questions to the page, and especially adapted to the classes of our public schools, from the second class to the upper fourth. There is a power in mental arithmetic. Some one ought to state that fact to the Education Department so that it would bear.

H. I. Strang, of Goderich, known to many as author of "Practical Exercises in English Composition," "Exercises in False Syntax," etc., has just issued, through the Copp, Clark Co., Ltd., a very useful little book, entitled "Grammatical Analysis." Part I will be found very helpful to the teachers both of Public Schools and junior classes of High Schools; while Part 2, consisting of well graded exercises, will be of service throughout the junior High School classes.

We have received, within the last few weeks, two little books for teachers' use, from the publishing house of the Copp, Clark Co., which we have not yet had time to examine carefully. They are McLean's "Hints on Teaching Arithmetic," and Strang's "Grammatical Analysis." We shall have fuller notices of both at an early day. Meanwhile, from our own hasty inspection, and still more from the favorable judgments we are receiving from good authorities, we have

## the doctors

approve of **Scott's Emulsion**. For whom? For men and women who are weak, when they should be strong; for babies and children who are thin, when they should be fat; for all who get no nourishment from their food. Poor blood is starved blood. Consumption and Scrofula never come without this starvation. And nothing is better for starved blood than cod-liver oil. **Scott's Emulsion** is cod-liver oil with the fish-fat taste taken out.

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formed favorable impressions of both. We have no doubt they will be found very helpful in their respective spheres by those for whom they are intended.

## NORTH AMERICAN LIFE ASSURANCE COMPANY.

The annual statement for 1895 of this solid and progressive Company has just been published, the official returns to the Dominion Government having been promptly made on the 31st of December last at the close of its year's business. The report shows that substantial and solid additions have been made to the insurance in force, assets, net surplus, the movements of which items from year to year indicate progress or the reverse of a company.

There are four items in a life insurance company's statement from which a very good idea can be obtained of its progress or retrogression. If these items are carefully compared at the end of certain years, the company's record and standing can be ascertained. The items referred to are cash income, assets, net surplus, and insurance in force, and at the end of the last three quinquennial periods of the North American were as follows:

	Cash Income.	Assets.	Insurance in Force.	Net Surplus.
1885	\$153,401	\$343,746	\$4,849,287	\$36,001
1890	354,601	1,034,325	10,076,554	127,149
1895	581,478	2,300,518	15,442,444	405,213

During the last quinquennium it will be observed that the cash income has increased by 64 per cent., the assets by 122, the insurance by 53, and the net surplus by 219.

The operations for 1895 were more successful than in any past year; policies issued exceeded \$3,000,000, the cash income reached \$581,478, while the sum of \$67,000 was added to the net surplus, now amounting to over \$405,000, after setting aside \$25,000 out of the year's earnings as an additional contingency reserve fund to anticipate a change in the basis of valuation. The solid character of the Company's assets is vouched for by the comparatively small amount of interest due, and the failure to find among them any trace of such undesirable items as "contingent commissions," "agents' balances or advances," "bills receivable." The North American claims a higher ratio of assets to liabilities than any other Canadian company, and compares most favourably in this respect with the very best of the American companies.

It is well known that mere size does not always guarantee strength or ability to make satisfactory profit returns to policy-holders, and this is practically borne out in the record of the North American Life, for not only is it relatively about the strongest life company in the field, if we gauge strength by a comparison of assets to liabilities, but it has for several years past been paying handsome returns under its investment policies, which has tended to make the Company one of the most popular in the Dominion, and a favourite with its agency staff. As an evidence of this, it may be mentioned that several policy-holders have just received from this company a return under fifteen-year investment policies, which have given them insurance for the term named and then returned the whole of the premiums paid with compound interest thereon at the rate of about five per cent. per annum. Certainly such a result as this should satisfy any policy-holder, and no doubt will attract the attention of intending insurers to the special forms of investment policies issued by the North American.

The success of the Company and the high standing it has attained owing to its splendid financial position must be exceedingly gratifying to all those interested in the Company, and also to those who watch the progress of our Canadian institutions. It has an excellent staff of officers, and the mention of the name of the president, Mr. John L. Blaikie, is sufficient to inspire confidence and give assurance of caution and skill in everything connected with the investments of the Company, while the name of the managing director, Mr. William McCabe, F.I.A., is sufficient evidence that that experience and actuarial skill, so essential to the success of a life company, is being exercised in the management of the North American. In the efforts made by Mr. McCabe to push forward and promote the interests of the Company, he has always been ably assisted by Mr. L. Goldman, A.I.A., the Company's secretary, since its inception.

## The Educational Journal Clubbing List

It has been represented to us that many of the subscribers to THE EDUCATIONAL JOURNAL might be glad of an opportunity to get, in connection with it, one or more of the leading weekly newspapers or magazines of the day at reduced rates for the two or more. We are, therefore, making the best arrangements in our power to supply to every subscriber who wishes it any one or more of a good list of papers and magazines, on the terms given in the following table. Our arrangements are not far enough advanced to enable us to name more than a few Canadian periodicals in this number, but we hope to have the table considerably extended in our next and following numbers. Of course, the advantage of this clubbing arrangement is available only to those who pay cash in advance. Immediately on receipt of the subscription-price named for any paper or magazine on our list, we forward it to the proper office and have the subscriber's name and address put upon the mailing list, after which the subscriber must look to the publishers of the periodical in question for his copy.

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The Educational Journal and the Literary Digest	\$3 75
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8. Kindergarten Examination.
9. Normal School Entrance, January, and 2nd Class Proficiency, June.
10. Normal School Entrance, August, and 2nd Class Proficiency, December.
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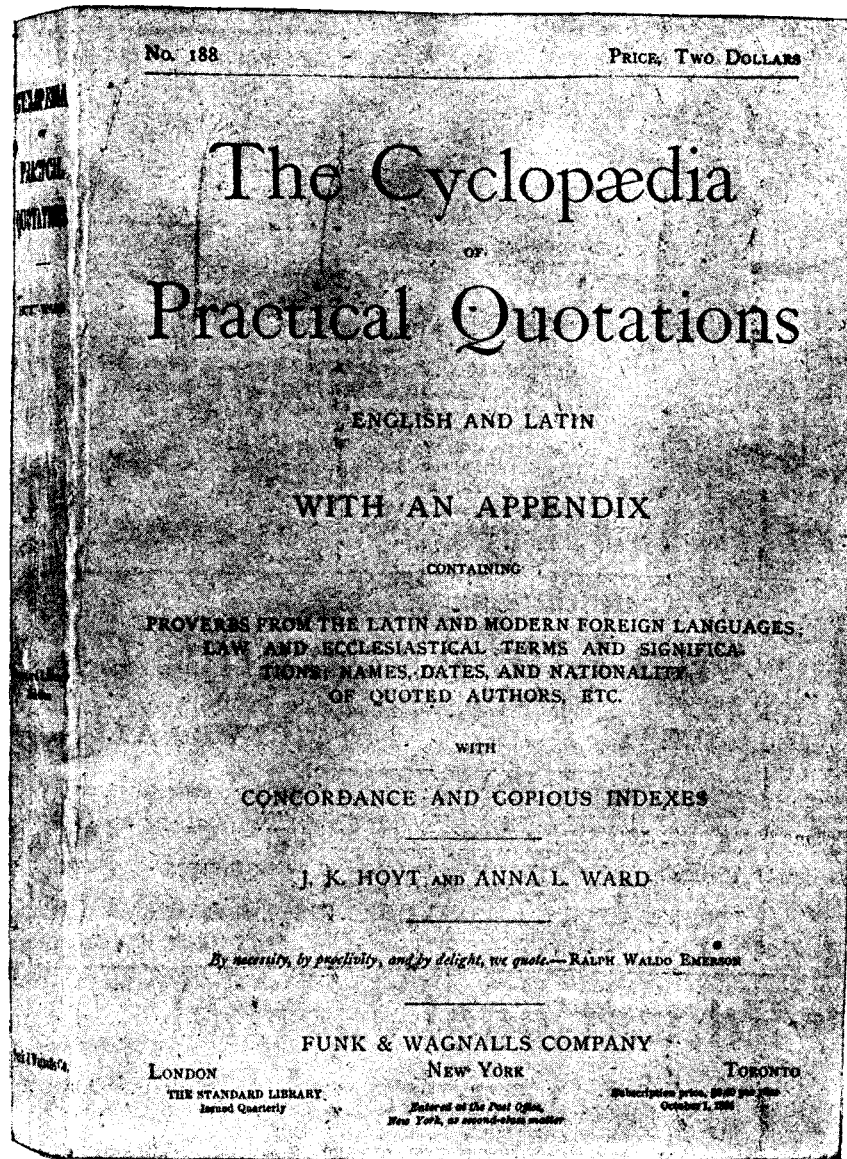
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 "JOKOSERIA"—J. W. Bengough's own department.  
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 ARTISTS—The work of seven different Artists in this number.

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**Official Calendar OF THE Education Department For the year 1896**

- March.
- 2. Last day for receiving applications for examination of candidates not in attendance at the Provincial School of Pedagogy. (1st March.)
  - 31. Night Schools close (session 1895-96.) (Close 31st March.)
- April.
- 1. Returns by Clerks of counties, cities, etc., of population to Department, due. [P.S. Act, sec. 129.] (On or before 1st April.)
  - Applications for examination for Specialists' certificates other than commercial to Department due. (On or before 1st April.)
  - Toronto University Examinations in Medicine begin. (Subject to appointment.)
  - 2. High Schools close, second term. [H.S. Act, sec. 42. (Thursday before Easter Sunday.)
  - 3. GOOD FRIDAY.
  - 6. EASTER MONDAY.
  - 7. Annual meeting of the Ontario Educational Association at Toronto. (During Easter vacation.)
  - 13. High Schools open, third term. [H.S. Act, sec. 42.] (Second Monday after Easter Sunday.)
  - Public and Separate Schools in cities, towns, and incorporated villages open after Easter holidays. [P. S. Act, sec. 173 (2); S. S. Act, sec. 79 2.] (Same as for H. S.)
  - 15. Reports on Night Schools due (Session 1894-5.) (Not later than the 15th April.)
  - Art School Examinations begin. (Subject to appointment)
  - 23. Toronto University Examinations in Law begin. (Subject to appointment.)

N.B.—The Departmental Examination papers are not supplied by the Department, but can be obtained from the trade through Messrs. Rowell & Hutchison, Toronto.

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HAVING at length surmounted the initial difficulties connected with the organization of our proposed Agency or Bureau for the mutual benefit of School Boards, Principals, and all others requiring Teachers of any grade, on the one hand, and of Teachers of all classes seeking situations, on the other, we now respectfully invite Boards of Public and High Schools, Governors, Principals, and Managers of Colleges and Private and Proprietary Schools, and all others who are responsible for the choice and appointment of Teachers of any grade, to communicate with us, at the earliest possible date, giving us full particulars with respect to any vacant positions, their duties, the qualifications needed, salary offered, etc.

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We also respectfully invite Teachers of all grades, from Public School to University, who may be seeking situations, whether they are for the time being unemployed, or are desirous of bettering present situations, to communicate with us.

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