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# The Educational Journal.

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

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### THE DOMINION EDUCATIONAL ASSOCIATION.

WE have received and should have noticed in last number, "Circular of Information, No 1," from the Educational Association of the Dominion of Canada, which was organized in this city, last July, by Canadian teachers in attendance at the meeting of the National Educational Association of the United States. At that meeting a Provincial Council was formed, consisting of (1) the Superintendents and Acting Ministers of Education of the various Provinces, (2) the Presidents of the Universities of the Dominion, (3) the Principals of Normal Schools, or schools engaged in the teaching of Pedagogy, and (4) the Presidents of all existing Teachers' Associations throughout the Dominion.

The members of this Provisional Council present met immediately for organization, elected a Provisional Executive, of which Hon. G. W. Ross is President and Rev. Elson I. Rexford, of the High School, Montreal, Secretary. They also appointed a Committee on Programme. The Executive now announces that the first meeting of the Association will be held in Montreal, the first week in July, and will extend over four days, July 5-8th. The Programme Committee have decided upon the following order of exercises:

1. That the first day should be occupied with a meeting of welcome in the afternoon, and a conversazione in the evening.

2. That the remaining days should be occupied with (a) general morning meetings (9-12); (b) afternoon meetings in sections (2-4); (c) evening public meetings of a more popular character (8-10).

3. That the Association should be organized for its first meeting in five sections—namely: (1) Kindergarten, (2) Public School, (3) High School, (4) Normal Training and Inspection, (5) University.

4. That there should be a scholastic exhibit in connection with the meeting of the Association, including specimens of school work, school appliances, text-books, etc.

Local committees have been organized in Montreal to make due preparation for this meeting. Arrangements have been made with the Canadian Pacific and Grand Trunk Railroads to give return tickets for single fare, and to extend the time of such tickets to cover any side excursions from Montreal, which members may desire to take, full information of which will be given in the *Association Bulletin*. A provisional programme has been prepared by the Programme Committee, and the Secretary is now in correspondence with the representatives of the different Provinces in reference to the details of the programme. It is expected that the financial interests of the Association will be provided for in part by grants from the Dominion and Provincial Governments, and from the proceeds of the *Association Bulletin*. There will also be a membership fee of one dollar, payable at the point of departure as part of the price of the reduced railroad ticket.

The first week in July has been selected as the most convenient time for the meeting of the Association. The National Educational Association of the United States meets the second week in July, at Saratoga, and those who desire to do so can take in the Montreal meetings on the way to Saratoga.

In Ontario and Quebec the first week in July is usually occupied with important Departmental examinations, but these will be taken up the previous week in order to make room for the meetings of the Association; and it is hoped that similar arrangements will be made in the other Provinces of the Dominion in order that educationists may be free to take part in the proceedings of the first meeting of the Association.

The Secretary announces that suggestions will be gladly received from any one interested in the success of the Association concerning the plan outlined above.

It is to be hoped that the attendance may be large and representative.

### TOUCHING EXAMINATIONS.

AS will be seen from our advertising columns, the examinations for Commercial Specialists' certificates will be held during the first week in July. The Examiners are: W. A. Douglas, B.A., Accountant, Freehold and Savings' Loan Society, Toronto, a former public and high school master; Thos. Bengough, Toronto; J. T. Slater, Toronto Public Schools; and A. C. Casselman, Drawing Master, Normal and Model Schools, Toronto. We understand that a circular is being prepared which will give further details in regard to all the courses for special certificates.

The Department has announced that the next examinations for High School Assistants and Public school First Class certificates will be held next December. We note in the recently amended Regulations that an examination will be held in reading and in drill, etc.; in each of which subjects the candidate must make fifty per cent to pass. Judging from the Regulations and the number of failures, a high standard is set at this professional examination. Forewarned is forearmed. Intending candidates will do well to govern themselves accordingly.

It is announced that the sixth annual meeting of the Modern Language Association of Ontario will be held in the buildings of the Education Department, St. James' Square, Toronto, on Tuesday, Wednesday and Thursday, April 19th, 20th and 21st, 1892. The meetings of this Society have hitherto been interesting and profitable, and if we may judge from the subjects of discussion announced in the programme and the names of those by whom papers are to be presented, this meeting may be expected to surpass all its predecessors. The reading of each paper is expected to take half an hour, the remaining half-hour to be devoted to discussion. A notice appended to the programme informs us that all persons who are engaged in Modern Language (including English) teaching in Ontario may become members of the Association, on payment of an annual fee of one dollar, but all who are interested in Modern Language study will be welcome at its meetings. Wm. Tytler, B.A., is President and J. Squair, B.A., Secy-Treasurer of the Association.

## ❁ Special Papers. ❁

### ONTARIO SCHOOLS.

BY JOHN H. SANGSTER, M.D.

A PAPER READ AT THE TEACHERS' CONVENTION  
AT STRATFORD.

(Concluded.)

But what shall I say of those, and there have been, possibly still are such, who actually carry their text-books on

MEDICINE, LAW, OR DIVINITY,

into their school-rooms, and surreptitiously read them there? What shall I say of those who never devote even one hour a day to the thoughtful preparation lessons, or to their intellectual improvement as teachers—whose whole waking hours out of school are given to frivolity or to music or to studies foreign to their calling—who day after day drag their leaden limbs to school, fagged out and exhausted by a night's severe application to legal, medical, or theological works, and spend the day vainly trying to fix their weary thoughts, and to compel their unwilling powers to the drudgery of uncongenial duties? Of these I dare not venture to say what I think. I can only hope that none of you are in this category. I do not care to characterize as it deserves the conduct of those who thus give the cream and blossom of their time and zeal to private concerns, and only the sorry residue to the labor they have undertaken to perform. If on this occasion I do chance to address even one teacher who is in this awkward predicament, to him let me say, "You may intend to remain in the profession only for another year, or for another month, or for another day, but for conscience sake, for honesty's sake, for the sake of such dregs of self-respect as still belong to you, do not spend that year, or that month, or that day in stealing the time belonging to your school. Your time is not your own to do as you like with it. Your agreement as a teacher covers much more than the six hours' actual superintendence and instruction. You bind yourselves not to neglect your work, but to teach to the best of your ability. Your covenant, at all events, by implication as, I feel assured, would be decided in any test case submitted to the courts of law, involves all your time not required for needed rest, refreshment and recreation. I deliberately repeat it, your time belongs not to you, but to your schools, and is paid for by the community. Consequently, in using, or misusing, it for purposes outside your school work, you are breaking the eighth commandment as distinctly as if committing any other theft. There are

#### SEVERAL OTHER POINTS

on which I should like to dwell, but the rising numbers at the head of these sheets warn me to desist. If what I have been privileged to write to you causes even a very few—nay, causes even one teacher to accustom himself to take higher views of his profession, and to emancipate himself from the faults and shortcomings to which I have referred, and to do, hereafter, in his school-room with all his might whatsoever his

hand findeth to do, I shall be amply repaid for the few hours I have been able to snatch from professional duties, to devote to this paper. It would have been a real pleasure to me had it been possible for me to accept your kind invitation to be personally present with you. No one can feel more keenly than I do myself how flat and cold are pen-and-ink exhortations. At best the written sheet is but a poor substitute for the living voice. Thoughts are never winged with such penetrative power as when they flow from a full heart and fall upon open and receptive ears. I have written to you earnestly, and yet I trust not unkindly. I keep a very warm corner of my heart for teachers. Your work appeals to my sympathies above all other human occupations. Trials and crosses, deprivations and discouragements environ your lot in life, but these are peculiar to no particular avocation, being the common heritage of man. Did time serve I could, I think, show you that it also has rewards and compensations and indemnifications inherently its own. You sometimes worry or fret because teachers are not held in higher esteem by the public—because, in common parlance, the profession is not more respectable. Let not your hearts be troubled about so small a matter. It makes all the difference in the world to you what you yourselves think about your calling, but why should you be concerned with regard to what the Hon. A. B., or Judge C. D., or the Rev. Dr. E. F., may think or say about it? Why should you feel hurt because Miss Shallow or Mrs. Shoddy affects to look down on you and does not seek your acquaintance?

#### IGNORANCE, VULGARITY AND PRETENSION,

even when dressed in broadcloth or silk and riding in a gilded coach, are still only ignorance, vulgarity and pretension, and should move you to pity or contempt rather than annoyance. People of small hearts and narrow minds regard money as the only or as the chief standard of respectability. Though still, perchance, flavored with the washtub or the wheelbarrow of their earlier years, such persons try to ape what they wrongly suppose to be the airs of their betters, and in the attempt make themselves both offensive and ridiculous. They would condescend to either Gladstone or Bismarck if dressed in corduroys, and from the lofty attitude of their insufferable self-sufficiency and stupendous ignorance, would affect to look down even on the Archangel Gabriel if he came to dwell among us in humble guise and of low estate. Why should you permit such people to disturb your equanimity? Why should you care for the notice or the companionship of those whom, in all things save the single accident of wealth, you know to be your inferiors? The world acknowledges at length that your labor is respectable. It rests with you yourselves to force from it a recognition of your individual respectability. If your profession is to be raised in public estimation, you must raise it yourselves. If you wish the public to respect it, respect it yourselves. No Act of Parliament can help you in this matter. The status and dignity of your calling are lowered by every incompetent or unfaithful man or woman suffered to

remain in your ranks, just as they are elevated and adorned by every true and earnest teacher to be found among you. It is to be hoped that an increasingly large number of young people will embrace teaching as a calling for life. At present a great part of your best material is yearly diverted into other pursuits. Yet it may be fairly questioned whether, all things considered, teaching does not offer as fair a prospect for life as any occupation within your reach. Other professions may seem to you more remunerative and less laborious. Appearances, however, are frequently deceptive—far-off hills in summer commonly look greener than those on which we stand. In Canada and in the United States the so-called learned professions are universally so overcrowded, that it is hard work for the rank and file to make both ends meet. Thousands of hard-working

#### DOCTORS AND LAWYERS AND PARSONS

and surveyors and engineers are not making clear of expenses the incomes of first-class school teachers. Of course there are exceptions—a few draw prizes in the lottery of life, but you have also in your profession some positions, with large salaries attached, to which you may aspire. If at present you are unknown and at the foot of the tree, it altogether depends upon yourselves how long you remain so. Climb, if you will—by all available honest means climb, but remember that to climb you must work. The quickest and surest way to get out of a lowly position, is to make yourself conspicuously efficient in it. If you would rise, be true to yourselves; there are glorious opportunities awaiting each one of you in the more or less distant future. Be prepared to seize these as they present themselves, and there is no power on earth that can keep you down. The most formidable lions that stand in your path towards distinction and honor are indolence and procrastination. These you must boldly face and conquer. Be diligent and prompt in equipping yourselves for chances that are certain to come. That tide in your affairs "which taken at its flood leads on to fortune" may not have reached you yet, but sooner or later it will lap the strand at your feet. Let it find you with sails trimmed and rudder shipped and anchor weighed, and all ready to cast-off and to catch the golden opportunity which once lost never returns. Emerson has tersely written that no man has truly learned anything until he knows that

"EVERY DAY IS DOOMSDAY."

Assuredly every day in your lives is freighted with chances, is vital with possibilities, is pregnant with fateful openings towards good or evil. Bind upon your wrists and write upon your foreheads that "now" is the grandest word in the English vocabulary. If you ever hope to achieve greatness or to become a man or a woman in the noblest sense of the term, "now" is the time to begin. To-day is the best day in all your lives. To-day is an assured fact, is here within your grasp. To-day invites you to seize each of its flying hours, and to stamp it with the indelible hall mark of some holy deed done, some good resolution carried out,

some noble task accomplished, some vile temptation trampled under foot, some evil habit corrected, some heavenward progress secured. To-day is yours to use or to lose as you may decide. To-morrow is the idle promise or the vague hope of the irresolute and the feeble. To you and to me to-morrow may never come. To-morrow lies behind the glittering constellations—cold, impassive, intangible, and inscrutable, shrouded from all human ken by the dark and impenetrable veil of sable night. To-morrow is forever ringing the knell of dead hopes and forgotten promises and broken resolves and lost chances. If then you would ever be or do anything that is worthy and great, begin "now." Be earnest, diligent, intense, faithful. Let all that is just and noble in sentiment and grand in action inspire you to emulate the great and the good, whose names are historic and whose words and deeds are the world's most glorious heritage. Let these exalted incarnations of human possibilities shame your cowardice by the temerity of their daring, and spur your sloth by the grandeur of their diligence, and goad your weakness by the energy of their strength, and fire your indifference by the glow of their zeal, and sting your pride by the unconscious irony of their nobler manhood, until, all aflame with the contemplation of the glory of their mighty achievements, you resolve, like them, to dare and to do, and gird yourselves with that quickening and heroic spirit which sweeps all impediments from its path, surmounts all obstacles, recognizes no impossibilities, which impassionates ideals into actualities, vitalizes soaring imagination into settled purpose, and clothes frail mortality with the omnipotence of indomitable will. But if unhappily you cannot be aroused, if though cast in the image and similitude of man you are spineless, cold, insensate, dull, if no spark of divine fire glows in your sodden hearts, if only puny and craven souls scarcely animate the damp rags of humanity you know as yourselves, if the example of the Great and the Good cannot move you to strive after "better things," but only appals you with the thought of the mountain of difficulties in the way, then shrink, if you will, affrighted, back into the naked nothingness and obscurity of mere human animals which only live and do their daily dole of work, and eat and sleep, and procreate and die, and are forgotten.

Unless above himself he can  
Exalt himself, how poor a thing is man.

TRUE ease in writing comes from art, not chance.  
—Pope.

It is both joyous and burdensome to live in such times. When rivers widen and deepen they lose the prattle of their first miles so full of the mountain brooks. Their sound changes from high delight to impressive solemnity. Thus the swelling stream of truth, political, religious, and moral, sounds to us in a deep tone. The vast volume of knowledge means a new volume of duties. Great conduct must spring from great thought. It may solemnize the heart to go along with all of God's world in it, but it ought to be a greater calamity to move along with an intellect too small to contain such a portrait of man and his maker. Between a heart shamefully empty and a heart nobly overflowing, may heaven grant to you the mind which like a great river can drain of its truth the whole vale of our race.—Rev. D. Swing.

## Primary Department.

### METHODS IN ARITHMETIC.

ARNOLD ALCOTT.

As I have touched on nearly all the principal points in the teaching of multiplication, a paper or two on the teaching of division may now be in place.

As I have said in previous numbers, mental work should accompany slate work. In other words, mental work is the surest preparation for dealing with numbers beyond the capacity of the mind to grasp without mechanical aid.

In teaching multiplication I have taught division incidentally, *e.g.*, I am teaching the table of two times; when can I have a better opportunity to introduce the idea of division? So I say not only, how many are twice six, but also, how many twos are there in twelve, how many sixes are there in twelve, and so on throughout the table.

I am now, however, to deal with division technically. The educational principle, from the simple to the complex rules here, and consequently we teach long division first, and then proceed to short division.

The processes in long division may be enumerated thus:

1. See how many times.
2. Answer.
3. Multiply.
4. Subtract.
5. Bring down.

The teacher should write these steps on the blackboard as above, and should also have the pupils copy on their slates.

Now, *re* the kind of examples. This is most important. The divisor should be a long one, that is over six or more digits, in order that each step of the work may be impressed before a new step puzzles the pupils. The following is an excellent divisor with which to start, *viz.*, 102536. The first two figures being one and zero, there will be no trouble as to how many times. The wisdom of having the lowest digits in the left hand position will, of course, be seen by all our readers, as there is less chance of the subtrahend being too large.

The teacher can make a question including just the particular multiplication tables which she has taught, for instance, the tables of two, three, four and five times.

102536)5569936874(54321 times  
512680\*\*\*\*

443136  
410144

329928  
307608

223207  
205072

181354  
102536

78818 over

The class is asked for every step of the work, according to the rule, and are shown when they have found the difficulty, not before, that they must count six places from the left before putting down the multiplication.

Of course, as I have said in previous articles, every conscientious teacher has her questions carefully prepared before class lessons. And no book which you could buy would be appreciated or understood by you as well as your own note book with carefully penned examples.

I shall treat of short division in a future number. Does some one ask, "Do you give the terms, divisor, dividend, quotient and remainder to your pupils? Why, certainly, but these are introduced incidentally. I shall show how I can use them specifically at a later date.

A word in closing. You have, of course, already begun your Easter gems. Let me give you a pretty and suggestive one:

### EASTER-TIDE.

THE little flowers come from the ground,  
At Easter time, at Easter time.  
They raise their heads and look around  
At happy Easter time.  
And every little flower doth say  
"Be glad and full of joy to-day,  
For all that sleep shall wake again,  
And spend a long, glad Easter day."

Then waken sleeping butterflies,  
At Easter time, at Easter time;  
Go, spread your downy wings, and rise  
At happy Easter time.  
And these bright creatures seem so say,  
"Be glad and full of joy to-day,  
For all that sleep shall wake again,  
And spend a long, glad Easter day."

### A MORNING IN SPRING.

RHODA LEE.

"WHAT month is this children? Yes, showery April—the spring month that begins to awaken the sleepy earth-folks. What will you be doing in your gardens by-and-by when the warm breeze has driven away Jack Frost and his cold winter winds?" continued Miss Blossom, addressing the forty or fifty seven-year-olds gazing up into her good-natured face. "We shall be digging our garden pretty soon and getting in the seed," said master Frank. "Our father has his ready now." "Suppose," said the teacher, "We have a garden this morning, all ready for seed. You may tell me what you would like to have in it." "I would like to grow melons," said a bright-eyed boy with a thought of an old-fashioned August. "I would like potatoes;" "We might have beans;" "It would be nice to have some radishes." As the suggestions came thick and fast, the names of the different kinds of garden produce were carefully written down on the slates. After obtaining a long list of both vegetables and flowers, the slates were examined, the ten most difficult words selected and placed on the black-board for the spelling lesson of the following day. The spelling lesson proved so interesting as to occupy rather less time than usual and thus gave an extra five minutes before intermission which were devoted to repeating the words of a new song, "Planting the Corn and Potatoes," (Mrs. Hubbard's song book).

After recess a mysterious-looking glass dish was brought out of Miss Blossom's cupboard. Eyes sparkled and lips smiled, and I came to the conclusion there was some particular interest connected with this appearance. This time the bowl was

found to contain white beans which had been soaking for some time. Every child was given a bean and also provided with a large sized pin with which to investigate. After leading the children in their examination of the object, noting resemblances, differences, etc., the teacher summed up all in a story of the little fairy in the white house—Fairy Plumule. The rain tapping incessantly above, then finding its way to the little white house, causes it to swell, then burst, and Fairy Plumule determines to go up if she can and learn what the noise is. When she reaches the top she finds everything green and beautiful, and as she is pale and sickly she begs the breeze to take a message to the great sun which she thinks might make her fair also. Of course he does, the little wings turn green and she grows tall and graceful.

A glass can filled with water and covered with a piece of course netting stood on the window sill. Three or four beans and a few peas were placed on this, and I have no doubt that the class who took such interest in the morning's lesson will watch with increasing delight the freeing and growth of the little fairy.

## ✻ English. ✻

Edited by Fred. H. Sykes, M.A., EDUCATIONAL JOURNAL, Toronto, to whom communications respecting this department should be addressed.

### THE CAPTURE OF QUEBEC.

BY GEORGE WARBURTON.



WOLFE, AT AN EARLY AGE.

#### I. BIOGRAPHICAL.

The biographical notice prefixed to this lesson in our Readers will be found sufficient.

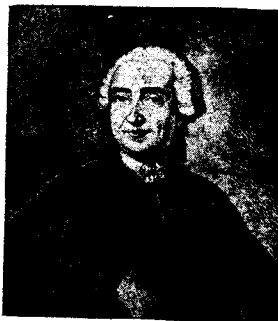
#### II. INTRODUCTORY.

In the study of Literature the object of all biographical treatment is to explain and enforce the extract under consideration. The main biographical features to be laid before the class in this case are (1) the author's profession, that of a soldier, and his consequent fitness to write on military matters, (2) his residence in Canada, where he lived in contact with the traditions and records of the struggle he undertook to describe, and where he had opportunity to visit the scenes of the various events.

Considerable time might indeed be given to the study of the life of Wolfe and of Montcalm, the heroes of the war. Were it possible for the teacher

to place Vol. II. of Parkman's "Wolfe and Montcalm" in the hands of his pupils, a result would be a better understanding of the capture of the city, and very likely an increased desire to know more about the daring and the romance with which our early history is adorned and with which Parkman deals so graphically.

Any ordinary history will give an adequate account of the origin of the war between England and France, and very little need be said to the class about the circumstances immediately preceding the day of battle, further than that there was jealousy between Montcalm and the French Governor Vandreuil, each of whom considered himself the principal ruler, and each of whom would rather choose that disgrace should come upon the French cause than that he should yield to his opponent. This explains what at first sight appears a piece of hurried folly and foolish hurry on the part of Montcalm, in attacking the English with only a portion of the French power—the troops under the Governor, and the artillery in the city itself under General Ramsay, being absent. It may be well to explain to the class that Wolfe had, a few days before, by sending his fleet up the river, rendered it almost impossible for the French to obtain supplies, and that he had, by landing on the Plains of Abraham—so called from Abraham Marten, one of the first colonists—entirely shut off the French, who for some time had been put on short rations, from their base of supplies.



MONTCALM.

rendered unpleasant by a forced confession that the reverse which had happened to the British arms, and which augured final defeat at Quebec, were the results of his own failure to grasp all the details of the situation. His bravery and his manliness are illustrated by his remarks to his physician shortly before the battle: "I know perfectly well you cannot cure me, but pray make me up so that I may be without pain for a few days, and able to do my duty; that is all that I want."

#### II. OUTLINE OF METHOD OF CLASS STUDY.

##### I.—To Secure a General Knowledge.

I. Read the whole extract in the class.

II.—Have each member of the class outline the incident in his own words.

III.—Ask for headings for each paragraph. [The following will perhaps constitute an answer to this: (1) general introduction, (2) the leaders, (3) the plan of attack, (4) the time and place when the plan was begun, (5) the landing of Wolfe, (6) the first troops to land, (7) the ascent begun, (8) the summit reached, (9), (10) might properly form one paragraph with the title, "The manner of landing," (12) the success of Wolfe's plan, (13) Montcalm makes ready for battle, (14) the plan of the French attack, (15) the English plan of action, (16) the result, (17) Montcalm succeeds in rallying his men, (18) the charge of the English, (19), (20) Wolfe wounded, (21) rout of the French upon the wounding of Montcalm; (22) Wolfe's condition, (23), (24) Wolfe's capacity for leadership shown in the hour of death, (25) the news in England, (26) the feeling in England, (27) the respect paid to Wolfe's body, (28) the great results of the conflict.]

IV.—Group the paragraphs into the natural divisions of the extract, [(a) 1, 2, 3; (b) 4, 5, 6; (c) 7, 8; (d) 9, 10, 11; (e) 12 to 24; (f) 25 to 28].

V.—Contrast the conduct of Wolfe and Montcalm.

VI.—What were the advantages and disadvantages of each general? (Montcalm had the advantage of numbers, and Wolfe that of an experienced force).

VII.—How long was the result of the battle in doubt?

VIII.—Describe the nature of the cliff.

IX.—Whether was Wolfe above or below the city when he entered the flat boats?

X.—At what time of the day and of the year did the conflict take place?

II.—To Secure a More Particular Knowledge.

¶ I.—What peculiar circumstances are referred to?

Distinguish "deep" and "peculiar"; "success" and "failure"; "broad" and "open."

Explain how "nearly line... numbers" was true.

¶ II.—Distinguish "firmly" and "hopefully"; "chivalrous" and "heroic."

Explain the meaning of "stronghold," "staked," "prospect," and "ideal."

Why would not "mountain and forest, city and waters, valley and solitude" be better than the order in the extract?

¶ III. *Left bank.*—Which?

Distinguish "eminence," "precipice," "heights."

Why were the plans all kept secret?

*On either side.*—Of what?

¶ IV.—*First Division.*—Explain.

*Embarked.*—From what place?

Why were the soldiers in high spirits?

What words in Gray's "Elegy" were especially appropriate to Wolfe? ("The paths of glory lead but to the grave.")

*Young General.*—How old?

¶ V, VI.—*Light company.*—Explain the meaning!

Distinguish "path" and "track."

*Marched to and fro.*—Why?

*The tide.*—Was the tide in or out?

¶ VII.—What showed the bravery of the Highlanders? (Their immediate action).

*Qui vive.*—Meaning and pronunciation: (See note on p. 44).

*Qui vive (kē vēr),* the cry of the French sentinel corresponding to the English "Who goes there?"

Distinguish "sentry" and "sentinel."

Explain "shouldered his musket and pursued his round."

¶ VIII.—Explain "turned out"; "fired one volley"; "summoned to surrender"; "intrenched posts."

¶ IX and X.—Put the substance of these paragraphs into your own words.

Who were Monckton and Murray? (Wolfe's brigadier generals.)

Why did the battalions form below? (So that there would be less confusion when they reached the summit of the cliff. Wolfe's orders were very definite on this point.)

¶ XI.—What would be the effect if "sailed," "ran," "swift," "order," "rifle," "great," were substituted for "plied," "swarmed," "ready," "array," "gun," "incredible."

¶ XII.—*Demonstrations of the fleet.*—What were these? (The evening before the attack Admiral Saunders, whose position was opposite and rather below Quebec, had, after a brief fusillade of artillery and small arms, manned and landed his small boats as if to attack the French position in that quarter. The feint was quite successful, as Montcalm had placed a large portion of his forces to resist Saunders, thus affording Wolfe, who was above the city a better opportunity to land.)

¶ XIII and XIV.—Explain "order of battle." (Arrangement of troops for open battle.)

What is meant by "field state," "skirmishers."

Select suitable words with which to replace "murderous," "incessant," "disabled."

¶ XV and XVI.—*They sustained the trial.*—What trial is referred to?

Explain "parade," "closed up the gaps," "shivering like pennons."

¶ XVII.—Parse "on." Why is "lost" followed by a note of exclamation? Distinguish "gallant" from "brave"; "ruined" from "lost"; "dismayed" from "terrified"; "dauntless" from "fearful."

¶ XVIII.—Show that "majestic," "deadly," "majestic," "pace" are suitable words.

¶ XIX.—*Again wounded.*—How often was he wounded in all?

What words are emphatic in the first sentence? In the last?

¶ XXI.—Re-write in other words, "wavered under the charge;" "death had disordered;" "rose above the wreck of hope;" "made head against the enemy;" "show a front of battle;" "with a mortal wound."

¶ XXIII.—*Grenadier.*—One of a company made up of the tallest and strongest men in the battalion. What other grades of soldier are there in general service? (Infantry, light; cavalry, heavy and light; artillery; engineers.)

¶ XXIV.—Why is the last line printed separately and in smaller type? (It is a quotation from Campbell's "Battle of the Baltic.")

¶ XXVII.—*The River.*—What is its name?

What peculiarity do you notice about the last sentence? (A climax for emphasis.)

¶ XXVIII.—What is the "momentous question" referred to?

What effect has this battle had on Canadian affairs?

To what does "it" in "it began" refer?

When was the "British flag hoisted on the citadel of Quebec?"

*Anglo-Saxon race.*—To whom is the reference?

W. H. H.

#### ANSWERS TO CORRESPONDENTS.

T. T.—THE poem "Curfew Must Not Ring To-Night," with an account of its authorship, will be found in a volume of similar productions, entitled "Waifs and their Authors," by A. A. Hopkins, Boston: D. Lothrop & Co. It is found as well in certain books of recitations, but what special ones we cannot at present say. The circumstances of its production are as follows. Miss Rosa Hartwick, now Rosa Hartwick Thorpe, in 1867, then a girl of fifteen, chanced to read of the incident of the poem in a story called "Love and Loyalty." Her imagination was so fired by it, that she soon wrote the poem, which appeared in the *Detroit Commercial Advertiser* in the autumn of 1870.

#### SHALL AND WILL.

PROF. WILLIAM S. LISCOMB, A. M., TOKYO, JAPAN.

From "Education" for March.

OF all the much discussed topics in English speech it is probable that none has received greater attention than the use of those two unregenerate auxiliaries which have proved a stumbling block and a rock of offence to all persons ambitious enough to busy their thoughts with the future, rather than with the present and the past. The reason for this is not hard to discover. The employment of *shall* and *will*, and of their preterites, *should* and *would*, constitutes, probably, the most difficult single point of usage in English—difficult not merely to foreigners, in whose own language no such peculiarity exists, but to those who are native and to the manner born, and who have spoken English from the time when they first learned to lisp the words pronounced by their mothers or their nurses in babyhood. The learned and the ignorant meet here on a common ground of fallibility and error, for while many a man can be found to give with perfect accuracy all the rules for the Latin subjunctive, not one in a thousand could state satisfactorily any principle for our guidance in the use of *shall* and *will*, beyond the trite precept that the former is the auxiliary for the future in the first person of both numbers, and the latter in the second and third—a precept so defective and misleading as to be utterly false in a large proportion of the cases met with in actual discourse. The careful student must have observed that in no small number of instances *shall* is the auxiliary for futurity, pure and simple, in both the second and the third person, and that in some cases even *will* may be used in the same way in the first.

Most of the discussions of these auxiliaries now-a-days start with the fundamental meaning of the

words, and from this attempt to deduce principles to guide us in using them correctly. *Shall*, they inform us, is from the Anglo-Saxon *sculan*, and denotes obligation or duty, the recognition of which leads us, under a naive sentiment of honor, to assert merely our duty in the matter, leaving it to the world's sublime faith in us to understand that what we ought to do is a thing that we cannot neglect to perform. In like manner we are told that *will* is from the Anglo-Saxon *willan*, and denotes purpose or inclination, its use gallantly hinting to another that what he decides or is inclined to do cannot of course fail of accomplishment.

Now, however suggestive such a mode of presentation may be as enabling us to understand the subject, historically, it is of little or no value in teaching the correct employment of these words in spoken and written discourse. One may know all this and yet go on confusing them to the end of his days. For the practical student a succinct and well-classified statement of the actual usage of the language in regard to them is of more value than any amount of speculation as to the process by which they have come to be as they are.

Another defect of the prevailing method of discussion lies in its failure adequately to distinguish the different kinds of clauses in which these auxiliaries are found. Broad and general rules are given, as if of universal application, when perhaps they are true of only certain clauses, and quite inapplicable to others. Such a mode of treatment is much the same as if a Latin teacher should tell his pupils that the subjunctive mood is to be used whenever the thought is hypothetical or doubtful, without attempting to discriminate the different kinds of clauses with which they have to deal. The discussion of the future auxiliaries in English must proceed with similar exactness, taking into equally careful consideration the nature of the clauses employed. Indeed, there is no other principle that the student can follow with any practical result, and by this the lines of distinction are so sharply drawn, that he who has once mastered them may feel as much at home, and possess as strict and definite rules for his guidance, as does the diligent Latinist in the use of his moods and tenses.

In the following discussion we shall pursue the method of presentation thus indicated, first dividing clauses into the two great classes of principal and subordinate, and then considering the different kinds of each. The discussion will be considerably simplified if the reader will fix in his mind two fundamental meanings for each of the auxiliaries under consideration, besides their function as denoting merely future time. These two meanings are: for *will*, (a) consent or willingness, (b) resolution; for *shall*, (a) a strong assurance, (b) an exercise of authority.

With these preliminary remarks let us proceed to the analysis of the subject.

#### A. PRINCIPAL CLAUSES.

##### I. Declarative and Exclamatory Clauses.

1. *Shall* in the first person, *will* in the second and the third, express simple futurity.

(a) *Will* in the second and the third person is sometimes employed for the imperative, especially in addressing military inferiors:

"On the receipt of this message, you *will* take a detachment of troops and at once occupy the town."

"Your men *will* hold themselves in readiness to march at a moment's notice."

2. *Will* always in the first person, and often in the second and the third, expresses either—

(a) *Consent or willingness.* In the first person it is the form regularly used in promises:

"I *will* yield the point." "I *will* come to-morrow, if you desire."

"He *will* do as you wish."

(b) *Resolution.*

"I *will* not go." "I *will* do it, or *will* lose my life in the attempt."

"Ye *will* not come to me, that ye might have life."

"He *will* have his way, in spite of consequences."

3. *Shall* in the second and the third person expresses—

(a) *A strong assurance*, whether a promise, a threat, or the emphatic assertion of a fact:

"You *shall* see me again."

"He *shall* be punished for his crime."

"There is not a girl in town, but, let her have her will in going to a mask, and she *shall* dress like a shepherdess."

(b) An exercise of authority on the part of the speaker:

"You *shall* come with me, in spite of prayers or threats."

"You *shall* go, and he *shall* soon follow you."

A fine distinction is often expressed by the combination of *shall* and *will* in the same sentence:

"I *shall* supply you with money now, and I *will* furnish you with a reasonable sum from time to time, on your application to me by letter."

"All persons who *shall* be taken with arms in their hands within these lines *shall* be tried by court-martial, and, if found guilty, *will* be shot."

#### II. Interrogative Clauses.

1. *Shall* in the first and the second person, and *will* in the third, express simple futurity.

"*Shall* I see you soon?"

"*Shall* you go to Rome this summer?"

"*Will* they return at once?"

2. *Shall* in the first and the third person also at times indicates authority on the part of the person spoken to, or gives him the right to decide the point in question:

"*Shall* we come with you?" "Shall I read you the story?"

"*Shall* he go with us?" "Shall they be ordered to leave the town?"

3. In questions, as in declarative sentences, *shall* may be used in the third person to emphasize the fact.

"*Shall* not the Judge of all the earth do right?"

"For what *shall* it profit a man, if he shall gain the whole world and lose his own soul?"

Observe the nice distinction between *shall* and *will* in the following passage:

"It justly fastened itself upon the rebellion, and demanded new and severer punishment of the rebels, instead of the magnanimous reconciliation which the beloved president, of whom it had been bereaved, had recommended. Who *will* say that this sentiment was unnatural? Who *shall* say that it is even unjust?"

4. *Will* in the second person indicates consent or resolution. In the first person it can hardly be used.

"*Will* you go with me?" "Will you allow me to show you these engravings?"

#### B. SUBORDINATE CLAUSES.

I. Clauses of *cause*, *concession*, *result* and *comparison* follow the rule for declarative clauses:

"I have no fear, since I *shall* soon be beyond his reach."

"You need feel no anxiety, for you *will* receive help from your friends."

"I will accept it, although I *shall* have no use for it."

"Although he *will* be made to see his fault, he will not confess it."

"I am so well provided for, that I *shall* not need your assistance."

"They are so unreasonable, that they *will* never consent to it."

"He is happier than you *will* be a year hence."

"He is not so wise as they *will* shortly wish him to have been."

(a) Here, as in declarative clauses, *shall* may be used to denote authority, to express a strong assurance, or to emphasize the fact:

"You will never see him again, though you *shall* hear of his success."

"Although all *shall* be offended, yet will not I."

(To be continued.)

In connection with the study of geography much interest may be awakened by introducing imaginary excursions, by land and water, to different parts of the world. The teachers may inquire the way from one place to another, as from Atlanta to London, the pupils pointing out and describing the trip; or the teacher may describe a trip or voyage, describing the places at which he stops, omitting their names, and require the pupils to name the places from the description; or the pupils may prepare descriptions, the teacher and the class naming the places as the descriptions are given.—*Southern Educator.*

## Book Notices, etc.

*Shoemaker's Best Selections for Reading and Recitations, No. 19.* Compiled by Mrs. Anna Randall-Diehl. The Penn Publishing Company, Philadelphia. Cloth, 50 cts.; paper, 30 cts.

Teachers, readers, students, and all persons who have occasion to use books of this kind concede to Shoemaker's numerous selections a place among the best issued. From such inspection as we have been able to give Number 19 we are disposed to regard it as one of the best of the series. It contains about eighty-five selections in prose and poetry, grave, humorous and pathetic, many of them from writers of the highest standing.

*Delsartean Pantomimes; With Recital and Musical Accompaniment* Designed for Home, School, and Church Entertainments. By Mrs. J. W. Shoemaker. Philadelphia: The Penn Publishing Company.

This is a handsome volume of 180 pages, explaining in the simplest language and illustrating with very beautiful plates the application of the art of pantomime in connection with a number of choice selections. The positions are shown by diagram and the movements minutely yet briefly described. Though the author believes that in our day and in her country the pantomime is best received and most enjoyed where there are both recital of words and musical accompaniments, and has arranged these exercises accordingly, yet they can, if it is preferred, be used without either the one or the other or both. In the latter case the exercise would be pure pantomime, in which the action of the piece or play is rendered by gesticulation only, a method which was in vogue as a pastime amongst the ancient Greeks and Romans.

*Conversation. The Principles of the Art.* By Dr. Mahaffy.

*Correspondence. Suggestions, Precepts, and Examples for the Construction of Letters.* By Agnes H. Morton, B.A.

*Debating. The Debater's Treasury, Comprising a List of 200 Questions, with Notes and Arguments.* By William Pittenger, Author of "How to Become a Public Speaker," Oratory, Sacred and Secular," etc.

The above are three booklets, neatly bound in cloth and containing from 140 to more than 200 pages each, which have been sent us from the well-known Penn Publishing Company, of Philadelphia. The name of the author of the first, Dr. Mahaffy, so well and favorably known as the writer of some excellent historical treatises, as well as the reputation of the firm, may be accepted as an assurance that the books are helpful and suggestive in the treatment of their respective themes, and though no instruction of book or teacher can ever make a conversationist, a letter writer, or a cogent debater apart from native talent, yet it is indispensable in the case of each that the talent be carefully cultivated and improved. To this end books such as these may prove of great service. They may, too, if rightly used, prove still more helpful to speakers of mediocre abilities in these directions by helping them to do passably that which they would otherwise have done badly, all their lives.

*Native Trees. A Study for School and Home.* By L. W. Russell, Principal Bridgman Grammar School, Providence, R.I. Boston: New England Publishing Co. 1891. Price 30 cents.

As the author in the introduction states, there is "really a demand for easily understood and practical matter about our native trees. Works upon general botany do not supply the needs of those who wish, without difficult study, to come to a friendly acquaintance with the forest and wayside trees which they daily meet." This demand the little book meets, we should say, most fully. All our Canadian friends appear: the maples, the elm, the birches, the oaks, the chestnuts, and the

beech. We cannot but love them more for what we learn of them here. Of the style suffice it to say that it is suited to the subject. No better book could fall into the hands of the teachers of children at this season of the year.

*Moffat's Geography of Europe.* Reprinted from Moffat's New Geography. Edited by Thomas Page and revised by Rev. E. Hammonds, M.A., Vice-Principal Battersea Training College. Carefully revised throughout and to last census. London: Moffat & Page, 28 Warwick Lane, Paternoster Row, E.C. Price 1s. 6d.

Each country is treated under two heads—(1) Physical. The physical features, with accompanying notes, are most conveniently arranged in a list which is very full. Climate, soil, minerals, and wild animals receive attention. (2) Political. Agriculture, manufactures, commerce, exports, internal communication, government, education, divisions, and an extensive array of cities and towns receive attention. Explanatory notes are put wherever they are necessary. These books are mines of information for teachers and students, but, according to the pedagogical notions which prevail in this country, are quite unsuitable for use as text-books.

*Friendship. Essays by Cicero* (translated by C. R. Edmonds), Bacon and Emerson. With Portraits. Pp. 104. Price \$2.00. Chicago: Albert, Scott & Co.

A volume made up of three famous essays, bound in beautiful white and gold, with the subject of friendship, should meet with a kindly reception at this season of good fellowship. For the student of comparative literature it offers, moreover, a charming study in observing the treatment of the same theme by men so wide apart in time and country as Cicero, Bacon and Emerson.

*Dr. Pick's French Method.* Pp. 113. Price \$1.00. Syracuse: C. W. Bardeen.

This work is an elementary class book in French, based on the principle that the teaching of a language must be based upon the language itself, and not on the grammar of the language. The author takes a sentence in French, explains the meaning and form of the words, then exercises the pupil in the elements of the sentence and in rendering of English equivalent expressions into French. The principle—no new one—carefully handled by an able teacher will be very helpful with junior pupils, and deserves trial. The little book has a cynical indifference to accents that we fear only Syracuse printers possess.

*Illustrated Edition of Green's Short History of the English People.* Parts I., II., III. 1s. each. London: Messrs. Macmillan & Co.

The wonderful popularity of the *Short History of the English People* by John Richard Green is owing to the many good qualities that the work possesses. The historian gave up the old standpoint of the chroniclers noting the glittering pageants of royalty and the pomp and circumstance of war; he mingled with the people, endeavored to depict their manners, their customs, their development, and their conflicts. Combining untiring industry in the perusal of the authorities of each epoch with the rare faculty of seizing the salient points, Mr. Green was able to give a picture of the English people, which, though we may object in parts to its partisan spirit or its paucity of detail, is, on the whole, as accurate and full as it is in the power of any one man to afford. When in addition to these merits, we find the whole work permeated with a noble and generous spirit—and presented in language that might serve as a model of simple and elegant style, we do not wonder that the work has attained its phenomenal success.

It is, therefore, with peculiar pleasure that we welcome the *Illustrated Edition* of the history now being issued in shilling monthly parts, thirty in all, of which three are before us. Under the direction of Mrs. Green, a long series of pictures illustrating the arts, costumes, coins and architecture of England will be included, as well as portraits of eminent persons, and chromo-lithographs of maps, manuscripts and missals.

The numbers before us give promise of a work of rare merit. The pages are royal 8vo. with wide margins and excellent printing. The illustrations in these three parts are more than a hundred in number, including three full-page lithographs and many full page engravings and twelve maps.

The Illustrated Edition will be made, we believe, an integral part of each school library, to lend a charm to the study of English history. F.H.S.

*The Ups and Downs of a Donkey's Life.* With Illustrations. Pp. 145. Price 1s. London: G. Bell & Sons.

The charming story told to French children under the title of *Mémoires d'un âne* by Comtesse de Ségur is here told to English children, with adaptations, by Mrs. Fielding. School children will follow the adventures of Napoleon with rare delight, and learn to read while they are amusing themselves. *Heureux celui qui s'amuse en s'instruisant*, seems to be the motto of Bell's Reading Books.

F.H.S.

*A Short Historical Grammar of the German Language,* translated and adapted from Behagel's *Deutsche Sprache*, by E. Trenchmann, M.A., Ph. D. London: Macmillan & Co. pp. 194.

Behagel's *Deutsche Sprache* is to-day the most popular and most satisfactory treatment of the historical grammar of German extant, and a satisfactory translation such as the present will be very welcome to all who fear the difficulties of the language of the original. Behagel's grammar is, it must be remembered, historical, that is to say, it begins with an exposition of the phonetics of the pre-Teutonic period, then traces the changes through the original Germanic, Old High German, Middle High German, to the New High German. Its second phase of work is a general introduction to the principles of language, function of words, changes of meaning, etc. This leads the way to the special study of New High German, which embraces the orthography, phonology, inflexions, syntax, etymology, and a chapter on the influences of foreign languages on German.

Teachers will find the volume an excellent companion volume to the H. S. German Grammar, and we heartily recommend it to a place on the shelves of all High School libraries.. F.H.S.

*Preparing to Read, or The Beginning of School Life,* by Mary A. Spear, Principal of the Model School, State Normal School, West Chester, Pa., with over three hundred drawings by D. R. Augsburg. Boston and Chicago: New England Publishing Company. Price 50 cents.

This is undoubtedly a good book of its kind. So far as it favors the learning of words, first from pictures, then as wholes to be remembered as such, apart from any knowledge of the elements of which they are composed as signs of sounds, we have no faith in the method. There are, however, many good points in the book. The whole of the second part, which consists of outline drawings of simple objects, is excellent. What we do not and cannot believe, and what our experience and observation have taught us to disbelieve, is "that the child can best learn to read by learning to recognize sentences before he is taught disconnected words," that is, if we understand it, without any idea of the powers of letters as signs of sounds.

*The Story of the Odyssey, for Boys and Girls,* by Dr. Edward Brooks, A.M., Superintendent of Philadelphia Public Schools. 370 pages, cloth. Illustrated, \$1.25. Philadelphia: The Penn Publishing Company.

The *Odyssey* has been called a poem of the sea. It is, indeed, a tale of voyage and discovery, with many a thrilling adventure in unknown lands. In it we roam from land to land, and from sea to sea; and the reckless hero never seems so much at home as when he is on his galley's deck. It has been a rich mine of wealth for poets and romancers, painters, and sculptors, from the dim date of the age which we call Homer's down to our own. This reproduction of it is well adapted, as the author designed, to "contribute something to the happiness and culture of the boys and girls" who may

read it. The story is told in simple, yet excellent, English, which is all the better for the slight "flavor of the antique" imparted to the style by the use of old-fashioned expressions, which seem to be in keeping with the original. The interest and value of the work are materially increased by seventeen illustrations from Flaxman's designs. So far as we have observed the reproduction of this famous classic story is characterized by delicacy as well as by simplicity of diction. The idea of putting such books into the hands of the young, or into the hands of parents and teachers to be read to the young, is good. To the few who may afterwards have the pleasure of reading it in the original, this foretaste will but add zest and piquancy to the Homeric Greek. To the many who may never form acquaintance with the original it will give glimpses of the beauty and a taste of the delight of this old classic.

*Lessons in Literature for Entrance Examinations.*  
Edited by F. H. Sykes, M. A. Toronto: Grip Publishing Co. Price 25 cents.

Teachers who have not unlimited time and library privileges to aid them in preparation of work will be glad of the assistance offered in this little book. No other eulogy of it than the name of its editor, the editor of our English Department, who is widely known as an able annotator and as the perplexed teacher's guide, philosopher and friend, is necessary to commend it to the notice of the profession. The editorial quill has been aided by eight other pedagogical pens. A peculiarly appropriate thing that, as among the spheres and muses, so in scholastic dissertation there should be a ninefold harmony. The plan of the book is good. An exhaustive treatment of each lesson is given, containing explanations of textual difficulties, suggestions as to methods of teaching, and a biographical sketch of each of the authors. A good feature is the inscription of cuts of the authors (though truth compels the admission that they are not all as good as they might be), and in some cases the author's signature in fac-simile. The chief objection to the book is the cheap form in which it appears: at least that is an objection to minds possessed with a Ruskinian love of good binding, and a dislike of paper covers for any other kind of literature than dime novels. However, aesthetic do not always take precedence of economic considerations, even with teachers.

Some typographical errors of the first editions will be found corrected in a second now going through the press. The cover will also be cured of its biliousness and present a healthier hue. Z.

*Chemistry of the Carbon Compounds.* By Professor Victor von Richter. Philadelphia: P. Blakiston, Son & Co.

The revised edition of V. Richter's well-known work on Organic Chemistry contains a considerable amount of new matter, and may now be regarded as the exponent of the most modern views in regard to the important matters with which it deals. The plan of the work remains as before, and its excellent arrangement makes it a most satisfactory reference book, as well as a trustworthy guide for the preparation of organic compounds. It is safe to say that the American translation of this work will meet with the same cordial reception as that accorded to the same author's treatise on Inorganic Chemistry.

*Experiments for Students in General Chemistry.* By Professors Smith and Keller. Philadelphia: P. Blakiston, Son & Co.

This little work is of a thoroughly practical character. As its title indicates, it contains directions for performing a series of experiments such as are practicable for students of elementary chemistry. The arrangement of the work is admirable, and the instructions precise and clear, simple diagrams in most cases supplementing the text. An excellent feature in the arrangement is the prominence given from the first to the natural grouping of the elements. The student is led by his own observations to understand the intimate relations existing amongst the members of a given group. The book is obviously the work of men who know by practical experience exactly what the needs of the young student are. A better model of a school book in science it would be hard to find.

*A Compend of Human Physiology.* By Albert P. Benbaker, A.M., M.D. Philadelphia: P. Blakiston, Son & Co.

This book is one of a series known as ? Quiz-Compend? They contain in a condensed form a great deal of information upon the subjects of which they treat. They are not designed to take the place of the ordinary text-books, but rather to serve the student's purpose when reviewing his work after a wider course of reading. Regarded in this way they are exceedingly useful, and have met with the approbation of some of the foremost authorities in medical science.

## School-Room Methods.

### TEMPERANCE.

BERE.

SOME discoveries I have made :

1. That any subject flourishes when it is made very welcome in our rooms. All the other studies hold out their hands to join those of Temperance. Geography, History, Literature, even Arithmetic saying, "Willingly we will work with you."
2. That the better I become acquainted with "The Public School Temperance" the greater is the respect I have for it.
3. That it is bad policy to place the text-book in the hands of pupils without introductory lessons, say sufficient to cover the first twenty lectures.
4. That though charts and objects would materially assist, yet till people believe "That parsimony towards education is liberality towards crime" we can do considerable teaching without.
5. That the best results are had when the pupils enter heartily into the conversations. 'Twere well that the teacher indulge not in violent utterances against the use of liquor. 'Tis her duty to teach so that the pupil has wisdom and self-control sufficient, at the proper time, to refrain from swallowing poison.
6. That the teacher's example must be right.
7. That children should learn to pity, not to scoff at the victims of intemperance. That each influence, however weak it seems, may be a power for good.

#### LESSON III.—PUBLIC SCHOOL TEMPERANCE.

LAST week the third class had for literature and reading "Egypt and Its Ruins."

What more natural than that we should enjoy a chat about mummies this morning! Girls and boys are such brilliant conversationalists when they are full of the subject in hand.

At last the interest is concentrated on one particular mummy.

Some years ago a real live, hard-working English doctor was chosen by his brother physicians to study out a most difficult question. He went to work, and so interested did he become that he spent a whole year making investigations, studying and experimenting. Of course the work was well done, so well that Dr. Richardson is now known and honoured throughout the British empire.

Then with the doctor we see the mummy, the body of one, once a priest or perhaps a ruler who was, ages ago, so expensively embalmed and laid in such a costly tomb. With a strange fascination we watch the weighing of the dried skeleton, we note the measurements taken, the height, the girth, then the head, and the limbs. The doctor estimates that in life the owner of the body, whose bony framework weighs now only sixteen pounds, weighed one hundred twenty-eight pounds. Where have gone the one hundred and twelve pounds? Dried up: Water! How curious!

Arithmetic does her share. The class are taught that one-eighth only of the human frame is solid matter.

I noted that the word *matter* seemed strange to them, but a moment or two sufficed to throw the necessary light on it.

I had my glue on my desk preparatory to explaining *colloids* and *hydrated*, but time was so nearly up that there was barely time for the pupils to try the flexibility of their fingers, feel the plumpness and softness of their cheeks and hands, and prove the capacity of various members of their bodies for motion, and contrast their bodies with the shrunken, parchment-like covered, bony frame. What gives flexibility, size and form?

Next day the lesson need not be dull. *Organic substances* requires explanation so does *affinity*, but a few simple articles as illustrations will chase away any dullness hovering round. The jelly shall be on hand to reinforce the glue. The boys may perform the experiments.

In a body weighing eighty pounds, ninety-six pounds, 100 pounds, 144 pounds, what part is solid? What water?

Ex. Write a short account of how Dr. Richardson estimated the amount of water in the human body.

NOTE.—Last year with fair success we had temperance lessons of ten minutes every morning, immediately after opening. The lack of time is a serious drawback, but the importance of the subject justifies the taking of time from other subjects if necessary.

The third and fourth classes may be taken together, but new thirds and old fourths are better taken separately.

### HOW TO TEACH WRITING LESSONS.

II.

BY C. H. M'GARGAR, C.A., NATIONAL BUSINESS COLLEGE, OTTAWA.

You will kindly pardon la grippe for not permitting my second lesson on Penmanship to appear in the issue immediately following the one in which my first appeared. This is my excuse for its delay.

In our first lesson we left the classes, all grades, after having practiced well muscular movement exercises, sweeping from the left to the right of the paper and a muscular movement fairly well developed. We will now make the application to the several classes. Introduce every writing lesson by movement exercises. For the fourth class write copy on the blackboard, just one word, at first, such as *man*, with or without the capital. If the movement exercise of that day were an exercise introducing the first curves of the capital M., then write the word with a capital. Explain this to the class, calling attention to and illustrating the common mistakes. If without a capital, this copy will do for fourth and third classes, and in some cases for the second class. If the capital is used for fourth class the same word without capital may be used for third. The third class may be an intermediate, and if the second class copy on the board is a hard one for that class it will also do for third. If fourth class copy is easy it will do for third also. In this way you can arrange always to have only two copies for the three classes, and these copies must be put on the board as nearly like copper-plate as possible, and if the teacher should happen (?) to be a poor writer, the first duty of that teacher is to spend the summer holidays at some school of Penmanship, or otherwise improve the chirographic scribble. Without this improvement no teacher can conduct a writing class or writing in a school successfully, although a fair degree of improvement on the part of the pupil may be perceptible.

After dealing with the board copies for second third and fourth classes, pass through the room and insist upon good position, good movement and care, and if the teacher has the energy and displays it, here will be no trouble about improvement. Write the word, if time will permit, for each pupil. After some time the copy might consist of two or more words for second, third and fourth classes. For the first class put simple exercises on the board, such as the small i without the dot, the n, m, u, etc., and as they improve sufficiently, form simple words as *min*, etc. Write for first class at their seats same as for third and fourth. If a pupil is making a mistake in formation, movement, etc., sit beside that pupil and show with your own efforts the proper way. In no other way can a teacher secure the confidence of the pupils so effectually as by doing almost perfectly what he is trying to teach.

I have long since disapproved of copy-books with engraved headlines, and if the department would take steps to quash the somewhat common idea that the more illegible the writing, the greater the educational attainment, our teachers and students would be better writers. To do this, writing should play a most important part in our examinations for teachers, consequently, in High Schools, Collegiates, etc., as well as receive more attention in Public Schools.

Should any teachers desire more minute application in any particular, write me, asking just the questions you desire answered, and I will be pleased to give you my own idea and practice.



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

J. E. WELLS, M.A. - - - - - Editor.

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As many people, either thoughtlessly or carelessly take papers from the Post Office regularly for some time, and then notify the publishers that they do not wish to take them, thus subjecting the publishers to considerable loss, inasmuch as the papers are sent regularly to the addresses in good faith on the supposition that those removing them from the Post Office wish to receive them regularly, it is right that we should state what is the LAW in the matter.

1. Any person who regularly removes from the Post Office a periodical publication addressed to him, by so doing makes himself in law a subscriber to the paper, and is responsible to the publisher for its price until such time as all arrears are paid.

2. Refusing to take the paper from the Post Office, or requesting the Postmaster to return it, or notifying the publishers to discontinue sending it, does not stop the liability of the person who has been regularly receiving it, but this liability continues until all arrears are paid.

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## \* Editorials. \*

TORONTO, APRIL 1, 1892.

## THE BAD BOY.

WE hope that all our readers who are anxious, as every earnest teacher must be, to find out and apply the very best methods in school management and discipline, have read "A Plea for the Bad Boy," in last number. The article was sent us by one who occupies a responsible position in connection with public school work, with a request for publication. With that request we most cheerfully complied. We believe in hearing both sides of every question. We do not expect or wish any reader to accept our opinions, even when accompanied, as they usually are, with some of our reasons for holding them, without carefully considering what is to be said in support of other views.

The title of "A Plea for the Bad Boy, by an Old Teacher," is somewhat misleading. The sketch is rather a plea for the rattan as an instrument for civilizing and reforming the bad boy. So far as it is an argument, its validity rests upon the underlying major premise that there are certain children of the lower classes whose natures are so calloused by their antecedents and sur-

roundings that they are impervious to the influence of any higher motives, such as a sense of right or duty, gratitude, affection, and so forth. They cannot be reached save through the smart and tingle of the nerves whose termini, scattered over the surface of the body, still respond, happily, to the touch of the strap or rattan.

Now the first question is that of the fact. There is, alas! no doubt, that there are to be found in almost every school, especially in the towns and cities, specimens of boys and girls too, who have been so degraded by heredity and brutality that the task of finding and arousing their better natures is one which requires almost infinite skill, patience and long-suffering. But is it true that the most effective way of reaching those better natures is through the epidermis, already toughened by cuffs and blows. Is it not rather paradoxical to suppose that the self-same treatment which has been the means of their degradation, should become the potent instrument for their elevation? We have always supposed that the very fact that a boy or girl had been hardened by a life-long familiarity with blows, rendered any attempt at reclamation by harsh methods the more hopeless; while, on the other hand, the fact that such were all unused to kindness, justice and affection, made them often peculiarly sensitive to the gentler influences to which they were so unaccustomed. We leave it to our readers to judge, as many of them no doubt can readily do from experience, which view is more in accordance with the fact.

Our correspondent, in forwarding the clipping in question, says: "There are schools and schools, teachers and teachers. In some schools and under some teachers corporal punishment may not need to be used. In some the authority to use it must be maintained, but that authority should be used as rarely and as judiciously as possible."

These remarks suggest two thoughts or queries:

1. "There are schools and schools." That means, we suppose, that while some schools can be carried on very well without corporal punishment, there are others which contain pupils who can be managed in no other way. Now we, unhappily, cannot doubt that that there are to be found in many schools incorrigibles. It is an indispensable corollary of our view of the ideal school, towards which we should always be pointing and striving, that there should be some means of getting rid of incorrigibles; some suitable institution to which they shall be sent for the peculiar discipline they need. But we hold it to be too bad that a mode of punishment from which every teacher of refined feeling must revolt, and which can but be

painful and injurious to the well-behaved majority of pupils, should be forced upon a school by one or two abnormally bad children.

2. "There are teachers and teachers." Followed out to its logical results does not thus prove too much? While it is admitted that "corporal punishment should be inflicted as rarely and judiciously as possible," the effect of the reasoning is that it must fall into the hands of the teachers who should be the very last to be entrusted with the arbitrary power to use it—those, viz., who lack the intellectual and moral force which enables other and better teachers to do without it. Nor should it be forgotten that the consciousness that one may fall back upon the ready appeal to physical force, takes away one of the strongest incentives to the cultivation of that mental and moral force which is the secret of the higher and better discipline.

We cannot refrain, in closing, from suggesting in barest outlines the picture which "A Plea for the Bad Boy" irresistibly suggests to us: "We had met in an equal contest . . . and I had conquered." Do you like the picture of such a struggle between a lady of culture and refinement (presumably) and a rough, coarse boy. Suppose, moreover, that the boy had been a little bigger and a little braver! What then?

## \* Literary Notes. \*

THE *Journal of Zoophily*, published monthly at 530 Walnut street, Philadelphia, organ of the American Anti-Vivisection Society and the Women's Branch of the Pennsylvania Society for the Prevention of Cruelty to Animals, bids fair to become a useful help to teachers and other friends of humanity in opposing cruelty and promoting kindness to animals. It is filled with interesting facts and incidents touching animal life, many of which might be used with effect in the school-room, on occasion." Subscription price, \$1.00 a year; in clubs of four or more, fifty cents each. Foreign, \$1.25 a year.

*The Canadian Mute*, published at the Institution for the Deaf and Dumb, at Belleville, the first number of which is before us, is interesting in itself, and will appeal powerfully to the sympathies of many besides the members of this afflicted class of our fellow-beings. The objects of the publication is threefold, viz., to enable a number of the pupils to learn type-setting, and from the knowledge obtained be able to earn a livelihood after they leave school: to furnish interesting matter for and encourage a habit of reading among our pupils and deaf-mute subscribers, and to be a medium of communication between the school and parents, and friends of pupils, now in the Institution, the hundreds who were pupils at some time or other in the past, and all who are interested in the education and instruction of the deaf of our land. The

paper is neatly and correctly printed on good paper and well filled with interesting matter.

*The Popular Science Monthly* for March has a varied and attractive table of contents. First comes the fifteenth of Dr. Andrew D. White's *New Chapters in the Warfare of Science*, dealing with Astronomy. In the series on American Industries there is a fully illustrated paper on "The Organ," by Daniel Spillane, describing some of the largest instruments in the United States, and telling what advances American organ-builders have made in their art. Another illustrated article is a very readable account of "Domestic Animals in India," by John Lockwood Kipling. Carroll D. Wright contributes an instructive paper on "Social Statistics of Cities," in his Lessons from the Census. Under the title "Way-side Optics" a lesson on the mechanism of the eye, with diagrams, is given by Dr. Casey A. Wood. In "Moral Educability" the possibility of educating the moral faculties is discussed by Edward P. Jackson. The latest important discovery in zoology, that of "The Australian Marsupial Mole," is described, with illustrations, by Dr. E. Trouessart. Other articles of varied interest follow. In the Editor's Table ethical teaching in schools is discussed, and the other departments present a pleasing variety. New York: D. Appleton & Company. Fifty cents a number, \$5 a year.

✱ Question Drawer. ✱

S.F.—(1) For Second-Class, Non-Professional, study specially Chaps. II., III., IV. of High School Physics, also Dynamics, Heat, Electricity.

(2) The whole of McLellan's Algebra. Read the text and do all the (a) exercises for first reading. Write to the Education Department for course of study in both subjects.

B. McI.—The examination in Temperance is conducted in just the same way as that in any other subject. If the pupil obtains the prescribed minimum of one-third, the number of marks gained in that, or any other optional subject, will be added to those obtained in the compulsory subjects, and the total will constitute his standing.

T.E.A.—The Grenadier is an infantry soldier, one of a company composed of the tallest and stoutest men in the regiment. The grenadiers are posted on the right of the battalion, and always lead it in attack. The word is derived from *grenade*, as in the days when hand grenades were used, the tallest and strongest men were selected to throw them.

Your other questions are referred to English Editor, by whom they will no doubt be answered in due time.

A.M.B.—(1) The only member of the Senate who receives a "salary" proper is the Speaker, whose salary is \$4,000 annually. But each member of the Senate, and of the Commons too, receives an "indemnity" of \$10 a day if the session does not exceed thirty days, otherwise the sum of \$1,000 for the session.

(2) For question re "Temperance," see answer to B. McI.

ENQUIRER.—(1) Each Minister in charge of a Department in the Dominion Government receives a salary of \$7,000 per annum. The Premier has \$8,000.

(2) Under the International Postal Conventions each nation receives prepayment of letters posted within its territories for the other country. As the number of letters going each way will naturally be about the same, the arrangement is substantially fair and saves book-keeping.

S.R.A.—(1) Most of the larger geographies treat of the motions of the earth under the head of "Mathematical Geography." There are various works treating exclusively of this branch of the subject. Perhaps some teacher will kindly name one that is cheap and easily procured.

(2) The Statesman's Year Book will give you the totals of exports and imports of different countries. It can be had through any bookseller.

(1) and (2) For details touching examinations in Drawing, History and Literature write to Education Department for a copy of "Regulations."

(3) In computing cost of plastering only one-half the area of doors, windows, etc., is deducted in order to compensate for loss of time caused by corners, etc.

ALEXIS.—(1) Can a teacher who signs an agreement for his salary to be paid at the end of the year, by law collect his salary quarterly? A strange question, surely. We should answer, "No, if he is a man of honor." If he is not, the question becomes a legal one which we would not answer if we could, because we should not like to abet meanness or dishonesty, even if sanctioned by the letter of the law.

(2) Apart from such considerations as the foregoing, it is not legal for the Trustees to refuse to pay a teacher's salary quarterly.

(3) Whether in the case in which the Trustees refuse to fill in the blank in the agreement touching the length of notice required from either party to terminate the engagement the teacher can leave before the end of his term of engagement on giving sufficient notice, and if so, what notice would be sufficient, is a legal question which we cannot undertake to answer. Much would no doubt depend upon the sufficiency of the reason given.

W.H.D.—The answers to most of your questions were given in the JOURNAL of March 1st. One or two were, we find, overlooked.

(1) There are various books on Mechanical Drawing. They can no doubt be procured through any educational bookseller who is wide enough awake to advertise in the JOURNAL.

(2) and (3) have been already answered.

(4) Having passed the Junior Leaving Examination, you can have your Third Class Professional renewed by the Board of Examiners of the county in which you last taught.

A YOUNG TEACHER.—To answer your questions satisfactorily would require at least a column. We will try to have such an article as you need in an early number of the JOURNAL, possibly in next number. Meanwhile, the best guide which we have seen is the "Limit Table," recently published by Inspector Maxwell, of Amherstburg, for the guidance of teachers in his Inspectorate. We do not know whether he has copies to spare for outside teachers, but we would advise you to write him and find out if they are on sale.

AN INQUIRER (we have mislaid letter containing name).—(1) Drawing, Reading and Commercial course are compulsory for the non-professional second-class.

(2) The High School English Composition will no doubt cover the ground. Arithmetic includes the mensuration required.

(3) Tel-el-Kebir is the name of a place in Egypt at which a memorable victory was gained by British troops under General Wolseley some years ago. It is about eighty miles from Ismailia, on the Suez Canal. Shebandwan is about fifty or sixty miles west of Port Arthur. It is south of the Canadian Pacific Railway, and on the line of the old Dawson route to the North-West.

A.B.—1 and 2 were answered in JOURNAL of March 1st. For 3 you had better write to Secretary of the Medical Council, Toronto, or to the Registrar of the University.

S.F.—Notice of intention to take the Second Class non-professional examination must be sent to the Inspector within whose inspectoral division you intend to write, not later than May 24th. The notice must state the class of certificate for which you are a candidate, and what optional subject or subjects you have selected, and must be accompanied with a fee of \$5.

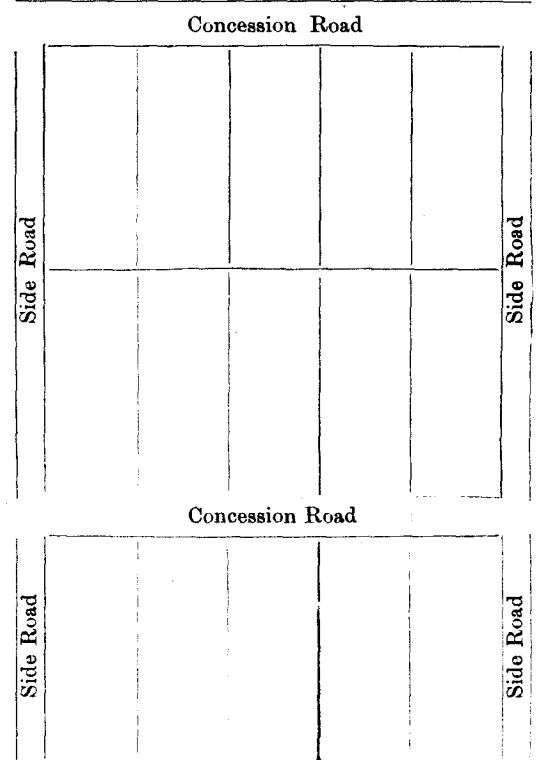
B.S.—The Entrance Examination will be based on the following subjects, as prescribed for Form IV. of the Public Schools: Reading, Literature, Orthography, Geography, Grammar, Arithmetic, Composition, History, Drawing and Writing. We have not space for particulars. Write to Education Department for a copy of School Law and Regulations. See also editorial in JOURNAL of Jan. 15, 1892, and subsequent numbers.

ANXIOUS.—(1) We hope soon to have some articles on School Games. Meanwhile, write to any of the educational booksellers, advertising in our columns and ascertain if they have not something that will suit you.

(2) The *Writer* of Boston, we think, examines and values manuscripts for authors. Address Editor of *Writer*, P.O. Box 1,905, Boston, Mass.

T.S.P.—Your questions can best be answered by a diagram. Put the following on your blackboard and you will be able to give your pupils in Second and more advanced classes a clearer idea of what is meant by concession and side-road than any verbal definition can convey.

1 1/4 miles



Here we have between the two concession roads ten farms, situated back to back. Each of these is ordinarily (circumstances may sometimes compel variations) 200 x 80 rods, and so contains 100 acres. The whole square made by the ten farms bounded by the concession and side roads contains therefore 1,000 acres, each side of the square being 400 rods long. The word "concession" originally denoted the strip, sixty-six feet wide, *conceded* or given up by the owners of the opposite rows of farms to make the roads, but is now generally used to denote the whole area covered by the ten farms, five on each side of the road. The "side-roads" are so called because they run along the sides of the contiguous farms. A school section usually, we think, though not uniformly, includes four concessions or a square of two and a half miles a side.

A.B.C.—Thunderstorms usually occur at the time of the day when the lower air tends to ascend from the heated ground. When this ascensional movement is delayed by the presence in the upper air of a uniform stratum of cold, still air, the lower air becomes abnormally heated: and, if, at the same time, it is saturated with water-vapor, we have the conditions of an incipient thunder-storm. As soon as the equilibrium is broken, the warm, moist air ascends, the cold air flows in and there is a fall in the temperature of the lower air.

(4) No definite answer can be given because the time at which the moon is the greatest number of degrees above the horizon varies with each year, in accordance with laws which are too complicated in their action to be explained here.

## Contributors' Department.

## PHYSICAL CULTURE.

## FOURTH LETTER.

BY A. C. MOUNTER, SECRETARY ONTARIO COLLEGE OF ORATORY.

## III.

## ONE MORE OBJECT AIMED AT IN THE EMERSON SYSTEM AND HOW TO ATTAIN THESE OBJECTS.

In the somewhat hurried preparation of the matter for my last article, I find I overlooked one very important object aimed at in the Emerson System, viz., "Strength at the centre, freedom of the surfaces." By strength I mean not only health to the vital organs—though that is the first requisite—but also muscular and nervous strength. The practice which develops a healthy condition in the vital centres will also develop muscular and nervous strength in the trunk of the body. But what about the surfaces? Do students or others following sedentary pursuits require muscular development in the forearm, wrist and hand? Surely not; and any exercise which produces abnormal tensioning of the muscles of these parts must not only result in rigidity and stiffness of movement, but will, in proportion to the degree of muscular development, exhaust the fluids of life. In this connection I may be pardoned for asking a few practical questions which all earnest educators would do well to ponder. Are the exercises of the gymnasium, or our ordinary calisthenic movements, arranged with a view to developing "strength at the centre and freedom of the surfaces?" Do not such exercises in their very nature render the attainment of such an object impossible? Is not the inevitable outcome of gymnasium practice the development of strength in the surfaces and devitalization at the centre, thus reversing a fundamental principle in physical exercise, the value of which cannot be disputed? I have never yet met a person who has followed the regular practice of a gymnasium for any considerable time, whose vital organism has not suffered in proportion to the violence of the exercise taken. Moreover, such persons invariably develop rigidity of the surfaces, and consequently stiffness of movement. How could it be otherwise? It is folly to speak of developing grace without any attention being given to "strength at the centre." Delsarte says truly, "Grace without strength is affectation." Given this "strength at the centre" the surface movements will be given with a dignity and smoothness which reflect reserve power.

And now I must pass to the third division of my subject, viz., "How these objects may be attained."

Dr. Emerson divides his system of exercises into four classes, which he names, "First, Second, Third and Fourth Divisions."

In the first division he aims to secure a good standing position of the body, especially obeying the law of gravitation. A good test of position is given in raising the body on the toes, heels of feet about  $1\frac{1}{2}$  inches apart. The slightest swaying in any direction is an indication of incorrect position. Students are especially cautioned against depressing the chest. "Keep it up and out." If retained in such a position there would be no need of such advice as, "keep your shoulders back," or "breathe with the muscles below the lungs." With the chest as high as nature intended, the shoulders must be at the side. (They were not not intended as chest or back appendages.) The cause of "chest breathing" is chest depression. The lungs and heart are habitually allowed to crowd the stomach and abdomen, which renders expansion at that point a practical impossibility. Hence, the only alternative for the in-flowing air is to crowd the chest up, that being the only direction, under such conditions, in which the trunk of the body can expand; Whereas, if the chest were as high as it should be normally, there would be plenty of room below the lungs to allow the diaphragm to contract and expand freely as nature intended. Moreover, with the chest normally high, the vital organs are not prevented from retaining an altitude that is conducive to their healthy action. But with the chest lowered, it will readily be seen the vital organs must be correspondingly depressed.

An excellent exercise for lifting the chest and strengthening the muscles which support it is to place the weight of body on the balls of feet, then,

with both hands brought a little forward, push downward and outward; throwing the head backward and upward. There is no better exercise for securing a correct position of the entire body than this. No contracted chest or bent spine can long remain so when this exercise is faithfully and regularly practiced.

Nothing is of more importance to the healthy action of any vital organ than that it should have plenty of room to act in its own sphere. There are multitudes of dyspeptics and consumptives to whom the four words, "keep your chest up," would, if followed, give a new lease of life. Of course, theory is much easier than practice; and I can assure any who are suffering because of chest depression, you cannot hope to change your habits in this respect without the faithful and regular practice of exercises, which not only lift the chest but develop those muscles which sustain it. And here again, let me add, such development must be from within, not from without.

The poising exercises of the first division are also very valuable in securing a dignified position of the body. They are arranged with a view to bringing the whole body into harmony with the law of gravitation. With the weight of body upon both feet poise forward as far as possible, bending only at the ankle joints; then back, in neither case allowing either heels or toes to leave the floor.

Again, with the weight of body entirely on one foot, bring the unsupported limb around to back of supporting limb so as not to allow the foot to touch the floor. Then poise the body forward and backward as before, bending only at ankle joint. Then change to other foot, repeating the exercise. These exercises have also an æsthetic value. They aid in the development of what is termed "good presence." Our estimate of stranger is nearly in proportion to our impressions of his "presence." We almost instinctively make this a criterion of what he is. That we are not always right in conclusions thus formed does not disprove the rule; but rather shows that some of the noblest natures are sadly misrepresented by their bodies. And all must agree that, other things being equal, the man of good presence will accomplish far more for himself and others than one whose body is an ugly mask, hiding his real self from all excepting those whose intimate acquaintance with him enables them to peer behind this unprepossessing exterior. Then, if "good presence" aids in a man's usefulness (as it certainly does) it is surely every man's duty to endeavor to develop it. One more letter will complete this series.

## A DAY IN AN INDIAN SCHOOL.

BY IOTA NORTH.

Boom! boom! boom! goes the big bell, and in the darkness (for it wants two hours to daylight,) the boys and girls thump, thump, out of bed, while an elder pupil in each of the dormitories lights a lamp so that the half-dreamy children may get on their clothing. Then they all file into the lavatories and there are sounds of splashing and of spinning towel rollers as the cleansing and polishing process proceeds. It takes a good while for all to get washed, and scarcely has the last one finished when another bell rings and the boys and girls appear in their respective school rooms for roll call, so that all may be washed and brushed for prayers, which come immediately after. But the farm boys have been out during this time feeding cattle, and the shop boys lighting fires and preparing generally for the day's work. The kitchen girls, too, have been at work preparing breakfast, but these being larger children dress and wash more rapidly than the others. There is a sound of a bell and all march into the assembly room where prayers are held. These consist of a hymn, a short reading from the Bible, and a prayer offered by the principal. Immediately after prayers comes breakfast. All the boys and girls stand at the long tables and repeat the grace after the teacher in charge; then all sit down to a frugal but wholesome meal of porridge and milk, bread and butter and tea. After the meal thanks are returned by all, and the real duties of the day are to be faced. In a few minutes the large tower bell rings, and the boys who work on the farm or in the trade shops in the morning go out to their tasks. The girls on morning duty now wash dishes, make beds, sweep, and in fact plunge into the general work of the house. Those boys and girls who work at trade or domestic work in

the afternoon go to school in the morning, and they have now a few minutes to look over their lessons before the bell rings for class work. The class-work bell rings at nine; and if we should go about the school a few minutes after this what a busy place we should find it. In the school rooms are boys and girls hard at work at just such things as are taught in public schools. In the kitchen are girls washing, cleaning, baking, and the thousand and one other "ings" that only the housekeeper knows about. Girls are washing in the laundry, sewing and mending in the sewing room, sweeping, dusting and bed-making in the dormitories.

Outside, since I describe a winter scene, boys are hauling wood and hay, cleaning stables, cutting wood, and shovelling snow. In the shops there is the sound of the carpenter's saw and hammer, and the blacksmith's anvil sends its beats out to mark time to the industrial symphony. In the leather shop there is a pyramid of dilapidated boots and a tangle of broken harness, both being repaired by the ever busy needles of the instructor and his boys; while the click, click, from the printing shop as the type falls into the sticks, reminds us that "of making of books there is no end."

At noon the scholars simply change places; those at trades go to school, and those at school go to shops and house work. Again all is activity till supper time, save that those at school stop at four and play till supper. After supper there are a few minutes for recreation, and then comes singing, or drawing, or study; then prayers, and about 8.30 all go off to bed, each one kneeling down in private prayer before retiring, and I should add immediately on rising in the morning.

In institutions of this kind those in charge soon get so used to large numbers that the matter does not strike them. Take a school say of a hundred children, which requires seventy loaves of bread, one hundred pounds of beef, sixteen pounds of oatmeal, and so on in proportion every day. It takes twenty-five pounds of candy when a patron would like to give a treat; and say fifty pounds of sugar for a "taffy pull." There are at least four hundred pairs of socks and stockings in use or in process of mending; two hundred boys' shirts (fifty boys in winter,) two hundred pairs of moccasins, besides the coats, hats, caps, handkerchiefs, aprons, mittens, etc., etc., in all about four thousand pieces, which must all be numbered, kept in repair and kept track of by those in charge. And this is the more difficult since the Indian child knows nothing of the care of clothing, and cares nothing of knowing it. But thus the work goes on, and amid the clanging of bells and changing of classes; amid the constant reproving, and the constant urging forward, we see cases where the teaching is well received, where the seed falls on good ground and know that the labor to raise a degraded people by work, knowledge and Christian life is not unattended by its due reward.

## YOU BOYS.

(TO BE RECITED BY A LITTLE GIRL.)

He twisted, he turned,  
All quiet he spurned;  
His back, like the back of a camel, he humped;  
On tables he drummed,  
On windows he thrummed;  
He hopped, and he jumped, and he thumped, and  
he bumped!

He wriggled about;  
Came in with a shout;  
He sat in the cradle where poor Dolly lay!  
An Indian yell  
Most clearly could tell  
Where he could be found any time of the day!

He tied, on the spot,  
His legs in a knot;  
His wee sister cried, looking up from her toys;  
"You're much like an eel,  
But worse a great deal;  
I'd rather be ten girls than one of you boys!"

—George Cooper in *Our Little Ones*.

I WOULD have my children able at each moment from morning to evening, to read on my face and to divine upon my lips that my heart is devoted to them; that their happiness and their joys are my happiness and my joys.—Pestalozzi.

Mathematics.

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

MODERN METHODS IN GEOMETRY.

We have on previous occasions pointed out objections to Euclid's arrangement of the principles of elementary geometry, and have given some examples of a more satisfactory and self-consistent method that has been developed in Europe and America during the last hundred years. We commend to the attention of our educational authorities a neat illustration of the advantages of modern methods, and respectfully request them to think the matter over carefully and then

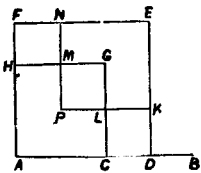
"Cut Prejudice against the grain."

The following proof of Euc. II. 9 and 10, has been sent to the London Mathematical Society. The author is a little girl only ten years of age!

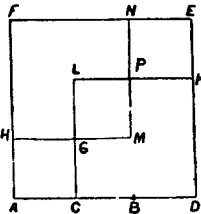
If a line AB is bisected in C and divided unequally in D either internally or externally, to prove that the sum of the squares on AD, DB is equal to twice the sum of the squares on AC, CD.

SOLUTION by MISS HILDA HUDSON.

On AD, AC, CD draw squares ADEF, ACGH, CDKL, all on the same side of AB; on FH, within the square AE, describe square FHMN;



II. 9.



II. 10.

this is equal to the square on CD. Let NM, KL, produced, if necessary, meet in P.

Then PE is equal to the square on AC, and PG to the square on BD. The sum of the squares on AD, DB is equal to the figures AE, PG; that is, to AG, PE, CK and FM; that is, to twice the sum of AG and CK; that is, to twice the sum of the squares on AC, CD.

CORRESPONDENCE.

22. See page 666.

SOLUTION by THE EDITOR.

The amount of the mortgage at the end of 4 years @ 6% = 5000(1.06)<sup>4</sup>

If P = each of the four equal payments, the whole amount paid in will = P + P(1.06) + P(1.06)<sup>2</sup> + P(1.06)<sup>3</sup>, and these two sums must be equal, being the cash value at the settlement and release of the mortgage.

∴ P(1 + 1.06 + 1.06<sup>2</sup> + 1.06<sup>3</sup>) = 5000(1.06)<sup>4</sup>,  
∴ P = 5000(1.06)<sup>4</sup> ÷ (1 + 1.06 + 1.06<sup>2</sup> + 1.06<sup>3</sup>)  
= (5000 × 1.26247696) ÷ 4.374616 = etc.

Consult Hamblin Smith's Arithmetic, Canadian Edition p. 342.

23. See page 666.

SOLUTION by THE EDITOR.

120 @ 75c. = \$90 ; 225 - 90 = \$135  
∴ \$135 = 120 × <sup>3</sup>/<sub>2</sub> invoice price per gal.  
∴ invoice price = 75c., as may easily be verified thus, 120 (75 + 37<sup>1</sup>/<sub>2</sub> + 75) = 225.

32. By A. B. M. DORKING.

If goods be sold on condition to allow 10% discount off the bill if payment is made at the end of 6 months, what ought the discount to be if payment is made

- (1) three months sooner than the stated time, or
- (2) " " after " " " "

money being worth 5% per annum?

SOLUTION by THE EDITOR.

Suppose the Bill to be \$100; then by the question this is considered worth \$90 due in 6 mos. We have then to see what sum paid at the end of 3 mos. would amount to \$90 at the end of 6 mos. @ 5%. This is of course <sup>3</sup>/<sub>4</sub> of \$90. Hence the discount to be allowed off the bill in case (1) is 100 - <sup>3</sup>/<sub>4</sub> × 90 = 100(1 - <sup>3</sup>/<sub>4</sub>) = \$11<sup>1</sup>/<sub>4</sub>, and in case (2) is 100 - <sup>3</sup>/<sub>4</sub> × 90 = \$8<sup>1</sup>/<sub>4</sub>.

N.B.—This correspondent did not comply with the rule: Send the problem as well as the reference to the text-book.

33. By M. BRIERLEY. Solve the equations:  
(x + y)z = a; (z + x)y = b; (y + z)x = c.

SOLUTION by THE EDITOR.

(1) × (2) gives y<sup>2</sup>z<sup>2</sup> + yz(zx + xy) = ab;  
and from (3) y<sup>2</sup>z<sup>2</sup> + cyz = ab, a quadratic  
∴ yz = <sup>1</sup>/<sub>2</sub> [-c ± √(c<sup>2</sup> + 4ab)], and by symmetry,  
xy = <sup>1</sup>/<sub>2</sub> [-a ± √(a<sup>2</sup> + 4bc)],  
zx = <sup>1</sup>/<sub>2</sub> [-b ± √(b<sup>2</sup> + 4ac)]. Call these three results m, n, and k; multiply the three together and x<sup>2</sup>y<sup>2</sup>z<sup>2</sup> = mnk, ∴ xyz = √mnk = p, say;  
∴ by division x = p ÷ m, y = p ÷ n, z = p ÷ k.

34. By J. K. P.

Show that a<sup>4</sup> + b<sup>4</sup> + c<sup>4</sup> = 2(x<sup>3</sup> + y<sup>3</sup> + z<sup>3</sup> - 3xyz) ÷ (x + y + z)<sup>2</sup>, when x - y = a, y - z = b, z - x = c.

SOLUTION by THE EDITOR.

It is easily shown by actual multiplication that ab + bc + ca = -(x<sup>2</sup> + y<sup>2</sup> + z<sup>2</sup> - xy - yz - zx),  
∴ a<sup>2</sup>b<sup>2</sup> + b<sup>2</sup>c<sup>2</sup> + c<sup>2</sup>a<sup>2</sup> = (x<sup>2</sup> + y<sup>2</sup> + z<sup>2</sup> - xy - yz - zx)<sup>2</sup>. (A)

Also a + b + c = 0, ∴ by squaring twice we get a<sup>4</sup> + b<sup>4</sup> + c<sup>4</sup> = 2(a<sup>2</sup>b<sup>2</sup> + b<sup>2</sup>c<sup>2</sup> + c<sup>2</sup>a<sup>2</sup>) = 2(x<sup>2</sup> + y<sup>2</sup> + z<sup>2</sup> - xy - yz - zx)<sup>2</sup> from A  
∴ (a<sup>4</sup> + b<sup>4</sup> + c<sup>4</sup>) (x + y + z)<sup>2</sup> = 2(x<sup>3</sup> + y<sup>3</sup> + z<sup>3</sup> - 3xyz)<sup>2</sup>, whence the result required.

35. (July 1890, No. Eta).

Sum  $\frac{1}{1 \cdot 4} + \frac{1}{9 \cdot 16} + \frac{1}{16 \cdot 25} + \text{etc.}$

SOLUTION by THE EDITOR.

The n<sup>th</sup> term is  $\frac{1}{n^2(n+1)^2}$ , and this may be separated into the partial fractions:

$-\frac{2}{n} + \frac{1}{n^2} + \frac{2}{n+1} + \frac{1}{(n+1)^2}$ . Giving n the values 1, 2, 3, etc., the given series resolves into these four:—

$-\frac{2}{1} + \frac{1}{1} + \frac{2}{2} - \frac{2}{2} + \frac{1}{4} - \frac{2}{4} + \frac{1}{9} + \frac{1}{9} + \text{etc.}$   
 $+\frac{1}{3} + \frac{1}{3} + \frac{2}{4} + \frac{2}{5} + \frac{2}{8} + \text{etc.}$   
 $+\frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \frac{2}{25} + \frac{2}{36} + \text{etc.}$

And the sum of these is evidently

-3 + 2( $\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \text{etc.}$ ). The sum of the series within the bracket may be found as follows:

We know that Sin δ =  $-\frac{\delta^3}{1 \cdot 2 \cdot 3} + \frac{\delta^5}{1 \cdot 2 \cdot 3 \cdot 4 \cdot 5} - \text{etc.}$  (Euleis Series). Also that

Sin δ = δ(1 -  $\frac{\delta^2}{\pi^2}$ )(1 -  $\frac{\delta^2}{2^2 \cdot \pi^2}$ )(1 -  $\frac{\delta^2}{3^2 \cdot \pi^2}$ ) etc.

= δ - δ<sup>3</sup>( $\frac{1}{\pi^2} + \frac{1}{2^2 \pi^2} + \frac{1}{3^2 \pi^2}$ ) + etc.

Equating coefficients of δ<sup>3</sup> we see that

$\frac{\pi^2}{6} = \frac{1}{1} + \frac{1}{2^2} + \frac{1}{3^2} + \text{etc.}$  Hence the sum of  $\frac{1}{1 \cdot 4} + \frac{1}{4 \cdot 9} + \text{etc.} = \frac{\pi^2}{3} - 3$ .

36. By A SUBSCRIBER.

Use the Binomial Theorem to find the value of 999<sup>4</sup>.

SOLUTION by THE EDITOR.

(a - 1)<sup>4</sup> = a<sup>4</sup> - 4a<sup>3</sup> + 6a<sup>2</sup> - 4a + 1. Put a = 1000  
∴ a<sup>4</sup> = 1000<sup>4</sup>; 996a<sup>3</sup> = 996000a<sup>2</sup>; 996006a<sup>2</sup> = 996006000a; 996005996a = 996005996000; ∴ result = 996005996001.

37. By M. JOHNSON.

Determine in the most simple manner the greater of the ratios  $\frac{37893}{35283}$ , and  $\frac{39893}{38283}$ .

SOLUTION by THE EDITOR.

We know that  $\frac{37893}{35283} < \frac{39893}{38283}$ , which is  $< \frac{39893}{38283}$ ;

for it is easily shown that  $\frac{a}{b} < \frac{a+x}{b+x}$  where x is

any positive quantity and  $\frac{a}{b}$  any proper fraction.

38. By H. J. C.

Prove that

$\frac{a-b}{1+ab} + \frac{b-c}{1+bc} + \frac{c-a}{1+ca} = \frac{a-b}{1+ab} \cdot \frac{b-c}{1+bc} \cdot \frac{c-a}{1+ca}$

SOLUTION by THE EDITOR.

Assume

$\frac{(a-b)(b-c)(c-a)}{(1+ab)(1+bc)(1+ca)} = \frac{x}{1+ab} + \frac{y}{1+bc} + \frac{z}{1+ca}$   
∴ (a-b)(b-c)(c-a) = (x+y+z) + x(a+b)c + (b+c)a + z(c+a)b + abc(cx+ay+bz).

Equating coefficients we get

(A) x + y + z = 0  
(B) cx + ay + bz = 0  
(C) x(a+b)c + y(b+c)a + z(c+a)b = (a-b)(b-c)(c-a).

Taking C - Aac - Bb we get

$z(a-b)(b-c) = (a-b)(b-c)(c-a)$

∴ z = c - a, and similarly

x = a - b, and y = b - c, which proves the identity.

39. By G. W. SIMPSON.

Solve 20x<sup>n+1</sup> - 21x + 1 = 0 (A.)  
26x<sup>2n+1</sup> - 27x<sup>n</sup> + 1 = 0 (B.)

SOLUTION by THE EDITOR.

A × 13x<sup>n</sup> - 10B gives  
3x<sup>2n</sup> - 13x<sup>n</sup> + 10 = 0  
∴ x<sup>n</sup> = 1 or  $\frac{1}{3}$

Substitute this in A and 200x = 207, x = 1.035 or 20x = 20, x = 1

40. By MISS KATE GALLAGHER.

If x + y + z =  $\frac{1}{3}x = \frac{2}{3}y$ , find the numerical value of (x + y + z) ÷ z

SOLUTION by THE EDITOR.

$\frac{1}{4}(x+y+z) = \frac{1}{3}x = \frac{2}{3}y$   
∴  $\frac{x+y+z}{z} = \frac{1}{4} = 2$ .

We trust these solutions will satisfy our correspondents and prove interesting to many readers of THE JOURNAL. Please keep us well informed about your difficulties.

Correspondence.

HOME WORK.

To the Editor of THE EDUCATIONAL JOURNAL.

SIR,—I do not know that my experience in the matter of home work will be of much use, as I have never given home work to "children of five and six years"—to none in classes lower than the second. In my present school I had, until last summer, been in the habit of giving the Second, Third and Fourth classes a little home work. I never believed in giving much, and my experience last summer convinced me that none is better even than a little.

At the request of the parents I discontinued it for about four months, and found that the progress of the pupils was more rapid than before.

As winter came on, however, the parents expressed their wish that I should resume home lessons. So, though against my judgment, I have done so, but make them as light as possible. I can not say that I have found their school work materially weakened by it.

ONTARIO IN MANITOBA.

STONEWALL, MAN., March 3, 1892.

HOME WORK.

To the Editor of THE EDUCATIONAL JOURNAL.

SIR,—Regarding the home work question which has been receiving attention in THE JOURNAL, I would say I believe country schools are guiltless of burdening the little people with work out of school.

But the fathers are guilty of heaping up chores for the boys (and the mother usually saves the girls) till nine o'clock finds the boy more ready for bed than for school. When told of this the father only laughs and enters upon, "When I was a boy," and we escape as soon as possible.

Frequently Dan or Tom falls asleep over his book in the evening, and Mr. Brown wonders why his boys haven't more lessons to learn, or why they are so little interested in their work.

Perhaps this is one of the reasons why boys escape from farming when they can. It is a reason often why boys are careless and troublesome in school.

Teachers only find such the case in winter, for the summer does not see those boys in school. T.

## \* Hints and Helps. \*

## PRONUNCIATION OF TEACHERS' WORDS.

BY PROF. H. A. FORD, DETROIT, MICH.

UNDER this head I had the pleasure some time ago of indicating to the readers of THE EDUCATIONAL JOURNAL the orthoepy of a number of the words of pedagogy most liable to be mispronounced, as now fixed by the new Century Dictionary. That great work has recently been completed; and since many names must have been added to your subscription list since my former article, I think it well to recapitulate more briefly the words before given, and complete the list from the later volumes of the Dictionary. A few words from the common branches are included, also some names of geography not in the Century's vocabulary.

Abdómen or ab'domen.  
Ac'cent, noun; accent', verb; accent'ed.  
Acous'tic (oo or ow). So of course acoustics.  
Adjecti'val or ad'jectival.  
Al'gebra (not bray). But long *a* in algebra'ic and al'gebraist.  
Antepenult'. But penult or penult'.  
Antipodes (antipòds), except as Latin, an-tip'ò-des.  
Ar'ab, Ar'abic.  
Arctic, antarctic (don't elide the first *c*).  
Apparā'tus.  
Ar'kansas (saw, by act of Legislature).  
Asiatic (ā'she or ā'zhe). Only the *sh*-sound was before allowed by authority. The Century furnishes no uniform rule, but gives Cauca'shan or Caucā'sh'an, Ma-lay-si-an, Pershan, Polynes'shian. The corresponding proper nouns are not given, but it is presumable that the Century editors would have them also correspond in orthoepy. Other derivatives generally agree with those given.  
Ax'i-om (not axyum).  
Biography (by, not bí).  
Cairo (in Egypt, ky'ro; in America káro).  
Cayenne' (ā, not ī).  
Chinese, Japanese, and the like (nepce or neez).  
Chlorid or chlòride. Note the order of preference in spelling.  
Concord, (kawrd common noun; proper name, kurd).  
Danish (day).  
Dem'onstrate or demon'strate.  
Dialogue, catalogue, etc. (short *o*). Catalog and prolog are given as alternative spellings, gram, program and rime (for rhyme) as preferred orthography, and literarian, a substitute for *literatus* proposed by the *Literary World* a few years ago, is welcomed into the full fellowship of the language.  
Diph'thong and diphthe'ria (dif or dip). So diphthong, but not apthong (af only).  
District. Deestric still lingers in places.  
Dis'cip'line, dis'ciplinary.  
Elocu'tion. Don't slur the first *o*.  
England, English (ing').  
E'poch or ep'och.  
Equation (shun or zhun).  
Example, examine and their derivatives (gz).  
So egzibit and egzibitor, but ekshibition.  
February. Get both *r*'s in this, in both spelling and pronunciation.  
Fiord (feeawrd').  
Geography and geometry. Look out for jog and jom.  
Glā'cier or glā'cier. But glā'cial only.  
Hy'gi-ene (not hy'geen).  
Isthmus (ist or iss).  
Italian. No "eye" in this.  
Juvenile. Nor "Nile" in this.  
Learn'ed (adjective in two syllables).  
Lév'er or lē'v'er.  
Lycē'um. So museum, atheneum, etc.  
Mos'lem (not Moz'lem).  
Mountain, mountainous. *A* as in prelate.  
Mul'tiplicand.  
Mythology (mi).  
Nō'menclature.  
Oā'sis, oā'sēs.  
Oblique (ē or ī).  
Ocean'ic (she).  
Ox'id, oxide, oxyd, oxyde (id, ide).  
Parent (*a* long before *r*).  
Parallelepiped (corrected spelling).  
Ped'agógue, pedagóg'ic, pedagóg'ism, but pedagóg-gy.

Pet'al.  
Philol'ogy, philolog'ic. Philosoph'ic (not zof).  
Plāt'inum.  
Pret'erit, pret'erite (short *i*).  
Pronuncia'tion (cī).  
Recess'.  
Southern, southerly, Southron (ou as short *u* and *th* aspirated). Southeast, etc. (ow). Southward or southard.  
Subtraction. Get no second *s* in this.  
Tel'egraphy (or teleg'). So telegrapher and telegraphist, but telegraph'ic only.  
Won't (wunt) or wōn't.  
Zo-ol'o-gy (zō, not zoo). So epizootic and other related words.

A MANUAL OF PUNCTUATION  
AND SOME MATTERS OF TYPOGRAPHY

DESIGNED FOR PUPILS, TEACHERS, AND WRITERS.

BY JAMES P. TAYLOR, LINDSAY.

(Continued).

## BRACKETS.

BRACKETS are used for explanations thrown into a quotation by the transcriber; if he introduces a correction or a short note, he puts *his* remark in brackets. By doing so, his remarks can be distinguished from the author's, who may have used parentheses in the very passage quoted.

## Examples.

1. A fleet of twenty ships were [was] in the bay.
2. *Verner*. [Rushing forward.] Here, Tell.
3. "She [the poor little match girl] was frozen to death, and a bundle of burnt matches lay beside her."
4. Yawning most volcanically, he made up to one of the room windows, were (*sic*) stood a large water-bottle or jar, one of those long-necked clay things in which they usually keep fluids in the East.  
(*a*) In the last example, *sic* is put after "were," to show that the quotation is faithfully given; and *this word* is generally inserted in parenthesis. But in actual work it would be mean trifling to copy a clerical error so palpable. It is done here, as in Ex. 12, Rule IV. of the Comma, to exemplify the use of *sic*.

## QUOTATION MARKS.

Marks of Quotation [" "], which consist of two inverted commas and two apostrophes, are used to indicate a passage taken from another writer, or to mark a repetition of what a writer himself had already said.

When a quotation is within a quotation, the included one is indicated by single marks, and, if another be inserted into the second, the double marks are again used.

A phrase or a saying from a foreign language is usually put in italics.

When an extract consists of successive paragraphs, each paragraph begins with inverted commas, but the apostrophes are not used until the final close. It was customary to prefix inverted commas at the beginning of every line of a quotation, but it is seldom done now.

Names of books, ships, etc., are correctly put in quotation marks, though for neatness they are often put in italics.

## Examples.

1. Lamb says, "Why are we never quite at our ease in the presence of a schoolmaster?—because we are conscious that he is not quite at his ease in ours."
2. In the "Third Reader," are these two sentences: "The innkeeper begged him not to proceed. 'There is danger ahead,' said he: 'the wolves are out.'"
3. With him, *Stat pro ratione voluntas*.
4. In Franklin's "Autobiography," are the following paragraphs:—  
"William Maugridge, joiner, but a most exquisite mechanic, and a solid sensible man."  
"Hugh Meredith, Stephen Potts, and George Webb, I have characterized before."  
"Robert Grace, a young gentleman of some fortune, generous, lively, and witty; a lover of punning and of his friends."
5. Last winter I read Smith's "Wealth of Nations," Whitney's "Life and Growth of Language," and several articles in Appleton's "Encyclopedia;" but lately I have consumed my

leisure with the *Edinburgh Review*, the *Atlantic Monthly*, *Blackwood*, and some lighter reading.

6. Three frigates were in the harbour,—the *Shannon*, *Arathusa*, and the *Clio*.

(*a*) "Are called *The Turn*;" are called *The Close*.

## THE APOSTROPHE.

## RULE I.

The apostrophe is used to denote the elision of a letter or letters.

## Examples.

*I've*, for *I have*; *he's*, for *he is*; *you'll*, for *you will*; *'tis*, for *it is*; *don't*, for *do not*; *ne'er*, for *never*; *o'er*, for *over*; etc.

(*a*) It is also used to denote the omission of figures; as, The rough old times of '59 (1859)—It happened during the years, 1861, '62, '63, '64, and '65.

(*b*) It is inserted to aid in forming the plural of letters and figures; as, Cross your *l's* and dot your *i's*.—Make your *5's* and *8's* plainer.—In our village there are no less than four M.D's.

## RULE II.

The apostrophe is used to mark the possessive case.

## Examples.

John's book.—The boys' yard.—Nicholas's hat.—Dickens's novels.—Burns's poems.

## THE HYPHEN.

The hyphen is used between compound words that together would not be recognized as a single word: it is also used between a prefix ending in a vowel and a word beginning with the same vowel, to show that each of the vowels must have a separate pronunciation; and to mark a break in a word at the end of a line.

## Examples.

1. Glass-house, night-time, half-dollar, twenty-third, one-horse concern, crow's-nest, vice-president, etc.

2. Pre-existence, re-examine, re-echo, co-operate, co-ordinate, etc.

(*a*) When an expression is used as a qualifying epithet, the words forming the expression may be connected by hyphens; as, It is some out-of-the-world place.

(*b*) In dictionaries the hyphen is used between the syllables of words, to aid in the pronunciation.

## OTHER MARKS.

*Two Commas*.—Two inverted commas are often used to save the repetition of a word that is common to several cases; as,—

James Booth.....Toronto.  
James Welsh....." "

*The Caret*.—The caret is used to show the omission of a letter or a word; as,—

Some vilage Hampden here rest.

*The Index*.—The index, or hand, calls for special attention to a remark; as, *All arrears must be settled at once*.

*Marks of Ellipsis*.—Ellipsis is indicated in three ways,—by means of a long dash, a series of periods, or of stars; as, C—s is very clever.—The book . . . is very old.—In California, he worked very hard. \* \* \* \* But, when he came home, he was still poor.

*Leaders*.—Leaders are dots, used mostly in tabular work, to lead the eye to the end of a line; as,—

John Watts.....Room 63.  
James Holt....." 21.

*Reference Marks*.—The Asterisk [\*], the Dagger [†], the Double Dagger [‡], the Section [§], the Parallel Lines [||], and the Paragraph [¶] are used "when references are made to observations or notes in the margin."

TORONTO PUBLIC SCHOOL BOARD.

TORONTO, March 21, 1892.

GRIP PRINTING AND PUBLISHING CO.

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OFFICIAL CALENDAR

- OF THE -

EDUCATION DEPARTMENT

March:

31. Night schools close.  
As the drawing books authorized by the Department were not issued in time to be used conveniently in every case for the July Entrance Examinations, the Examiners are hereby instructed to accept the work of candidates this year either in old or new series. The acceptance of the work in any blank exercise book is already provided for by the regulations.

As the course of the School of Pedagogy is to be extended to one year—probably from September to May—a special examination will be held in December for those who failed at the last examination and for candidates eligible for examination without attendance at the School of Pedagogy.

Literature Selections for the Entrance Examinations. 1892.

- Fourth Reader.
- Lesson IV The Little Midshipman.
  - " VII Boadicea.
  - " XIV Lament of the Irish Emigrant.
  - " XVI The Humble Bee.
  - " XXI Off in the Stilly Night.
  - " XXII 'Tis the Last Rose of Summer.
  - " XXXIV Death of Little Nell.
  - " XXXVII The Bell of Atri.
  - " XLI Making Maple Sugar.
  - " XLIX The Mound Builders.
  - " L The Prairies.
  - " LXXIX The Capture of Quebec.
  - " LXXX Waterloo.
  - " LXXXIII The Influence of Beauty.
  - " LXXXV Marmion and Douglas.
  - " XC Mercy.

Selections for Memorization.

- Lesson XIII The Bells of Shandon.
- " XXXI To Mary in Heaven.
- " XL Ring out Wild Bells.
- " XLII Lady Clare.
- " XLVI Lead Kindly Light.
- " LXVI Before Sedan.
- " LXXIII The Three Fishers.
- " XCIX The Forsaken Merman.
- " CIII To a Skylark.
- " CV Elegy written in a Country Churchyard.

EXAMINATIONS 1892.

- April:
1. Applications for examination for specialists' certificates of all grades, to Department, due.
  28. Art schools examinations begin.
- May:
1. Notice by candidates for the High School Entrance, and Public School Leaving examinations to Inspectors, due.
  - Examinations for specialists' certificates (except commercial) at the University of Toronto begin.
  24. Notice by candidates for the Departmental Primary, and the High School Leaving and University Matriculation examinations, to Inspectors, due.
- June:
1. Notice by candidates for kindergarten examinations, due.
  28. High School Entrance and Public School Leaving examinations begin.
- July:
4. Kindergarten examinations at Hamilton, Ottawa and Toronto begin.
  6. Examination for Commercial Specialists' certificates at Education Department, begin.
  11. Departmental Primary, and High School Leaving and University Matriculation examinations begin.

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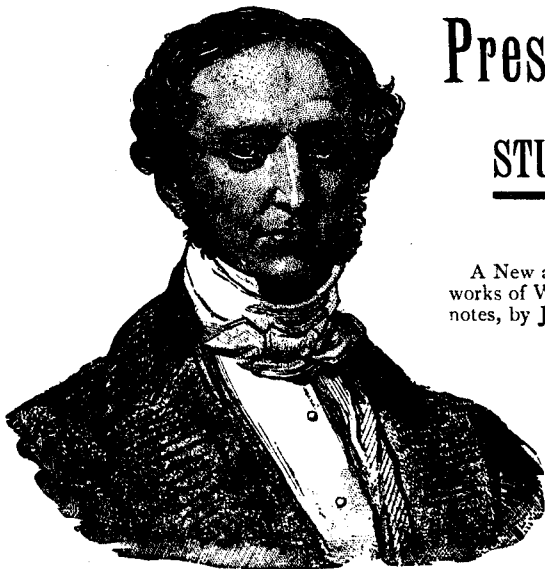
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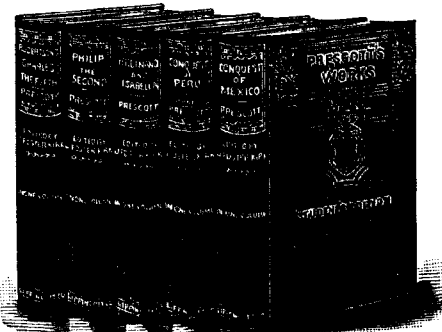
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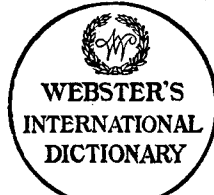
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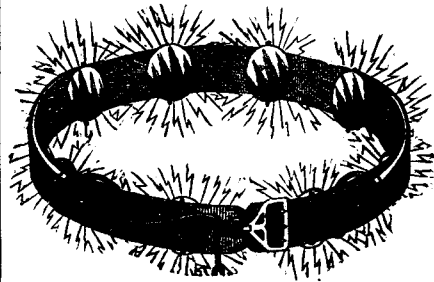
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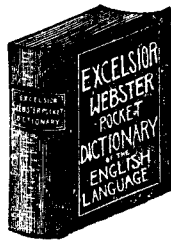
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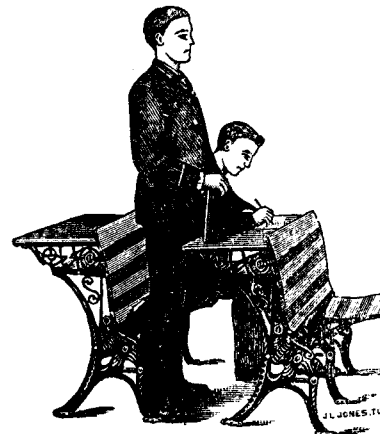
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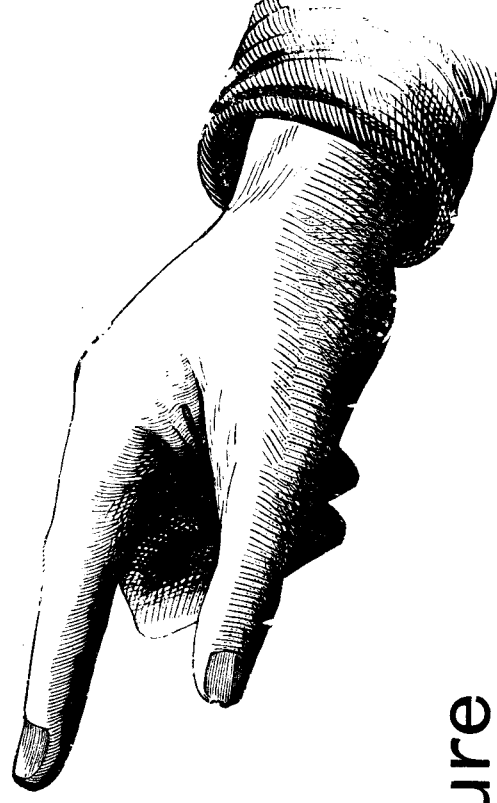
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