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TORONTO, MARCH 15, 1893.

Vol. VI.
No. 21.

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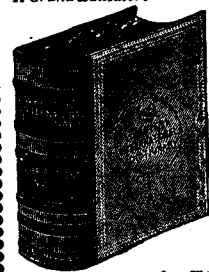
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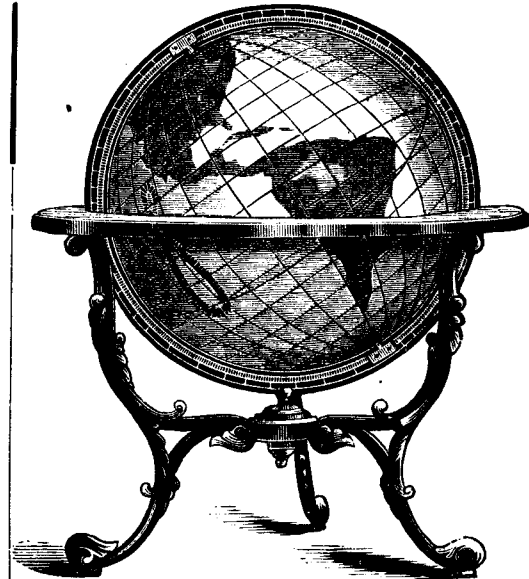


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OFFICIAL CALENDAR

- OF THE -

EDUCATION DEPARTMENT

March

- 29. Toronto University Examinations in Medicine begin.
- 30. High Schools close, second term. [H. S. Act., sec. 42.]
- 31. GOOD FRIDAY. Night Schools close (session 1892-93.)

EXAMINATIONS 1893.

March:

- 15. Last day for receiving applications for Examination from candidates not in attendance at the School of Pedagogy.

April:

- 1. Applications for Specialists' certificates due.
- 24. Written Examination of School of Pedagogy begins.

May:

- 1. Specialists' Examination at University of Toronto. Notice by candidates for the High School entrance, and Public School Leaving Examinations to Inspectors, due.

24 Notice by candidates for the Primary High School Leaving, and University Matriculation Examinations, to Inspectors, due.

June:

- 1. Applications for Kindergarten Examinations, due.
- 5. Normal School Examinations begin. Practical Examination of the School of Pedagogy begins.
- 26. Examinations in Oral Reading, Drawing and the Commercial course in High, Public and Separate Schools begin.
- 28. High School Entrance Examinations begin. Public School Leaving Examinations begin.
- 29. Kindergarten Examinations at Hamilton, Ottawa and Toronto.

July:

- 4. Primary and High School Junior Leaving and University Pass Matriculation Examinations begin.
- 5. Examination for Commercial Specialists' Certificates at Toronto.
- 13. High School Senior Leaving and University Honor Matriculation Examinations begin.

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TORONTO, MARCH 15, 1893.

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Subscribers to the "Educational Journal" who do not receive recognition of remittances promptly will please excuse the delay, as we have to make extensive changes in our list in order to conform to the P.O. regulations. This will be completed in a few days, and acknowledgments will then be sent.

On account of the above change all subscribers MUST send their old as well as their new address when renewing their subscription.

* Editorial Notes. *

WE are indebted to Mr. J. H. Cameron, Lecturer in French in University College, for an article describing the new French method of learning languages. It will, we have no doubt, be read with pleasure and profit by all who are interested in the subject.

NOW is an excellent time to subscribe to THE JOURNAL. The publication of the abundant supply of material furnished by our Prize Competition will give our readers for months to come, models and suggestions for teaching in Arithmetic, Grammar, History, Geography, and in fact almost every important branch of Public school work. This supplies amply, and in the best shape, what has seemed to us, and to some of our subscribers, for some time past, the one want, if there was one in THE JOURNAL. May not many of our friends and subscribers confer a real favor

on friends and acquaintances who may not yet be subscribers, by mentioning these facts to them, or sending us their names and addresses that we may forward sample copies.

WE are not infrequently asked questions by younger teachers which seem to indicate a lack of clear understanding, or accurate information, in regard to the constitution, methods of government, etc., of our own country. This is not surprising, for the means of gaining such information is not always easily found. For the benefit of younger readers and of all who care for the information, we give as one of our special papers this week, a clear and succinct account, from the pen of a well-informed writer, of the mode of procedure in the British Parliament. It will be remembered, of course, that the procedure in the Canadian Commons follows closely English methods and precedents in almost every respect. As parliamentary rules and usages are also adopted in almost every kind of society, especially as governing laws of debate and procedure, the information will be of double value, and is worthy of being carefully studied. It is an excellent plan, where circumstances will permit, to resolve occasionally, a school, or a school society, into a miniature House of Commons, and see that its rules are strictly observed. Children thus become early prepared to take part in the conduct of municipal and other meetings such as are necessary and frequent in this democratic country.

A DECISION which was recently given by the Supreme Court, of the State of Massachusetts, is not only of special interest to the teachers of that state, but to those of the whole Republic, and of Canada as well, for we suppose that the principle underlying the judgment, if sound for Massachusetts, would hold good in any State or Province having a Public school system, with local School Boards. The decision is that, in matters affecting the order and discipline of schools, the School Board has absolute power, and that their judgment is not subject to the revision of the courts. That is a far-reaching judgment. We are not sure that it is a salutary one. It seems passing strange that any Board created by law should become a law

unto itself, or that, acting in any capacity, it should be beyond the reach of the courts. We opine that such is not the case in Canada. The occasion of the judgment quoted was the action of a School Board in dismissing from the school a boy who was deemed so weak-minded as to be incapable of deriving any benefit from the instruction, and who was, moreover, a source of trouble and annoyance in the school. The action of the Board was probably right in the particular instance. But then, it is conceivable that it might have been wrong and unjust. In that case, according to the judgment, the parent would have no redress.

"THE teacher is dead, long live the 'Educator!'" So exclaims the *School Bulletin* at the close of a somewhat lengthy article bearing on a recent proposal of the N. Y. *School Journal*, "That the professional teacher—the one who holds a diploma good for life—be henceforth addressed as 'Educator.'" Having glanced first at the above, which is the closing sentence of the *Bulletin* article, we naturally inferred that it was a hearty supporter of the innovation proposed by its contemporary, and, while we had never before suspected that a more sonorous title was the felt want of the teaching profession, we were hardly prepared to set up our humble opinion in the face of those of two such leaders of educational thought. In perusing more closely the *Bulletin's* article, however, we fancy that we can detect here and there among many more or less cogent arguments in favor of the *Journal's* proposal, a tinge of something like irony in its advocacy, when e.g., it balances the *pros* and *cons* in respect to other modes of marking the profession which occur to it, such as a high waistcoat of the ancient clerical cut, or which it thinks preferable, a wig of the pattern affected by English barristers, or both. It insists, moreover, that either, or both, if adopted, should be red in color, as a delicate suggestion that the wearer is always a "well-red" man. We are, now, indeed half inclined to suspect that the grave Editor may be joking. On the whole we shall take a little time to think over the various suggestions before committing ourselves to a definite advocacy of the proposed innovation, and shall leave our readers to do the same.

* Science *

Edited by W. H. Jenkins, B.A., Science Master,
Owen Sound Collegiate Institute.

PHYSICS.

QUESTIONS FOR PRIMARY STUDENTS.

1. (a) STATE how you would show that the condition of matter is changeable.
- (b) What properties are common to all conditions of matter?
- (c) How would you show, experimentally, that air possesses each of the properties mentioned in part (b).
2. (a) A barge is loaded with coal, which is carefully covered, and leaves Cape Breton for Rio Janerio. Is there any difference in the water level on arriving at port? Why?
- (b) State how the weight of a body may be diminished without causing it to lose matter.
3. (a) Give separate proofs that gases, liquids and solids must be composed of very small particles. What are these particles called?
- (b) Give experiments which indicate that gases and liquids when apparently at rest outwardly are not so internally.
4. State how you would use each of the effects produced by the electric current in determining the magnitude of the cause.
5. What determines the strength of a voltaic current? Upon what factors does each determining cause depend?
6. Arrange two Bunsen cells in series, and two Daniell cells in multiple-arc, and join both sets. How would you test the presence of a current. Show by drawings the construction of a Bunsen and a Daniell cell.
7. Indicate by a diagram the construction of a Tangent galvanometer and an electric bell.

AGRICULTURE.

ANSWERS TO QUESTIONS AT THE PUBLIC SCHOOL
LEAVING EXAMINATION, 1892. (FOR QUESTIONS
SEE JOURNAL OF FEBRUARY 15TH).

1. (a) OXYGEN—A colorless gas, somewhat heavier than air, odorless. Almost all substances will burn brilliantly in an atmosphere of this gas if they have been previously heated.
- Nitrogen—An invisible gas, odorless, very slightly soluble in water, about the same weight as air, prevents burning. Animals placed in an atmosphere of this gas would die.
- Carbonic acid gas is also an invisible, odorless gas, considerably heavier than air, quite soluble in water, extinguishes flames and destroys animal life.
- Ammonia gas—invisible, a sharp, pungent, irritating odor, extremely soluble in water, lighter than air.
1. (b) One hundred quarts of air contain, approximately, seventy-nine quarts of nitrogen, twenty and a half quarts of oxygen, one-twentieth of a quart of carbonic acid gas, and the balance of ammonia gas and water vapour.
2. "Soil" is a mixture of very fine particles of rock matter of various kinds, with remains of animal and vegetable life, the whole forming a mass that has comparatively little adhesion, thus enabling it to be easily worked by various instruments.
- It is formed by the action of rain on solid rocks, gradually wearing them down to fine particles; by rivers which act much in the same way; by frost which expands crevices and splits off bits of solid materials; by the wind driving small particles over one another thus, by friction, making them smaller; by plant life which on decomposing forms acids which eat away the solid particles.
3. Drainage improves the soil by removing an excess of water, thus allowing the air to penetrate it better. Air, in many cases, can convert injurious materials into forms which are useful to the plant. Drainage also removes any injurious materials which may be present.
- Ploughing and subsoiling loosen the earth and allow the air, rain and rootlets of plants the better to penetrate it. In case of drought, plants on well ploughed land are enabled to go deeper and thus

secure water and additional nourishment. Subsoil ploughing also renders the subsoil more fit to be brought to the surface for plant nourishment; it also prevents the accumulation of injurious materials in the subsoil.

4. Rotation of crops is beneficial because each plant requires certain special foods. If the same crop is repeatedly sown on the same field it soon exhausts the soil of those foods, and unless the field is manured with material containing the same foods the crop fails, but a crop of another plant might find the food it requires. Certain crops also require different mechanical treatment of the soil from other crops. Suitable rotation, therefore, provides that the whole farm will be carefully and thoroughly worked.

5. Soiling is the preparation of the earth for the profitable growth of a crop, and comprises not only thorough working but complete manuring. Among the benefits are, first, the general one of loosening and rendering the soil friable and penetrable; second, supplying those foods to the soil which the special crop requires; thus ensuring a good crop and preventing exhaustion.

6. Weeds abstract from the soil much food which should go to nourishing crops. Being more hardy they often exclude other plants.

Canada thistle may be subdued by growing a crop such as clover or hay, which largely exclude it, or by summer fallowing.

Wild mustard should be plucked before coming to seed; the seed grain should be carefully examined; do not have a threshing machine from a farm where mustard is known to exist. Certain solutions will prevent the germination of the seed. Couchgrass is best removed by reploughing.

THE PRACTICAL STUDY OF A FERN.

MAKE a drawing one-half natural size of the complete plant. A specimen from the school herbarium will supply the material for this work if a fresh specimen is not at hand. Draw also the under side of the frond. Name all parts.

THE LEAF. (a) Draw one of the pinnae magnified two or three times, showing the under and upper surfaces, and indicating carefully the venation.

(b) From a growing plant, or from an alcoholic preservation, pluck one of the pinnae, wrap around the fore-finger and with a sharp razor take a small cutting parallel with the upper surface and as thin as possible. Mount this section in water on a glass slide, examine first with low power and then with high power, making drawings.

(c) Repeat part (b), taking the section from the under surface. Name the kinds of cells shown and indicate other structures observed.

(d) Make a cross section of the pinna through the midrib, being careful that the section through the midrib is very thin. Several attempts will be necessary before success is attained. Mount and draw. Name all the tissues and kinds of cells observed. If you have difficulty in naming the cells of the midrib in cross section, take off a small portion of the rib, place with water on a glass slide and with two sharp needles with wooden handles separate the rib as much as possible, then cover with cover glass and examine. Draw.

THE STEM. (a) Obtain from a florist a frond of a fern, if the season does not permit you to get a fresh specimen from the woods. Make a thin cross section of the stipe, and mount. Make also a thin longitudinal section of the same and place the latter on the slide just below the first. Cover both and examine. Indicate the corresponding parts in the two sections.

THE RHIZOME. Make sections of this as in the case of the stem. Examine, draw, and compare closely with your drawings of the stipe.

THE FRUIT. (a) Obtain a fern in fruit. Select a pinna with fruit-clusters. Draw the whole pinna, correctly locating the fruit-dots. With a good hand lens observe a cluster and draw.

(b) With a sharp knife detach one of the clusters, place on a glass slip with water, and examine with low power.

(c) Tease apart, in water, on the slide, one of the clusters, cover, examine and draw.

(d) Examine a spore with the highest power you have.

If you have ample time and can secure a few spores just matured, sow on a damp piece of pottery, keep moist, and after a time examine. For this part of the work, however, it would be better to consult some standard textbook.

If the herbarium provides several species of ferns, it would be excellent practice to examine each, comparing with your drawings, and noting the chief classificatory structures.

Go over all your drawings carefully, with a good text-book in hand. Have a clear idea of the whole plant before you leave it.

CORRESPONDENCE.

M. N. (Frankville). Q.—Does sound travel as fast at the latter part of its course as at the first?

Ans.—Yes, provided the conveying medium does not change in elasticity or density.

Q.—Is there any assigned cause for the collection of unignited gas in the centre of a flame?

Ans.—The process of burning of a gas consists in union, chemically, with oxygen; consequently the outer layers of gas are supplied freely with atmospheric oxygen, while the central part of the flame cannot receive it. The Bunsen burner provides for a better intermixture of oxygen and the gas before ignition.

An old subscriber (Massie). Q.—What work would you recommend to read on Zoology for Matriculation?

Ans.—In preparing for the Matriculation Examination in Zoology, a practical knowledge of each of the leading Vertebrate and Invertebrate types is required. This can be obtained only by dissection. Huxley and Martin's Practical Zoology will give full and explicit directions for this. After practically dissecting the types with the aid of this text, you will be prepared to use the H. S. Zoology with profit. You will also find further information in the following numbers of THE JOURNAL: June 15th, July 15th, September 15th, November 15th, 1892, and January 15th and the present number.

Bessey's Botany is a first-class work, and for preparation you couldn't do better than have a copy.

INTERESTING NOTES.

RADIATION THROUGH VACUA.

THE experiments of Professor Dewar upon the effect of high vacua on the radiation of heat, undertaken in the course of his researches with liquid oxygen, lead to some interesting considerations that may cause us to modify, entirely our conception of radiation of the sun's heat. It has been usually taken that the long heat waves, as well as the short light waves, came direct by radiation from the sun, and that consequently an enormous amount of energy was continually being dissipated. But Professor Dewar's experiment tends to show that an absolute vacuum is entirely impervious to low waves of heat radiation. Interstellar space, therefore, though transparent to light radiation, does not presumably convey heat radiation at all, and the heat waves manifest in the atmosphere are created there. We see in this the necessity for remodeling our theories upon the time required to cool the earth down; for, if space is impervious to heat radiation—as is Professor Dewar's vacuum—we need not fear cooling on this account. The interstellar space has lost one of its properties, and at a stroke, by a simple experiment, a huge proportion of the supposed available energy of the solar system disappears.—*Scientific American*.

ICE.

The molecules of ice are bound together by a very great force. To separate them, that is to melt say one pound of ice at 32° F., requires a power of 109,396 foot pounds, or a power equal to lifting the ice to a height of over twenty miles, or the exertion for one minute of over three horse power.

PHYSICS IN FRANCE.

At the chemistry exam.—"Which is the best known insulator?" The candidate, a young student, pale and thin, with a bilious complexion and a savage look about him—"Poverty, sir."—*La Monde Illustré*.

Examination Papers.

EDUCATION DEPARTMENT, ONTARIO.—
ANNUAL EXAMINATIONS, 1892.

THE HIGH SCHOOL SENIOR LEAVING AND UNIVERSITY HONOR MATRICULATION.

GRAMMAR, PHILOLOGY, RHETORIC, AND PROSODY.

Examiners: { W. J. ALEXANDER, PH.D.
J. E. BRYANT, M.A.
F. H. SYKES, M.A.

NOTE.—Candidates will write on questions numbered 1, 2, 3, 8, 9, 10. They will, in addition, take either 4 or 5, and also either 6 or 7.

A.

It fortifies my soul to know
That, though I perish, Truth is so:
That, howsoever I stray and range,
Whate'er I do, Thou dost not change.
I steadier step when I recall
That, if I slip Thou dost not fall.

—A. H. Clough.

1. (a) Give a grammatical analysis of the above selection so far as to show fully the nature and relationships of its various sentences and clauses (with the exception of the clauses introduced by "howsoever" and "Whate'er.")

(b) Describe clearly the grammatical function of "that" as used in the selection, and show the connection between its function as it is here used and the original pronominal character of the word.

(c) Dispose, grammatically, of "It" line 1; "know," line 1; "so," line 2; "steadier," line 5. In the case of "so" line 2, justify your answer by explaining the meaning of the word as here used. In the case of "steadier," line 5, justify

(1) the form of the comparative as used here; (2) the use of the comparative form instead of the positive.

(d) Dispose, grammatically, of "howsoever" line 3, and "Whate'er," line 4; also show clearly the nature of the relationships which the clauses introduced by these words bear to the rest of the sentence.

B.

"And if yow lykethalle, by oon assent,
Now for to stonden at my jurement;
And for to werken as I shal yow seye,
To-morwe, whan ye riden by the weye,
Now, by my fader soule, that is deed,
But ye be merye, I wol yeve yow myn heed.
Hold up youre hond withouten more speche."

Oure counseil was not longe for to seche;
Us thoughte it was nought worth to make it wys,
And graunted him withouten moose avys,
And bad him seye his verdit, as him leste.
"Lordinges," quoth he, "now herkneth for the beste;

But take it not, I prey yow, in desdeyn;
This is the poynt, to speken short and pleyn,
That ech of yow to shorte with your weye,
In this viage, shal telle toles tweye,
To Caunterbury-ward, I mene it so,
And hom-ward he schal tellen other two,
Of adventures that whylom han bifalle.
And which of yow that bereth him best of alle,

* * * * *

Shal have a soper at our aller cost.

—Chaucer: Prologue, ll. 777-799.

2. Show from illustrations drawn from this passage the relation of Middle English—with special reference to inflections—on the one hand to Anglo-Saxon, on the other to Modern English.

3. Show fully the meaning of the term King's English (Standard English). (b) Outline the history of its establishment. (c) Show the relation of Chaucer to Standard English.

4. (a) Explain the terms Ablaut (vowel-change) and Umlaut (vowel-modification). (b) Show fully the part they play in English. (c) Demonstrate in the following sentences the instances of the occurrence of one or the other:

There were many hidden paths leading through the fens, inaccessible to men and trodden only by the feet of wild beasts. From time to time our

hunters endeavored to make their way across this dangerous tract, the eldest of the brothers being most active and determined in this; but always without success.

5. (a) Define the term Collocation. (b) Show in full detail the importance of the order of words in English, illustrating your answer.

C.

If I say, therefore, that Shakespeare is the greatest of Intellects, I have said all concerning him. But there is more in Shakespeare's intellect than we have yet seen. It is what I call an unconscious intellect; there is more virtue in it than he himself is aware of. Novalis beautifully remarks of him, that those dramas of his are Products of Nature too, deep as Nature herself. I find a great truth in this saying. Shakespeare's Art is not Artifice; the noblest worth of it is not there by plan or contrivance. It grows up from the depths of Nature, through this noble, sincere soul, who is a voice of Nature. The latest generations of men will find new meanings in Shakespeare, new elucidations of their own human being; "new harmonies with the infinite structure of the Universe: concurrences with later ideas, affinities with the higher powers and sense of man." This well deserves meditating. It is Nature's highest reward to a true, simple, great soul, that he gets thus to be a part of herself. Such a man's works, whatsoever he with utmost conscious exertion and forethought shall accomplish, grow up withal unconsciously, from the unknown depths in him; as the oak-tree grows from the Earth's bosom, as the mountains and waters shape themselves; with a symmetry grounded on Nature's own laws, conformable to all Truth whatsoever. How much in Shakespeare lies hid; his sorrows, his silent struggles known to himself; much that was not known at all, not speakable at all; like roots, like sap and forces working underground! Speech is great! Silence is greater.

—Carlyle: Hero-Worship.

6. (a) Define the term "precision in diction."

(b) Show whether or not the following words are used in the paragraph with precision: "virtue," l. 4; "beautifully," l. 5; "Art" is not "Artifice," l. 7; "plan," l. 8. "voice," l. 9; "harmonies," l. 11; "symmetry," l. 19; "Silence," l. 23.

(c) In what ways does precision affect style?

7. (a) Define, in each case illustrating your definition by a reference to the paragraph, any five of the following rhetorical terms: Mannerism, Antithesis, Archaism, Balance, Climax, Epigram, Rhythm.

(b) State in each case what you consider to be the particular effect on the style of the paragraph resulting from the use of the particular mannerism, antithesis, archaism, etc., that you refer to in illustration of your definition.

8. (a) Define the terms, Simplicity of Abstruseness, as qualities of style.

(b) Examine in detail the various sources of Simplicity or Abstruseness in the paragraph.

(c) Give your judgment as to the simple or abstruse character of the style of the paragraph.

9. (a) Define the term Strength or Force as a quality of style.

(b) Point out to what extent there is forcible writing in the paragraph, touching briefly on (i) the quality of the thought; (ii) sentence-structure; (iii) paragraph-structure; (iv) amplification; (v) variety; (vi) figures of speech.

D.

"The splendor falls on castle walls,
And snowy summits old in story;
The long light shakes across the lakes,
And the wild cataract leaps in glory.
Blow, bugle, blow, set the wild echoes flying,
Blow, bugle; answer echoes, dying, dying, dying."

10. (a) Show in detail the various elements that aid in giving musical charm to this stanza.

(b) Describe the form of the stanza, distinguishing it from (i) quatrain, (ii) Spenserian stanza, (iii) sonnet.

At present girls read hardly anything but story books, a habit which fosters a life of excitement and gives a distaste for anything serious.—Elizabeth Daves, London, England.

EAST MIDDLESEX AND KENT PROMOTION
AND REVIEW EXAMINATION,

NOVEMBER, 1892.

ARITHMETIC.

SECOND TO THIRD CLASS.

Time—2½ hours.

LIMIT OF WORK.—Numeration and notation. Arabic to 1,000,000; Roman notation to the number of the year. Accurate and rapid mechanical operations in the four simple rules. Practical applications of the four simple rules. Easy factoring. Multiplication and division by factors. Writing, adding, etc., dollars and cents. Mental arithmetic.

1. I bought 76 bushels of oats at 30 cents a bushel, 100 lbs. of flour at 2c. a lb., one ton of coal at \$7.50 a ton, 22 yds cotton at 11 cents a yard, 3 pairs of shoes at \$1.75 a pair, 25 yds. of flannel at 36 cents a yard. Find the total amount of the cost.

2. I began storekeeping with \$11,413.16 and gained \$721.71 on an average each year until I had \$17,186.84. How many years did it take?

3. A boy can pick 58 quarts of berries in a day, and a girl can pick 55 quarts. How many quarts can 49 boys and 17 girls pick in 14 days?

4. A dealer has one thousand and twelve barrels of apples; he sold 179 barrels to one storekeeper, 128 to another, 49 to another. What are the unsold ones worth at \$2.15 per barrel?

5. Divide 213468975 by 197.

6. Multiply 487839 by 49 and prove the product by dividing by factors.

7. Addition on another page. Time 2 min.

8. Multiplication on another page. Time 2 min.

9. Division on another page. Time 2 min.

Values—12, 12, 12, 12, 10, 10, 12, 12, 12. Maximum 104; count 100 marks a full paper; 33 minimum to pass.

ARITHMETIC.

THIRD TO FOURTH CLASS.

Time—3 hours.

LIMIT OF WORK.—Practical applications of the four simple rules continued. Factoring continued. Reduction and the compound rules. Cancellation. Bills, averages, sharing, and measurements. (Authorized text-book to page 91.)

1. One hundred and ninety-two miles of a road were constructed at a cost of \$100,567.89. Find the average cost per mile:

(a) by long division.

(b) by factors.

2. When a bag of wheat (2 bushels 30 lbs.) is worth \$1.75, find the value of five loads each weighing 3450 lbs.

3. A field 48 rods long, 40 rods wide, was bought at \$40 per acre and sold at the rate of a cent per square yard. Find the gain.

4. A cistern eight feet in diameter is deep enough to contain 352 cubic feet. How many barrels of water will it hold (1 cub. ft. = 25 qts.; 2 barrels = 63 gallons).

5. 1 ton 3 cwt. 71 lbs. of butter is packed in 29 tubs each weighing 54 lbs. 8 oz. and in 17 smaller tubs. How much does each of the smaller tubs contain?

6. William White bought of Messrs. Geo. Black & Co., June 22, 1892, 45 yards linen at 38c. a yard; August 13th, 89 yards flannel at 39c. a yard; Sept. 10th, 69 yards of calico at 13c. a yard; Oct. 8th, 100 spools at 24c. a dozen; Nov. 5th, 36 yards silk at \$1.42 a yard. On August 13th, Wm. White paid \$18 and the balance on November 12th. Make out the bill and receipt it for Geo. Black & Co.

(12 marks for calculation and 6 if the ruling, arrangement and receipting are perfect.)

7. Find the cost of the wall paper at 19c. the single roll and bordering at 7c. the yard for a room of ordinary height, 26 feet by 15 ft. 6 in., allowing for 2 doors each 4 ft. 2 in. wide and 4 windows each 3 ft. 10 in. wide.

8. At \$13 per thousand find the cost of the 2-inch plank required for a 3-foot wide sidewalk 20 rods long.

Values—6, 6, 12, 12, 12, 12, 18, 12, 12. Maximum 102 marks; count 100 marks a full paper; 33 minimum to pass.

The Educational Journal.

Published Semi-monthly.

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

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

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This Department has been opened in order to give us in the business office an opportunity of talking each week to our subscribers. It will be edited by our business manager, and while it will not be strictly educational in its tone, we feel satisfied that those who read it will be interested, and that this interest will be sustained. We will tell our friends the subscribers, of the progress of the paper, will ask them to assist us in increasing this progress, tell of how we will show our appreciation of their efforts in this direction, speak of our plans for the future, in short, talk "business" to them, which we hope will result to our mutual advantage. We number our friends by thousands, for we count every reader, whether a subscriber or a purchaser, a friend of the paper, but we want more. Under some circumstances it is possible for a man to have too many friends, but a newspaper cannot have. Now, apart from any propositions we may make, it is directly to the interest of the readers of any paper that the subscription list be as large as possible—the larger our circulation the better we can make the paper—but we want to make it still more interesting to those who wish to help us. First, then, to those who desire to get a good farmer's paper, we offer the "Farm Journal" upon these conditions:

By an arrangement we have made with the publishers of *Farm Journal*, Philadelphia, any one paying up their subscription for EDUCATIONAL JOURNAL to the end of '93 will receive as a premium the *Farm Journal* for one year. Every farmer, gardener, stock-breeder, orchardist, dairyman, poultryman, their wives, and even the boys and girls will find *Farm Journal* crowded full of helpful information. It aims to be practical rather than theoretical, to be brief and to the point, in fact to be cream, not skim milk. It is adapted to all parts of the country, North, South, East and West. If you are not acquainted with it, send a postal card to *Farm Journal*, Philadelphia, Pa., for a sample copy. It has already more subscribers than any other monthly agricultural paper in America.

To every one who secures a new subscriber for THE EDUCATIONAL JOURNAL and who pays his own subscription one year in advance, we will send the "Farm Journal" one year free to his own address, and also one year to any friend he may select, the new subscriber of course receiving "Farm Journal" as well. To our lady readers we make this offer:

A leading magazine free to all who pay in advance for THE EDUCATIONAL JOURNAL. *Woman's Work* is a literary and domestic magazine—deservedly one of the most popular published. It is pure, entertaining and helpful in every department. Its pages are filled with high-class original reading matter and illustrations suited to all ages; it is published to satisfy the great need for good home literature, and no other periodical meets it so well. Send us \$1.50 for our paper and *Woman's Work* for one year—making the latter entirely free.

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Sample copies of any of these publications will be sent on application to us, if stamps are sent, 2c. for "Farm Journal," 2c. for "Woman's Work," or 10c. for "Home-Maker." Sample copies of THE EDUCATIONAL JOURNAL free.

The offers will all hold good until withdrawn, whether mentioned in this column or not, and any one of them is well worth accepting. If none of them interests you, we'll have other propositions that will.

TEACHERS' CONVENTIONS.

Oxford County, March 29th and 30th, at Woodstock.
East Bruce, April 27th and 28th, at Chesley.
West Bruce, May 4th and 5th, at Kincardine.
Brant County, May 11th and 12th, at Brantford.
Haldimand County, May 22nd and 23rd, at Caledonia.
East Kent, May 25th and 26th.

* Editorials. *

TORONTO, MARCH 15, 1893.

PRIZE LIST, COMPLETED.

THE winner of the first prize for the Model Lesson in Arithmetic, is Miss Fannie E. Young, of Kingston, Ont. The confusion and delay arose from the fact that Miss Young was one of three who chanced to use the same motto (Maple Leaf), and the envelope containing her name and address either failed to reach us or was mislaid in the office.

We are glad that the matter is now set right, and we congratulate Miss Young and all the other prize and honor winners on their success.

In our announcement, February 15th, we stated that the second prize in Grammar would be divided equally between Miss Longhurst, of Windermere, and Mr. George Spark, of Petherton, their names having been bracketed by the Examiners.

As there were many competitors in Grammar, and both these articles are meritorious, the Publishers have decided to give the full amount of the second prize to each, making two second prizes in this subject.

A POINT OR TWO IN DISCIPLINE.

ALWAYS try to bring out that which is best in a boy or girl. That is an excellent rule in discipline. Some children are amenable to better and higher motives than others, but the cases are few in which a parent or teacher of tact and insight cannot find something better to drive out the worse when it threatens to become for the time uppermost. A boy of eight, while in a refractory mood, was told to do something which he disliked doing. His face at once took on a combination of pout and frown, and, though he was too well trained not to obey with tolerable promptness, it was evident that the spirit in which he was about to begin promised anything but good to himself or comfort to others. That could not be permitted. What was to be done? Reproof, remonstrance, above all scolding, would have been worse than useless while the child was in that angry mood. Punishment of some kind might have been tried. Most parents and teachers would probably say that it was deserved. But the question was not one of deserving, but of training, forming habits, producing the right effect upon character. So the father thought, and

calling the boy to his side, he said to him gently and kindly: "This has to be done. How are you going to do it; in a cheerful, pleasant manner, or with a frown upon your face?" with a few more words in similar strain. The child hesitated a moment during which the signs of the internal conflict could be seen in the play of his features. Then he looked up and said with a smile which was at first a little forced but in an instant became genuine, "Cheerfully, Papa," and ran off brightly to his task, which of course then became very light.

"I don't think it right to coax my children or my pupils," we fancy some rigid disciplinarian exclaiming. "That is not the way to teach them prompt obedience." We beg pardon. The act described was not coaxing. It was just appealing to that which was best in the boy nature, his sense of right, or his love for his parents, as the case may have been. Either is a vastly better motive than physical fear. And it secured vastly better results. The obedience which followed was a truer obedience than could possibly have been obtained by a harsher method. And it produced a better and more lasting effect upon the boy. It strengthened his power of self-control, self-conquest. It was one of the acts which go to the formation of right habits, and of obedience to conscience. It helped to preserve his own self-respect, and to strengthen his love and reverence for his parent.

The same tactics might not, probably would not, have been successful in the case of another boy, more stubborn or wilful in disposition. Here is where the necessity for tact and insight comes in. It is even conceivable that coercion, possibly punishment of some kind, might have been found necessary in the end. Obedience must be enforced. None the less is it true that dread of punishment of any kind, above all the fear of physical pain, is about the lowest of all motives to obedience. Hence it should never be appealed to save as a last resort, even by parents. Our readers, of course, know that we do not think it should ever be appealed to by the teacher. How much better in every way to reach, not, indeed, the same result, but a far better result, by bringing into successful play a better motive.

We repeat, then, always appeal to the highest motive which can be made effective in the given case. And one word more in connection with this point. Don't hurry an angry child. Give him a little time to fight it out with himself. Give the better feeling time to get the upper hand. Of course any outward unseemly manifestation of anger should be promptly suppressed, both for the sake of respect and propriety, and because this is what anger often

feeds upon, making itself more furious by its own indulgence. But to gain time for self-control is often the main point. Be patient. Which of us can subdue his own passion in a moment? Let us not expect more of a child than can be relied on from our own manhood or womanhood. How many an unhappy struggle between teacher and pupil might be avoided if the teacher would only give a little more time for the better side of the pupil to get uppermost. But, there, our little sermon is long enough and we will change the subject.

TEACHING PATRIOTISM.

THE following from *The Schoolmaster* (London, Eng.), is so much in line with the views we have from time to time expressed, and is so suggestive of what seems to us the difference between the false and the true ideas and ideals of patriotism, that we give it for the benefit of our readers. The true patriot is the man who strives by precept and example to raise, if only by a hair's breadth, the level of the moral and intellectual life of all who come within the sphere of his influence. The true patriotic teaching is that which tends to broaden, not to narrow, the coming citizen's horizon, and to teach him respect for the rights of others, whether individuals or nations. "For the right, wherever found and whithersoever it leads!" is an infinitely nobler motto, and one which points towards an infinitely higher type of civilization than the "For my country, right or wrong!" which is too often held up as the ideal of patriotism. "Tis men, high-minded men," and women and those alone who can constitute a state worth living in. Give us a generation of men and women—brave, honest, true, intelligent, broad-minded, large-hearted—and we will guarantee their patriotism. The United States, giant nation though it be, is young, and its range of vision is yet narrow and shut in by prejudice. It will grow, is growing broader every day. Let us emulate its excellencies, not its faults and follies. Here is *The Schoolmaster's* paragraph:

Of course, now-a-day civilization must have its mania. It is necessary to existence. It is an essential feature of the Gospel of Rush. And it seems as though the "Patriotic" fever is to follow the "Missing Word" craze. In an incautious moment the Bishop of Peterborough drew attention to the fact that in American schools the American flag hangs over the master's desk, and he now and then gives little lessons on that starred and striped emblem of municipal and commercial purity. Whereat uprises Mr. Benson Clough, who "Might have been a Rooshian," etc., and gives notice that he will move that the National Flag, the Union Jack of old England, be supplied to each of

the boys' and girls' schools under the London Board, and that the same be hung in a conspicuous place upon the walls of each school. Then comes that genuine friend of Muscular Christianity, the Earl of Meath. Says he to Mr. Diggle, "I should be the very last to wish to encroach for one moment on the time devoted to religious instruction, but is that really the only opportunity which could be found during which the master could recall some inspiring memory connected with the flag, or recite some heart-stirring passage or poem, such as Tennyson's 'Defence of Lucknow,' with its noble refrain—'And ever aloft on the topmost tree, the banner of England flew!' Might it not be possible, say, on the first Monday in each month, to spare ten minutes from secular work after the religious instruction, to give the young Briton some notion of the mighty heritage and glorious traditions which are his birthright?" His Lordship, by way of giving practical effect to his suggestion, offers £50 to be expended in Union Jacks, one for each school, as far as the sum will go, the masters and mistresses to be directed to give periodical lessons of a national and patriotic character, at the completion of which "the flag should be carried round the room, the scholars meanwhile singing the 'National Anthem' or 'Rule Britannia'!" To the fund started by Lord Meath, Mr. Clough, his breast swelling with national pride, will be glad to add £5. This is all very pretty, but if we are going in for patriotism, for goodness sake let it be of the right sort. Let the youngsters learn to cherish, respect, and develop aright those great democratic institutions for the conservation of which their forefathers fought and bled, but don't let us have a revival in favor of Insular prejudice, Fillibusterism, and the bad old Imperialism which clave a Spaniard in twain to the glory of God and His Majesty the King, and found popular expression in the doggerel:

Two skinny Frenchmen, one Portugee,
One Jolly Englishman's a match for all three!

THE Secretary of War has issued a general order announcing a renewal of agreement heretofore entered into by the government of the United States of America and the New Mexican States, whereby the Federal troops of the two countries may cross over the territory of the other in pursuit of savage, hostile Indians.

The attendance upon Indian schools has reached nearly 20,000 under Gen. Morgan's energetic efforts.

These two items, from two of our American exchanges, are strikingly suggestive when placed side by side. The first is malodorous of the old short-sighted and cruel policy which holds that "the only good Indian is a dead Indian." The second is redolent of the spirit of Christian civilization, as embodied in the Sermon on the Mount. Had the American Government and people begun a century ago the educational policy which is now being so successfully carried out under General Morgan's

superintendence, the necessity for pursuit of "savage hostile Indians" into Mexican territory, or elsewhere, would have long since ceased to exist, with the disappearance of the savage Indians themselves. The white man's bad faith and inhumanity to Indians have borne fruits which have made thousands of both races mourn, and which should cause at least the former to repent and abhor themselves. Thank God, a better day has dawned, and the necessity, if such there be, for such military orders as that above quoted, will soon be a thing of the past. As the *Journal of Education* says: "If every Indian child could be in a good school for five years, savagery would cease, and the government support of Indians would be a thing of the past. There is no reason why every Indian not over six years of age at this time, should not be a healthy, self-supporting, creditable citizen." And what is true south of the international boundary is equally true north of it.

IN accordance with the excellent suggestion made by the Examiners, we shall in future, instead of publishing the Prize Lessons in full in the various departments, without comment, have them carefully prepared for publication by eliminating all but the specially meritorious parts, thus securing room for the incorporation of the best points from other papers, which, though they may not have won prizes, contain parts and suggestions too good to be lost. Inspector Dearness has very kindly performed this service for us, in connection with the papers in Reduction, for this number, and will do the same in a later issue with the papers dealing with the Decimal system. Inspector Smith has also laid us and our readers under obligations by consenting to do the same with the Grammar papers. Other subjects will be treated from time to time in the same way. See department of School-Room Methods for the treatment of Reduction in this number.

THE youth who has learnt to read with thoughtfulness and intelligence, who loves reading, and who knows what to read and how to read, has in his reach the best gifts which life can offer.—*Canon Farrar.*

THE great difficulty to be encountered with young learners is the perpetual wandering of their minds. Their susceptibility to the excitations of the external world is so extremely sensitive, that sounds, sights, and other sensations, which would be wholly unnoticed by a mature mind, are constantly drawing off their attention from the subject in hand. There is as much danger to the development of the mind in roughly checking this fugitive disposition as there is in permitting its full indulgence. We must remember that the faculties of the child are opening to a world that is wholly new, that everything is as yet full of wonder and delight to it, and we must take care that we do not associate with the very pursuits in which we desire to engage the child a feeling of unpleasant restraint, whilst all other pursuits offer it liberty.—*English Writer.*

* Special Papers. *

THE NEWEST "NATURAL METHOD" OF LEARNING LANGUAGES.

BY JOHN HOME CAMERON, LECTURER IN FRENCH IN UNIVERSITY COLLEGE.

In these days of pedagogical reforms, a new method in languages has an interest for most of us. We are not quite sure that the last word has been said in such things. A *nostrum* has its attraction for most people, and the belief that it "has done some one good" recommends it to thousands more. And, after all, was there ever a quack remedy without its virtues? The "natural methods" in languages are all good as far as they go; and the latest try to go farther than the others. We are all, students and teachers alike, thankful for any advance in the way of lightening the burden of learning a language, which will remain grievous enough while we are waiting for *Volapuk* to triumph over the confusion of tongues and develop a literature of its own.

The new light comes this time from France. It is not a recent discovery, however. M. François Gouin, to whom we owe it, is now a retired teacher living in the suburbs of Paris. He is a man of some sixty years, and has all his life been a *professeur de langues*, first in a *lycée* at Caen, and latterly in the *École Arago*.

About forty years ago, when a student, M. Gouin went to study in the University of Berlin. Knowing no German, he set to work in a most thorough-going fashion. He began by devouring the grammar in ten days. Finding that of little avail, he committed to memory 1,000 German radicals found in a treatise. Then he worked through Ollendorf in four weeks. But all in vain. In desperation he attacked a German dictionary, and at the rate of 1,000 words a day, he learned it all in a month, and reviewed it so often that he could repeat the whole dictionary in two hours.

Temporary blindness checked this madness; but, on resuming his work after a month, he kept up his review, completing the dictionary each week.

After ten months of work he returned to France discouraged. When he reached home he found that one of his nephews, who had not yet been able to speak when he went to Germany, could keep up an unbroken chat about a variety of things when he returned. He determined to watch the boy learning his language, and in this way the discovery was made.

The boy was taken to see a mill for the first time. When he came home, he was silent. After an hour he revived and was full of his new experience, repeating his story again and again. Then succeeded the stage of re-arrangement in a conception of his own, and the carrying of this conception into action, in as far as he was able, accompanied by an audible description of what he was doing or was imagining to take place. The sequence of processes was clear: first, passive receptivity; then assimilation; next, the reproduction of what had been seen; lastly, the complete new conception, idealized and adjusted to the child's own requirements.

Without following the author through his account of what he saw, and how he deduced his system, we are now in a position to hear what the practical result is to be.

"To see in the mind's eye;" that is the beginning. We must, for the time being, abandon the abstract; we shall reach it unconsciously through the concrete. Now, observation of the child has shown him proceeding, not from word to word, but from one sentence to another; expressing, not abstract ideas, but concrete relations between him and his surroundings. He has learned his language in no other manner, and we must follow the same process whenever we would learn a new language. It is manifest, then, that the *verb* is the soul of language. What we have to learn is a series of propositions, and not a sing-song of paradigms, or long lists of words.

But to carry this out systematically will be to cover step by step the whole ground of our experience. We shall have to take our whole sum of knowledge to pieces retrospectively, and put it together again in a new language, as we have done progressively in learning our own. What relations shall we fix upon for the co-ordination of our pro-

positions? There are two relations which are universal: the relation of succession of time, and the relation of cause and effect. Practically, these two relations are frequently confounded, but that is of comparatively small consequence for our purpose. For instance, to teach the child (and in M. Gouin's system the child stands for any learner of a language), "to open the door in German," a series of eleven propositions practically exhausts the possible subdivisions of the complex act: 1. *I walk towards the door.* 2. *I draw near to the door.* 3. *I get to the door.* 4. *I stop at the door.* 5. *I stretch out my arm.* And so on.

The next question is how much of a language can be incorporated in such series of co-ordinated propositions. The answer will be best seen from the following details.

M. Gouin divides his linguistic material into seven general categories: 1, Man; 2, the quadruped; 3, the bird; 4, the reptile; 5, the insect; 6, the plant; 7, the elements. Under each he has several series, corresponding to the natural divisions of the subject, and each following through its entire existence the being or object treated of. The series is divided into groups of about twenty propositions, each of which forms a complete picture or relation. As each series was completed, the new words occurring in it were struck out of a dictionary containing the thirty thousand words of every-day life. M. Gouin himself says that at the end of about the fifteenth series the whole dictionary had been used up.

So far we have seen nothing attempted but what M. Gouin calls "objective language," or that dealing with concrete things. The "subjective language" is ingeniously worked in with the other, from which it is made to spring naturally; as, for instance, in the sentences of praise or blame pronounced by the teacher while the work is going on. This side of the system I have no space to describe at greater length.

Finally, there still remains "figurative language," or the language of tropes. This too has been introduced in the most natural fashion by the figurative application of literal terms. Here, however, the exercises are apart from those upon literal terms, and not intermingled with them, as are the subjective portions.

Practical teachers will still seek something more; and M. Gouin has not neglected to incorporate the grammar of the language in his remarkable method. It is scarcely necessary to say that the grammar is taught in sentences, like everything else; but the learner is not left entirely to formulate it for himself, as in most of the "natural methods."

We are now ready to return to the story of the discovery. When his discovery was made, M. Gouin went back to Berlin to begin anew. He lived in a German family and undertook to exchange languages with the children. His new system worked wonders. After an hour of conversation he could repeat without a mistake a series of 300 or 400 sentences in German, and the children could do the same in French. In a week he began to understand ordinary conversation and to speak spontaneously. His progress was so rapid that after some six weeks he took part in a philosophical disputation in the University, making a long speech in German and coming off victor. In three months he says he was practically master of the language. This may mean a great deal, and probably does in his case. But the complete mastery of a language is no matter of weeks; it requires years of practical work.

It would be interesting to examine to what degree this remarkable progress was due to the toil of the previous months. M. Gouin himself is very positive that all he has done before was only a hindrance, because of incorrect pronunciation to be got rid of, and because of wrong meanings attached to every verb he had learned. He is quite convinced that his method will do all he claims for it, when put into operation on virgin soil.

To acquire a language completely, he says, requires only 900 hours, which may be divided into 300 lessons of three hours. This is sufficient to put the learner in possession of 10,000 words, incorporated in 100,000 sentences. Less than this will do for many who wish simply to visit France, comfortably, speaking correctly, and understanding the current spoken and written language. To do this will require only six months' work at the rate of two hours work a day.

This last is the assertion made by Mr. Howard

Swan, who is associated with M. Victor Bétis in the translation of the French work by M. Gouin. The original, *L'Art d'enseigner et d'étudier les langues*, was published in Paris in 1880; but it was not till last year that the English translation appeared in London.*

Shortly before its appearance the translators brought it under the notice of Mr. Stead, of the *Review of Reviews*, who proposed a fair trial of the method in his own family. He has five children, all but one of whom had been learning French in the old way. Mr. Bétis was to teach them all for six months, and they were to speak French at the end of that time with a good "accent" and with fluency. The result of the experiment was published in the January number of Mr. Stead's *Review* (English edition.)

Five days a week the lessons were given for three hours each day, the eldest children (aged 18, 17 and 15) taking two hours, and the two youngest (aged 13 and 9) taking one hour. The instruction was conducted strictly according to the Gouin method. No words are allowed to meet the eye until they are familiar to the ear in association with their appropriate action or mental picture, the sounds being reproduced exactly by the pupil.

On the 19th of December an examination was held, extending over some four hours. The series of tests, all in French, was very long, numbering over twenty-four sections, and containing such as these: To describe in French the gestures made before them; to relate facts from their own lives; to read a passage from newspaper or novel (French), and reproduce the substance of it; to reproduce in French a fact related in English by any one present, or taken from a newspaper or book; to tell the same story twice in different terms; to explain the mental pictures rising in their minds on hearing a word or phrase; to explain certain forms of conjugation in author or newspaper; to repeat, after its conclusion, a French conversation held in their presence.

A suggestion by Mr. F. Storr, M.A., editor of the *Journal of Education*, that the pupils should translate textually an English passage submitted to them, was rejected by M. Bétis, as directly contrary to the principles of the method, which allowed no intervention of the mother tongue for translation phrase by phrase.

Without attempting to give any detailed account of the results of this examination, I shall merely say that they are, to all appearance, fairly satisfactory. Several exceptions could be taken to the character of the examination as a whole. But after making allowance for that, and for the unsafe report given by Mr. Stead, who admits his complete inability to speak French, it is evident, from the separate visitors' reports appended to the article, that very important work has been done during the six months. Mr. Storr's letter is peculiarly valuable, as it is the only one which points out specific deficiencies in the exhibition, such as mistakes in gender and conjugation. But he admits that the colloquial attainments of the pupils were unusually high and the accent above the average.

There is one advantage accompanying the use of this method which of itself is a great gain; that is, the increased interest taken by the pupils in the study of languages. Mr. Stead asserts—and in this he is a competent judge—that his children work with enthusiasm. During the last few months the elder children regularly read the *Petit Journal*; besides reading in leisure moments quite through *Le Comte de Monte-Cristo*. Similar testimony is given by Mr. Waddy, a head-master of North Berwick, who says that the Gouin system applied to French has made it one of the most popular studies in the school, and has completely done away with detentions, besides doing much to equalize the clever and the dull, and to bring general happiness with it.

Another report to the same effect is given by Miss Pryde, of the Bedford Park High school.

In France it has been used with great success for the last two years in the *École alsacienne* of Paris, and in many of the primary schools, especially in Brittany, where the French is to be taught to the Breton children.

If, then, for no other reason than that it may lighten the drudgery of the school-room, the system deserves a trial. If each teacher were left to

* "The Art of Teaching and Studying Languages." By M. François Gouin. Translated by Howard Swan and Victor Bétis. London, 1892. Geo. Philip & Son; 32 Fleet Street.

work out his own application of it, it would never be widely applied. But books of exercises are in preparation and will soon be available for teaching not modern language only but the classics as well.

It is true that the time required in the cases mentioned is considerable. Much could be done in the old way by a good teacher at work with the same pupils two hours or even one hour a day. But I am confident that with even half the time to give to these new exercises they would be found highly profitable. I still recollect the pleasure attending the work of a class of beginners in German with whom I once tried a method of my own somewhat after the fashion of the Gouin method, but much less complete. No class I ever taught took such hold of the language as did that one.

The new method has in it the elements of sound instruction, and will commend itself to many teachers everywhere. M. Gouin has received hundreds of letters from English-speaking countries, principally England, America and Australia, asking for his books. Teachers in the United States have expressed their desire to cross the sea to become his pupils. It is for this reason I bring it before the teachers of Canada. We must not lag behind the rest.

No system can quite convert the learning of a language into a kindergarten play, but there is room yet for one which would teach a language without tearing all the life out of it.

THE PASSAGE OF A BILL THROUGH PARLIAMENT.

BY EDWARD PORRITT.

THE stages of a legislative measure which is going through the English Parliament are the same in both the House of Commons and the House of Lords. As, however, the most important Government bills originate in the House of Commons, it may be best to follow in detail the procedure in the House of Commons. First of all, the member introducing a bill obtains permission of the House to do so. In the case of bills introduced by private members, and for which the Government is in no sense responsible, this is little more than a formal proceeding. In the case of a great measure, like the Home Rule Bill, or the Irish Local Government Bill which Mr. Balfour introduced in February of last year, the Minister in introducing the measure at this stage gives the House a full statement of its aim and scope, and an outline of its principal clauses. It is possible, of course, for the House to refuse its permission for the introduction of a bill, or for the opponents of the new measure to divide the House upon the question of its introduction. This, however, is rarely done, and usually, after a brief and superficial discussion, the permission of the House is granted. The Minister responsible for the measure at once leaves his seat on the Treasury Bench, goes to the Bar of the House, then walks back to the Table, and hands to the Clerk a draft of the bill, or, more frequently, a document setting out the title and scope of the measure, which is known as a "dummy bill."

There is never any discussion at this stage. The House reads the bill a first time, orders that it be printed, and the member introducing it announces on what day it is proposed to take the second reading. Mondays and Thursdays are Government nights. Wednesday afternoon, when the House sits from noon until six o'clock, and Tuesdays and Fridays, when the House sits from three o'clock in the afternoon until midnight, traditionally belong to private members, who ballot for the order in which their motions and bills are to be taken. For a few weeks in the early part of the session these sittings are assigned to private members, and it is on these occasions that a member who is not in the Administration gets an opportunity for forwarding bills which he has introduced or in which he is interested. But as the session proceeds, and Government business gets into arrears, the Leader of the House invariably comes forward with a demand for all the time. Private members who have bills in various stages of forwardness protest against this demand, and lament the infringement of private members' rights. The Government, however, has the majority on its side, and the resolution giving it all the time of the House is duly carried. Henceforward there is little hope for the measures introduced by private members, and

nothing but Government bills or votes of money for the public services are taken.

The fate of a measure is decided on second reading. At this stage the Minister responsible for it moves that it be read a second time. If he has made a long speech in support of his request that he be allowed to introduce the bill, and he feels that he has nothing more to add, he simply rises in his place and formally moves the second reading. The debate then commences in earnest. When the measure is a highly contentious one, and one to which the Opposition is entirely hostile, the leader of the hostile forces moves, as an amendment to the motion before the House, "that the bill be read a second time this day six months." This is tantamount to moving its rejection, and the mover of the amendment will follow with reasons why, in his opinion, the bill should not be further proceeded with. Another member who holds the same opinions seconds the amendment, and until the division is taken the discussion is waged on the two motions, or rather the motion and the amendment, which are before the House. The debate on the second reading of a great constitutional measure will go on for three weeks or a month. The important speakers are on their feet between half-past four and half-past seven in the evening, and again between nine o'clock and midnight, when the debate is adjourned. It is between these hours that the oratorical charges are delivered from the front benches.

It is a Parliamentary tradition that the member who catches the Speaker's eye is called upon to address the House. To a certain extent, and on some occasions, the House acts up to this tradition; but when a debate of first importance is in progress, the "whips" and the Speaker arrange the order of procedure. The "whips" know that this member of the Administration desires to answer that member of the Opposition, and this knowledge is communicated to the Speaker, who usually manages to call on these members in something like the order in which they themselves desire to address the House. The front rank speakers on both sides keep the debate going until the dinner hour. Members of the House of Commons dine between half-past seven and half-past nine, and in this interval the House is seldom attended by more than sixty or seventy members. The Speaker, however, is not absent for longer than half an hour, and as long as he is in the chair the debate goes on. It is maintained during this period by the fourth and fifth rate members, who cannot get an audience at any other time. They seldom add much that is new or important to the debate, but they like to be heard; they like their constituents to know that they have spoken; and they are careful to arrange that their local newspapers have long reports of these dinner-hour utterances. Now and again a really bright speech is made during this interval. Occasionally, especially in a new Parliament, a newcomer asserts himself; but usually the House of Commons is at its dulllest between half-past seven and half-past nine.

Between nine and ten the House fills again. The benches are once more crowded, this time with members in evening dress, and the ladies' gallery is again thronged. Between ten o'clock and midnight the House is at its liveliest. Rattling speeches and bright repartee generally characterize these last two hours of the sitting, and at this time, on the evening of the division, the Minister who has charge of the bill makes his speech in reply to the criticisms which have been passed upon it. When this is over the House clears for the division. Everybody retires except the Speaker, the Clerks, and the Sergeant-at-Arms, and twenty minutes more will settle the fate of the bill. There is no need to wait until the Speaker formally announces the figures. The result is known as soon as the tellers enter the chamber; for the tellers for the successful party are entrusted with the duty of announcing the result to the Speaker, and first approach the Table.

The division on the second reading settles the principle of the bill. The next stage is in committee. There is, however, an intermediate stage which is sometimes of importance. When the motion is made that the House go into committee on the measure, it is possible to move an "instruction," the object of which is to effect such an extension of the scope of the order of reference as will further the general purpose and intention of the House in the appointment of the committee. Sometimes a whole sitting is occupied in debating a

proposed "instruction" of this kind. While this debate is going on, the Speaker is still in the Chair. As soon as the instruction is disposed of, and the motion carried that the House go into committee, the Speaker retires; the Sergeant-at-Arms removes the mace from the table, and the Chairman of Committees, who, like the Speaker, is a salaried and elected officer of the House, undertakes the non-partizan duties of presiding. Fewer powers, however, are invested in the Chairman of Committee than in the Speaker. He does not wear a wig and gown, and does not sit in the Chair. His place is at the Table by the side of the Clerks of the House. At other times he sits with the political group to which he belongs, and speaks and votes like any other member.

Proceedings in committee are much less formal than in the House. On the second reading of a bill, a member may speak only once. In committee he may speak as often as he pleases. There is also a different mode of addressing the Chair and of addressing fellow-members. In the House the Speaker is always addressed as "Mr. Speaker;" in committee the Chairman is spoken of by name, and the members may speak of each other by their names or their offices, and not as "the right honorable member" for this constituency, or "the honored and learned member" for that constituency. There is altogether more freedom in committee than in the House, although the proceedings are in the same chamber and open to every member. Little attempt is made at oratory in committee, and frequently the discussions come down to the level of conversations.

The bill at this stage is taken line by line and clause by clause. When a clause has been agreed upon, the committee adopts a motion of which the formula is "that the clause stand part of the bill." When alterations or amendments have been made, the formula is "that the clause, as amended, stand part of the bill." Lively wrangles and critical divisions mark the progress through committee of every great measure. Weeks and weeks of the time of the House have to be given up to this stage in the case of a complicated and contentious bill, and there is no greater nor more effective test of the skill and ability of a parliamentarian than the piloting of a great bill through committee. Oratory in the early stages of a bill, while not without its influence and value in the House of Commons; but tact and discretion, good humor and a conciliating mode of address, on the part of the Minister responsible for the bill, count for much in committee, and often help a measure over difficult and dangerous places. When the house is in committee, just before midnight a motion is made that "progress be reported." This is equivalent to a motion suspending work on the bill until the next sitting. After the motion has been carried, the Speaker is recalled to the Chair for the formal adjournment of the House at midnight.

When every clause has been adopted, and the preamble agreed to, the bill is reported to the House for the third reading. At this stage it is possible to move the rejection of the bill in the same way as on the second reading, but no attempt can be made to alter the principle of the measure. Only verbal amendments can then be made. When the motion to read the bill a third time has been passed, there is an end to the bill so far as the Commons are concerned, and the Clerk is ordered "to carry the bill to the Lords and desire their concurrence." In the case of a bill which has originated with the Lords, and has passed its various stages in the House of Commons, the Clerk is ordered "to carry the bill to the Lords, and acquaint them that this House hath agreed to the same without amendment." When amendments have been made, the Clerk is ordered "to acquaint the House of Lords that this House hath agreed to the same with amendments, to which amendments this House doth desire the concurrence of their Lordships."

The only remaining stage is that at which the bill, passed in the two chambers, receives the royal assent. This may be signified by the Queen in person or by Royal Commission. Assent is usually given by Royal Commission, and on these occasions Black Rod, the officer of the Lords, summons the House of Commons to the chamber of the Lords to hear the Royal Commission read. The Speaker responds to this summons, and attends at the bar of the House of Lords, with the Sergeant-

at-Arms bearing the mace, and accompanied by those members who care to attend this final ceremony. Two or three members constitute a House for this purpose, and there are always sufficient members of the Administration in attendance to make up the Speaker's escort on these occasions. On his return to the House, the Speaker reports his attendance in the House of Lords, and the measures to which the royal assent has been given.

Up to this point the measures have been spoken and written of as bills. As soon as the royal assent has been given, they are known as Acts of Parliament.

It is to this carefully guarded, and to a casual observer somewhat complex, course of procedure that Mr. Gladstone's new Home Rule Bill has now been committed.—*The Christian Union.*

For Friday Afternoon.

OUR HEROES.

HERE'S a hand to the boy who has courage

To do what he knows to be right;
When he falls in the way of temptation
He has a hard battle to fight.
Who strives against self and his comrades
Will find a most powerful foe;
All honor to him if he conquers,
A cheer for the boy who says "No!"

There's many a battle fought daily
The world knows nothing about;
There's many a brave little soldier
Whose strength puts a legion to rout.
And he who fights sin single-handed
Is more of a hero, I say,
Than he who leads soldiers to battle,
And conquers by arms in the fray.

Be steadfast, my boy, when you're tempted,
To do what you know to be right;
Stand firm by the colors of manhood,
And you will overcome in the fight,
"The Right" be your battle-cry ever,
In waging the warfare of life;
And God, knowing who are the heroes,
Will give you the strength for the strife.

WHAT THE SCHOOL-BELL SAYS.

It is wonderful what unlike things
The school-bell says to the boys, when it rings!
For instance, the laggard who drags along
On his way to school, hears this sort of a song:

Oh—suz—hum!
Why did I come?
Study till four—
Books are a bore!
Oh how I wish
I could run off and fish!
See! there's the brook,
Here's line and hook.
S'pose I must go,
Study till four.
Books are a bore!

Then the boy who loves to be faithful and true,
Who does what his parents think best he should do,
Comes bravely along with satchel and books,
The breeze in his whistle, the sun in his looks,
And these are the thoughts that well up like a song,
As he hears the old bell with its faithful ding-dong:

Cling, clang, cling—
I'm so glad I can sing!
Everything fair,
And balmy the air,
Even a boy
Finds study a joy!
When my work's done
I'm ready for fun.
Keener my play
For the tasks of the day.
Cling, clang, cling—
I'm so glad I can sing!

These are the songs which the two boys heard,
When the school-bell was ringing, word for word.
Which do you think was the truer song?
Which do you hear, as you're trudging along?
Don't be a laggard! far better, I say,
To work when you work, and play when you play!

—Selected.

Book Notices, etc.

Any book here reviewed sent post-paid on receipt of price. Address The Grip Printing & Publishing Co., Toronto.

The Principles of Elementary Algebra. By Prof. N. F. Dupuis, of Queen's College, Kingston, Ont. Macmillan. Pp. 336, 6s.

Probably the strongest feature of this book is the free introduction of geometrical problems requiring the symbols of algebra to be interpreted into ideas concerning geometrical magnitudes and their relations. There are no better exercises in observation and thinking; they give wide scope for ingenuity, and assist the student to prepare for higher work. The chapter on Geometrical Interpretations, and the application of the graph to equations and to series are valuable additions. A good collection of examination papers along with this book would be found a satisfactory course for Senior Leaving work and for the pass work of the first year at college.

American Mental Arithmetic. By M. A. Bailey, A.M., Professor of Mathematics in Kansas State Normal School. 160 pp. American Book Co.

To every teacher who has to handle junior classes this is a helpful book. Lying on the teacher's desk it will supply busy work for certain hours between lessons. It is a piece of good work by a clever teacher, and is as full as an egg of well graded exercises.

Six Years' Pupil Teachers' Questions—1886-1891. 188 pp., 3s. 6d. Moffatt & Paige, London.

Every Public school teacher will find this book extremely useful for giving short home exercises to fourth, fifth, and senior classes in Arithmetic, Algebra, Grammar, Composition, History, Geography, Geometry, and Mensuration. The answers are given to the mathematical questions.

The Algebra of Coplanar Vectors and Trigonometry. By R. B. Hayward, M.A., F.R.S. (Macmillan.) 343 pp., 8s. 6d.

This is a book that will please many mathematical readers. The chapters are:—Introduction; I. Vectors and vector aggregation; II. Multiplication of Coplanar vectors; III. Trigonometrical ratios; IV. De Moivre's theorem; V. Vector indices and logarithms; VI. Excircular or hyperbolic trigonometry; VII. Roots of Unity; VIII. Infinite series; IX, X, XI, XII. Sinuation, series factors, partial fractions, rational and integral functions. It is a very interesting book.

Clay Modelling in the School-Room. A Manual of Instruction for the Kindergarten and School, based on the Curved Solids. By Helen Stephens Hildreth. Milton Bradley & Co., Springfield, Mass. Selby & Co., Toronto, Can.

This work supplies a want which has doubtless been felt by a great many kindergarten and primary teachers. Although the advantages of clay modelling have long been recognized, the course of instruction has not as a rule been definitely outlined, much being left to the discretion of the teacher. There should certainly be great freedom but withal the most careful direction. The free work, invention, and the power to work out of the shapeless mass of clay his own idea of objects seen or pictured gives to the child unlimited pleasure and development. But these lessons or efforts should have a definite and scientific arrangement, or half their value is lost. This arrangement Miss Hildreth gives in her outline. The order of exercises adopted is: 1st, Study and modelling of the normal type, this term denoting any one of the curved solids. 2nd, Typical object, this term used to denote any object whose form is based upon that of the normal type. 3rd, Free work, in which the child endeavors to make an object resembling in a degree the forms already studied. The practical suggestions for the care and handling of the

clay contribute not a little to the value of the book.

Some Aspects of Early Greek Education. By Charles W. Super.

This is the first of a series of monographs on educational subjects, to be issued by the University of Ohio. President Super's contribution to the series is not of real importance. It does not leave the impression of first-hand acquaintance with the subject.

Livy, Book IV. Prendeville & Freese, Cambridge. Deighton, Bell & Co.

Mr. Freese's new volume contains somewhat more grammatical material than the previous volumes. It is a very convenient edition, but not so good as Mr. Stephenson's of the same book.

Virgil, Æneid, Bk. I. By J. E. Page. Macmillan's Elementary Classics.

An admirable little book. Of this, Mr. Page's name is a sufficient guarantee. The notes are of the same interesting quality as his notes on the Odes of Horace. The whole series of course contains vocabularies.

Elementary Latin Grammar. By Professors Roby and Wilkins. Macmillan's.

Intended as an introduction to Roby's "Latin Grammar for Schools." An almost perfect simplification of Roby's Grammar, though the plan of our authorized introductory Latin books makes this stepping-stone unnecessary.

Virgil's Æneid, Bk. II. By John Henderson, M.A., and E. W. Hagarty, B.A. The Copp, Clark Co.

We may suppose that these Canadian editions of separate books of Virgil and Caesar are defensible in the same way as Macmillan's Elementary Classics. In this case the book is equally good. The notes are really excellent. That on *Excessere*, v. 351, is a fine example of their high quality. Yet it does seem a pity to throw any obstacle in the way of having complete editions of the Æneid and the Gallic War used in our schools, and the more so when we reflect upon what excellent editions of each are now available. It should be added that the present edition contains an interesting introduction, a novelty in its way, and valuable for teachers. The text seems free from typographical errors, though we notice, hastily, *paster* on p. 27.

Theocritus Bion and Moschus. Rendered into English Prose, with an Introductory Essay. By Andrew Lang. Macmillan's "Golden Treasury" Series.

Mr. Lang's exquisite translation has been added to the "Golden Treasury" Series with justice. Both the authors and their translator deserve this position. Mr. Lang's exquisite translation seems all the more lovely in its new form.

Principles of Education. By Malcolm MacVicar, Ph.D., LL.D. Boston, Mass.: Ginn & Company, 1892.

This book claims our attention at the outset through the name of the author. Dr. MacVicar is well known on both sides of the boundary as an educator of large ability and experience. Among the high positions formerly held by him in the United States was that of Principal of the New York State Normal and Training School, at Potsdam. In Canada he was for several years a Professor in the Baptist Theological College at Toronto, and he was the first Chancellor of McMaster University, which, indeed, was founded largely through his influence. "Principles of Education" is, therefore, the fruit of high attainments in educational science and long experience in educational work. The book itself must be judged in accordance with what it purports to be, and not with what any one may fancy it ought to be. It is, in brief, a statement of ninety-one important educational principles, each given in the form of a proposition followed by brief notes, which are explanatory rather than argumentative.

No attempt is made to discuss fundamental truths, or even to show the processes by which the propositions affirmed are reached. These propositions, however, in the main so commend themselves to the thoughtful mind that most of them will be accepted without demur. This is due scarcely more to the almost self-evidencing character of the views affirmed than to the admirable clearness and conciseness with which those views are expressed, and these qualities are characteristic in equal degree of the brief notes by which the propositions are accompanied and in many cases expanded. If the book was intended as an instrument as well as a manual of education, we frankly confess our preference for the inductive form and method. As a rule we have a horror of categorical text-books or books of any kind. But, as we have intimated, Dr. MacVicar's "Principles" is dogmatic only in form. It might, perhaps, be said that it matters little whether the investigation precedes or follows the proposition, so long as the steps of the process are suggested. The book is exceptionally well adapted to the two ends for which it is designed: "to furnish material which will provoke investigation and thought and that will render, at the same time, practical help to teachers and others interested in the education of the young."

English.

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STORIES FOR REPRODUCTION.

(JUNIOR CLASSES.)

THE ENEMY CONQUERED.

MINNIE, the cat, was spiteful and ill-natured, — and when her young master brought home his new dog—a fine spaniel—nothing could be done to smooth her ruffled feelings. The poor Fido's nose suffered terribly from the attacks. One day soon after the dog's arrival, we were in the garden when we saw Minnie climb out on the branch of a large tree that overhung the neighboring creek, to lie in wait for a bird, when to our great trouble she slipped from the branch into the pool. This, though not deep, was an ocean to the poor cat, who with staring eyes and straining legs endeavored in vain to reach the bank. Then suddenly we saw Fido, calmly and proudly make a bound over the low fence into the water, seize the cat and with a few strokes bear her to land safe and sound. Then after shaking himself he came to lay himself quietly at his master's feet. Minnie and Fido are now good friends.

THE PLOTS OF THE WICKED.

Once upon a time three robbers had long lain in wait for a merchant who they knew was returning from a distant town with many valuables. Finally he came and was surprised by the robbers and robbed of his goods, though he himself escaped. When the three men saw their rich booty they were delighted and proposed to escape by a long detour through the mountains. But on the way their provisions gave out and they agreed to send one of their number to a neighboring village to purchase food. When he had departed, the other two plotted to take his life on his return, and divide his share of the plunder. The man, on his side, hearing in the village that these men were being sought for the robbery, resolved to poison the food and so get rid of his companions, and escape with all the booty. He returned, bearing the poisoned food, and was killed by his companions. They, after hiding his body, ate the poisoned food and soon died in agony.

A WITTY ESCAPE.

Xanthus, while banqueting one day with his followers, drank so much that he boasted that he would drink the sea, and when everybody began to laugh wagered his house that he would do it, and that before all the people of Samos, and gave his ring as a pledge of his bet. The next day, when the fumes of liquor were dissipated, Xanthus awoke and missed his ring. Æsop told him that he had pledged it and no doubt along with it he would lose his house. Xanthus was alarmed, but the two took counsel together. When the day came for the execution of the wager, all the people of Samos had

gathered on the shore to see Xanthus drink the sea. Xanthus knelt down on the beach at the mouth of the river that there joined the sea, and was apparently about to drink, when he stooped, and rising spoke to the assembly: "I have bet," said he, "that I would drink the sea, but not the rivers that flow into it. Let those who have bet against me turn away the streams, and I'll do what I boasted I would do."

CORRESPONDENCE.

G.G.S.—The sentences you send should be treated as follows: (1) "The jury could not agree on a verdict; on that account he was acquitted." The sentence is compound, because made of two independent statements which might be expressed: "The jury could not agree on a verdict and he was acquitted on that account." (2) "We can never find out the secret, for it is hidden in deepest mystery." This sentence is complex, since the second part "for . . . mystery," is added as a reason for the first "We . . . secret," and is attached to it by the subordinating conjunction "for." (3) "The road was found impracticable; consequently the expedition was abandoned." This is compound, like (1); consequently = on that account.

R.O.—The moral of the fable, "The Viper and the File," II. Reader, is not to waste time attacking those who are stronger than ourselves. The proverb of kicking against the pricks is akin to it.

"Do good and leave behind you a monument of virtue that the storms of time can never destroy." This sentence is compound-complex. It is compound, because made up of the two principal statements "do good" and leave behind . . . destroy." It is complex because one of the co-ordinate parts contains a subordinate clause, "that the storms . . . destroy," which is an adjectival clause modifying "monument." "Of virtue" has adjectival relation to "monument" and "of time" to "storms."

"Write your name in kindness, love, and mercy on the hearts of those you come in contact with year by year." The sentence is complex. Note the omission of the relative "of those whom you come in contact with." Subject, you (understood); verb, write; direct object, (your) name; adverbial complements (1) (of manner) in kindness, love, and mercy (2) (of place) on the hearts of those . . . year. The subordinate sentence: adjective to "those." Subj., you; verb, come; adverbial complement (1) (of place), in contact, (2) (of time) year by year. With, strictly an adverb, may be loosely dealt with as a preposition forming with "whom," the understood relative the full adverb complement "in contact with whom."

M.B.—The lines of the "Village Blacksmith" referred to, mean "just as the blacksmith at his forge does cheerfully his daily duties, so in the world we must do our duties, and fashion our deeds and thoughts into perfection in the opportunities life affords."

SUBSCRIBER.—I. In the sentence "He is here," "here" is an adverb. In "Home they brought her warrior dead," "dead" is an adjective qualifying warrior. It is rather predicative than attributive, the sense being "warrior, he being (who was) dead."

II. When in the H. S. Entrance paper, the candidate is asked to "give the syntax of the following words," it means that he should tell the relation of the words in question to those words in the sentence with which they are connected. So for example, in the sentence you quote, "Then was committed that fearful crime, memorable for its singular atrocity, memorable for the tremendous retributions that followed," "Then" has adverbial relation (time) to "committed"; "crime" is the noun subject of "was committed"; "memorable" is an adjective in attributive relation to "crime."

ENQUIRER.—Inchcape Rock—or as it is more frequently called Bell Rock—is a reef of rocks 2,000 feet long, lying twelve miles south-east of Arbroath anciently (Aberbrothock), in Forfarshire, Scotland. The reef is partly uncovered at low water, but 16 feet under water at spring tides.

A THOROUGH knowledge of one's country is a prime condition of intelligent citizenship.—Charles F. King, Boston.

Teachers' Miscellany.

FOR THE GEOGRAPHY CLASS.

IN AUSTRALIA—"Everything in Australia is topsy-turvy. It reminds one of the butter-cups that ate up the cows. For example, when it is summer in our country it is winter in Australia—this, of course, being true of any country south of the equator. Then, too, when it is day here it is night there.

"There the compass points to the equator, and it is the northern side of the house that has the warm winter sun shining in all day at its windows. The animals have amazingly large feet and they carry their young in a pouch. The birds have beautiful and gayly-colored plumage, but their song is ear-rending to listen to.

"A hundred or so of these Australian birds twittering at daybreak above one's windows would drive one insane. The swans are black, so the saying that 'each mother's ducks are all swans,' would utterly fail in the point of its application here.

It is at night that the cuckoo's song is heard; and it is in the broad daylight that the owls hoot and screech. Here it is the valleys that are cool and the mountains that are warm. It is the north wind that is hot, the south wind that is cold, the east wind that is healthy and the west wind that brings the colds and sneezing influenzas.

"And, you hardly will believe me, but it is a fact, that here the bees have no stings, cherries grow with their stones outside, the beautiful flowers (many of them), have no smell, and some of the trees shed their bark, instead of their leaves.

"More than that, some trees have no leaves at all; while on others the leaves grow up vertically from the twigs. And now, one wonder more; the coal is 'black as coal?' No, indeed; the coal is 'white as marble;' that is, some kinds of it are."—From "People and Places Here and There."

COMMON SCHOOL ETHICS.

THE following principles among others are laid down by Mr. Joseph Wharton, of Philadelphia, who founded and endowed the Wharton School of Finance and Economy in the University of Pennsylvania, as fundamentals of the course of instruction for youth intending to enter upon a business career anywhere or at any time:

"The immorality and practical inexpediency of seeking to acquire wealth by winning it from another, rather than by earning it through some sort of service to one's fellowmen.

"The necessity of system and accuracy in accounts, of thoroughness in whatever is undertaken, and of strict fidelity in trusts.

"The necessity of rigorously punishing by legal penalties and by social exclusion those persons who commit frauds, betray trusts, or steal public funds, directly or indirectly. The fatal consequences to a community of any weak toleration of such offences must be most distinctly pointed out and enforced."

Whilst waiting for the outcome of uneasy discussions in some quarters of the question of religion in the common schools, we have in the above paragraphs a code of the purest Christian Ethics, to which no man, whatever his religious connections may be, can justly make any objection. They go to the root and core of right conduct in all the avocations of life, professional as well as industrial and commercial. The integrity which they enjoin should be taught at the fireside and at every mother's knee, and if thus impressed upon the infant mind, it would make itself felt with stern inflexibility in all the vicissitudes of after years. The first and third propositions are absolute in their soundness of principle, and the second is an invaluable adjunct to both, for many defalcations and failures are as much due to incapacity and neglect in keeping accurate accounts as to any wicked intention in wrong doing.

The above propositions come like the sudden striking of a crystal spring in the midst of turbid waters, and their application is much wider than the particular school upon which they have been enjoined.—Penn. Sch. Journal.

THE total area of the coal fields in the world is estimated at 471,800 square miles.

* Hints and Helps. *

THE PLAYHOUR IN A COUNTRY SCHOOL.

FRED. BROWNSCOMBE, PETROLIA.

II.—INDOOR GAMES.

BLIND NUMBERS.—The pupils stand in a circle and are numbered from one up, after which some volunteer takes his position in the centre, is blindfolded, and is turned around several times that he may lose his bearings. He then calls out two of the given numbers and the persons bearing these must immediately change places with each other, the "blindman" endeavoring to seize either while in the act of changing. If he be successful in this, he joins the circle, his captive is blindfolded in his place and the game proceeds again.

More than two numbers may be called at once. The centre player may at any time call out "all change," when all have to change places.

ANIMAL, VEGETABLE OR MINERAL.—Sides are chosen and a player from each leaves the room. After these two have decided upon the object to be guessed, they return, each going to the opposite side, where he is asked questions concerning the object chosen. The side which first guesses correctly, announces it by shouting or clapping hands, and is entitled to choose a member from the ranks of the opponents, the choice being limited only in these respects: that the captain cannot be chosen while any others of his side remains, and that any player once chosen cannot be re-taken. The game continues till one side has won over all its opponents or till the interest flags.

The two parties take places at opposite ends of the room so that the questioning by one cannot be overheard by the other.

Suppose, for example, the object is a key.

Question—"Does it belong to the vegetable kingdom?"

Answer—"No."

Q.—"To the mineral kingdom?"

A.—"Yes."

Q.—"Is it a manufactured article?"

A.—"Yes."

Q.—"Is it made of metal?"

A.—"Yes."

Q.—"Does its name begin with A?" "With B?" and so on till "yes" is given at K.

Q.—"Is it a key?"

A.—"Yes."

EARTH, AIR AND WATER.—The boys and girls seat themselves in a circle, excepting one who stands in the centre, with a handkerchief in his hand. This one throws the handkerchief at some player, calls out "Air," and counts ten. If the person who receives it fail to name a bird before the ten is counted, he yields up his place to the other, goes to the centre, throws the handkerchief, counts ten and calls either "Earth," "Air," "Water," or "Fire," as he chooses. If "water" be called the name of a fish must be given, if "earth," the name of an animal; "and if "fire," all must change places, the centre player endeavoring to secure a seat during the confusion.

GENERAL GROCERIES.—The pupils seat themselves singly, except one, who whispers in the ear of each in turn the name of some article found in a grocery. Then, after taking a name herself, she calls out two articles, as "rice" and "pepper." The pupils bearing these names must immediately rise and change places. The first player meanwhile seizes the opportunity to take one of the vacant seats, thereby leaving either "pepper" or "rice" on the floor. The player thus left calls out two other articles, and in this way the game goes on. To relieve any monotony, at times "general groceries" is called, when all must change places.

JACK'S ALIVE.—Seat so that an object may be passed around as in a circle. A small stick is held in the stove till one end is on fire. The blaze is then blown out and the smouldering wood in passed from hand to hand towards the right, each saying, as he passes it, "Jack's Alive," till the last spark is out. When this occurs the unfortunate in whose hands "Jack has died," has to allow one mark to be drawn on his face with the charred end of the stick by his right hand neighbor. This must not be removed while the game lasts.

The stick is now relighted and passed to the left; it is lighted again and again till the interest ceases.

A great deal of merriment is occasioned if the teacher happen to be a victim, though the mark will be made very gently.

GRAB.—Occasionally by way of variety have a "Grab." All the pupils leave the room, while the teacher distributes the kindergarten blocks on the floor, windows, desks, etc.; at a given signal all come in and each tries to get as many blocks as he can, stowing them in pockets, aprons, or school bags, till all are found. Then the count takes place and to the one possessing the greatest number of blocks a first prize is assigned, while the one who has the smallest number gets the "booby" prize. For the former an apple is the best, while for the latter a potato, bean, paper doll, or other non-sensical object will do; or draw beforehand on the blackboard, to represent the "Booby," placing beneath it any inscription which will be merry and yet not hurt the feelings of the child to whom it may fall.

THROW THE HANDKERCHIEF.—The boys and girls seat themselves in a circle with one standing in the centre. Some one in the circle throws a handkerchief to some one else, who immediately throws it to some other player, and so on, the centre player endeavoring all the while to either catch the handkerchief in its flight or touch some person who has it. Should he get the handkerchief he may exchange places with anyone he chooses; in the second instance he changes with the person he touched. He starts the game again by throwing the handkerchief, which must be held loosely, not knotted or tied.

CHEAT YOUR PARTNER.—The boys, excepting one, choose partners from among the girls, with whom they seat themselves, the odd boy, say Albert, being left on the floor. Albert then goes to Bert and repeats three times, the name of Bert's partner, "Ethel, Ethel, Ethel." If Bert says "Ethel" before Albert says it the three times, he keeps his place; if not he changes with Albert, and going to some other boy repeats the name of that boy's partner. After a while a girl takes the odd place and the girls move instead of the boys.

CHARIVARI, OR CLAP IN AND CLAP OUT.—The boys go into the porch while the girls seat themselves singly, excepting one, who acts as doorkeeper, and who assigns to each girl, one of the boys as her partner. She then opens the door and calls one of the boys who enters and seats himself beside one of the girls. If that girl be his partner he is allowed to remain; if not, the girls clap hands and he must retire to the porch again. Another is then called in and another, till each girl has a partner. Then the order is reversed, the boys remaining in the seats while the girls go out.

THE HUNTSMAN.—In this noisy game the pupils seat themselves, two in a seat, if your desks are double, in one row of desks, after which all the unoccupied seats are turned up. Then the teacher, or pupil selected for the purpose, assumes the duty of Huntsman, and designates each player by the name of some part of the arms or accoutrements of a hunter, as powder, cartridges, stock, barrel, gun, shot, bullet, belt, cap, gamebag, etc.

To carry on the game the Huntsman marches around the occupied row, calling out at brief intervals in any order the names given, the learners rising and falling into line behind the leader as he does so. For example he demands powder first: "Powder" instantly gets up and, holding the Huntsman by the coat, follows him around. "Shot" being asked next, seizes "Powder" by the coat and goes along too; "Rod" takes hold of "Shot" and so on, till all the players are in the march. Then one of the lately occupied seats is turned up. After marching quickly for a few moments longer, the Huntsman suddenly shouts "Bang" and sits down, leaving his followers to scramble for seats as they best can. Of course, one of these being turned up, two of the players are left standing. They are henceforth out of the game and can enjoy it as spectators only. The Huntsman then resumes his march calling as before and taking care to turn up a new seat before shouting "Bang." This is repeated till all are out except the Huntsman and one other (or the Huntsman alone if the seats are single.)

ONE of the effects of a good education is that people are taught to be tolerant of diversities of opinion.—*Supt. Thomas Vickers, Portsmouth, Ohio.*

SITTING STILL.

A FIRE is to be opened all along the line against the traditional "sitting still" idea of the school men. There are already many schools in which it is absolutely done away with. We have seen one primary school in which the entire session was one grand recess, the children going about the room as they liked, studying aloud if they choose,—and most of them did choose,—and yet there was the most work accomplished and the best results attained we have seen. It was a positive gain to take the children's thoughts from "sitting still," and concentrate it upon doing something that "meant business."—*N. E. Journal of Education.*

A PLEASING METHOD.

A WRITER discussing the well known custom of only calling upon the willing pupils to recite very sensibly says:

"To require children, in recitation, to hold up their hands when they can answer a question asked, and then always to designate one whose hand is raised to answer it, is a good way to make a school show off, and appear to be doing well as long as one or two master the lesson or different parts of it. It is a very pleasing method. It pleases the smart pupils, because it enables them to show off. It pleases the lazy pupils because it enables them to avoid the humiliation of failure. It pleases the visitors because "questions are answered so promptly and correctly." It pleases the teacher because it makes a poor school pass for a good one, and pleases everybody else. A method so pleasing is likely to fall into disuse, and yet the pupils whom it permits to remain silent, are the very ones who most need to be drawn out by judicious questioning. A method more pernicious would be hard to find, unless it be that of asking questions of the whole class and permitting them to answer "when the spirit moveth." Lessons in advanced classes should be recited by topics, and the topics should be assigned impartially. A good way is to write the names of the classes on cards, and after thoroughly mixing the cards, to assign the topics in order to pupils named on the cards as they are taken from the top of the pile.—*Intelligence.*

TWO WAYS OF TEACHING.

SPELLING in itself is dry, mechanical, and uninteresting, and the same is true of penmanship. On the other hand, an amusing incident is full of life. Now, if spelling and penmanship can be brought into relation to this incident, they may be made to acquire enough meaning to become interesting in themselves to the child.

A small boy is much amused before breakfast by seeing his cat jump over a stick. Soon after this occurrence he goes to school. The teacher instructs him in reading by the sentence method. During the lesson she calls upon the children for little stories, and writes them upon the board as reading matter. When our little boy tells his story, he says, "My cat kin jump." The teacher remarks, "My cat can jump," and writes this sentence upon the board. When the reading lesson is over, each child is told to write his own story upon his slate. The little boy sets to work and draws the words of his story as he sees them on the board. He is happy to find that he has the ability to write a story about his cat, and he thinks school is a jolly place because it has something to do with his cat. He knows nothing of penmanship or spelling or language; he has, nevertheless, received instruction in no less than four subjects, namely, language, reading, writing and spelling.

At another school the picture of a cat would have been shown to the child, the word "cat" would have been written upon the board, and he would have sung repeatedly, "c-a-t, cat; c-a-t, cat." After the recitation he would have been sent to his seat to write upon his slate things entirely uninteresting to him, such as columns of figures or letters or words. He would have received instruction in spelling and penmanship, but he would have worked entirely without thought. The lessons would have been a bore to him, and he would have received the impression that the school was a place which had nothing to do with the outside world.—*Dr. J. M. Rice, in The Forum.*

Primary Department.

"IF A BODY FINDS A LESSON."

TUNE—Coming thro' the Eye.

If a body finds a lesson
Rather hard and dry,
If nobody comes to show him,
Need a body cry?
If he's little time to study
Should he stop and sigh?
Ere he says: 'I cannot get it,'
Ought he not to try.
If a body scans a lesson
With a steady eye,
All its hardness he will conquer,—
Conquer by and by.
Then how neatly he'll recite it
Face not all awry.
Ne'er again he'll say: 'I cannot!'
But will go and try.

FIRST LESSON IN TIME.

RHODA LEE.

THE following lesson may not be suited to every class. With very young children the subject of time will have to be introduced in even a simpler manner than that which is here indicated. But it is hoped that this brief outline will at least be suggestive to the teacher beginning the work of music.

Teacher.—We have been learning to sing little tunes, and to know the notes as soon as we hear them, but there is something more to be studied. Listen while I sing and tell me if you notice anything strange about the tune as it is sung. (Sings long metre Doxology with time and accent altered). You have heard that tune often in church and Sunday school. Did it sound like that?

Pupil.—No. The time seemed rather different.

T.—I will sing it again. (Sings in strictly correct time). What about it now?

P.—It sounded all right. Just as it does in church.

T.—Now what do you think it is we need to learn beside the notes in a song?

P.—The right time.

T.—The band you heard yesterday required the drum to keep the time. The little people in the Kindergarten are marching just now. Do you hear the piano giving the time? Yes, and the triangle too. A tune without time would be strange.

I am going to sing a hymn you all know, and while I am doing so you may clap your hands softly. (Sings "Jesus Loves Me," to laa, making the accent rather marked).

You kept time nicely. Now you may all sing "The Golden Rule" and clap as before, (sing in quick time). You may clap for one more, (teacher sings "Home, Sweet Home," very slowly). Were the beats alike in the last two songs?

P.—The "Home, Sweet Home" beats were slower than the others.

T.—Yes, they were certainly slower. But listen to the clock on the wall, hear it tick. You have all heard a watch tick. Did it sound like the clock?

P.—No. The watch ticked far faster than the clock.

T.—But they both must be steady and regular or they would not keep correct time.

That is just the way in music. The beats may be slow or fast, yet they are all regular. But in music that steady throb that we feel we call by another name than beat. Put your hand on your wrist. What do you feel there?

P.—The pulse. (Have word written on blackboard).

T.—We have found that the pulses are regular. Let us now see if they are all equally strong. (Sings "Jesus Loves Me" to 1, 2, 3, 4, emphasizing the strong accent). Did you notice any differences in the pulses?

P.—Some were strong and some were not. Every second one was strong.

T.—Clap your hands while I sing this time and show me the strong and weak pulses. (Class beat loud, soft, loud, soft, etc.)

T.—I will now give you the signs for the pulses. The pulse which has the strong accent is represented by a straight line (|) The weak by a colon (:). We will write the pulse for the first line of the hymn we have sung:

Writes— | : | : | : | : ||

The double line merely indicates the end of the exercise.

T.—The strong pulse seems to measure off the music, and for that reason we call the space from one strong accent to another a measure.

Let us count the measures we have on the board. How many pulses in each measure?

P.—There are two pulses in each measure.

T. (After placing a note in each pulse)— This we call two-pulse measure.

| d : m | s : s | m : r | d : d ||

In time exercises the singing or reading is always in one tone. Instead of hand-clapping use now the terms strong, weak; strong, weak or laa, laa, laa, laa. After drilling on two-pulse measure, develop three-pulse in the same way.

| : : | : : ||

Accent will be strong, weak, weak, strong, weak, weak.

Four-pulse measure will be taught by the same method. The accents being strong, weak, medium weak. The sign for the medium accent is a short line, one measure being thus represented:

| : | : ||

T.—To aid us in getting the proper time in singing we have certain time names that we use. When we have only one note in a pulse the time name we give to it is taa. (Use this name now in the above exercise). (Teacher rubs out m in the first measure, the second s, and the last d).

When we wish to continue the sound in a pulse into the next one we indicate it by a short horizontal line.

| d : - | : - | m : r | i : - ||

When we carry doh into the next pulse the syllable we get is o. If we carry the time name through what name will we get?

P.—We get aa.

T.—Quite right. We now have the time names for our exercise as it stands.

(Class read, taa-aa, taa-aa, taa-aa, taa-aa.) Change notes as much as possible and drill.

NOTE.—More work has been indicated than can well be taken up in one or even two lessons. The work next in order after this would be that of two notes in a pulse, time name being taa-tai.

NUMBER WORK.

RHODA LEE.

"WHILE the bags are being distributed we will sing 'The Brooklet,'" said the teacher, and as four little girls moved quietly around giving out the brightly-colored calico bags, the class sang sweetly this pretty spring song.

The work of distribution over, at a signal the pegs were emptied on the lower left-hand corner of the slate and the bags put away in the desks. Each bag contained twenty-four shoe-pegs. Half the number were colored a bright crimson, and these were carefully separated from the white. The eager and expectant faces indicated plainly that the lesson was an enjoyable one. There was no half-heartedness. The children worked with a will.

The number to be studied was 6.

The children first found the numbers that made six. Every problem, let me say here, was first worked with the pegs and then written on the slate and blackboard.

The work in addition was indicated in two ways:

3	3	1	4	5
3	4	5	2	1
6	6	6	6	6

and

3+3=6.
4+2=6.
5+1=6.
2+4=6.
1+5=6.

Then came subtraction. Teacher gives problem and class worked it out with the pegs and then wrote the solution:

6-5=1.
6-4=2.
6-3=3, etc.

The following problems were then given:

1. Find how many 2's there are in 6?
2. Find how many 3's there are in 6?
3. How many times can 2 be taken away from 6?
4. How many times can 3 be taken away from 6?
5. What is the half of 6?
6. What is the third of 6?

Then came some purely mental work in getting change. The constant sum to "go shopping" with was 6c. The following were some of the problems given:

- (a) John paid 1c. for a pencil and 2c. for a ruler. How much change?
- (b) Mary bought a 2c. stamp and 3 post cards. Change?

The teacher then placed the following statements on the blackboard:

4+2=6.	6-4=2.
3+3=6.	6-5=1.
5+1=6.	6-3=3.

The children were then given slips of paper and were asked to write a number-story about each.

The following are some of the stories handed in :

6-4=2.—I know a little girl who was going to have a party. She invited six little girls, but four could not come, so she just had two.

4+2=6.—John had four papers to sell. He bought two more and with them he had six.

6-5=1.—Mary had six plates in her hand. She let five fall. How many had she left ?

6-4=2.—If Tom had six dogs and he lost four, how many would he have left ? He would have two.

6-3=3.—I had six flowers growing in a pot. The dog pulled up three. I had only three then.

6-5=1.—I had six playmates. Five got mad and went home, and then I had only one to play with.

6-4=2.—I had six chickens. Four died and that left me only two to grow up to be hens.

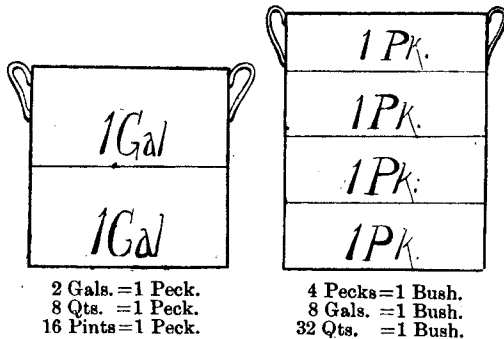
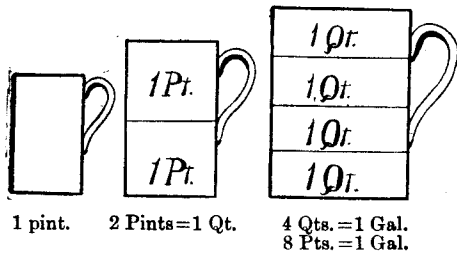
If all the means of education which are scattered over the world, and if all the philosophers and teachers of ancient and modern times were to be collected together, and made to bring their combined efforts to bear upon an individual, all they could do would be to afford the opportunity of improvement.—*Degerando.*

School-Room Methods.

ARITHMETIC.

THE REDUCTION LESSONS—AN ELEMENTARY LESSON.
MISS FANNY E. YOUNG, KINGSTON.

Materials.—A set of measures—pint, quart, gallon, peck, half-peck. A box of sand and a pail of water to develop uses of Dry and Liquid Measures. Besides the above, have full-size drawings on chart or blackboard of each of the measures as follows :—



Teacher holds up the pint measure :

Teacher.—What is this ? A.—It is a pint.

T.—Did you ever see one before ? A.—Yes.

T.—Where ? A.—The milkman has one. B.—

The grocer has one.

T.—What does the grocer measure with it ? C.—

Syrup. D.—Vinegar. E.—Coal oil.

T.—(Taking quart)—What measure is this ? B.—

A quart.

T.—Yes.

T.—Now, Archie, fill the quart measure with

sand, using this pint measure.

T.—How many pints ? A.—Two pints.

T.—How much of the quart is filled by one pint of

sand. A.—Half of the quart. Three pints ?—

A quart and a half. Four pints ?—Two quarts. Five pints ?—Two quarts and a half.

[By a series of examples using the measures with the sand and with the water the relations of quart and pint were taught objectively ; then the lesson proceeds with a series of exercises, each having a number of graded problems like the following type :]

(a) 9 pints make how many quarts ?

(b) How many pints in 9 quarts ?

(c) What part of 6 quarts is 3 pints ?

(d) Find the cost of 5 quarts at 3 cents a pint ?

(e) At 20 cents a quart how many pints can I buy for 30 cents ?

[The teacher then, taking the gallon measure, had its relation to the quart and pint respectively taught by actual measurement and led up to a series of problems more complex and varied than the above types.]

A LESSON ON LONG MEASURE.

From the lesson on Long Measure, by "WM. R. BROWN, HALLIWELL," we quote the following points :

At this point the teacher wishes to impress the length "inch" on their minds, so he draws a short straight line on the board, and having asked them to notice closely the length inch on the rulers, he tells them to put on their slates the length of the line in inches as near as they can judge. Then he measures the line with the ruler, and the child who has the nearest correct answer goes to the head. The teacher continues this drill with various articles—*pen-handle, finger, table-leg*, etc., until every child in the class can judge fairly well of the length in inches of any short article. If properly conducted this exercise gives great pleasure to the children ; it is very interesting. Don't object that such work takes much time ; no time could be better spent.

* * * * *

How many feet in 12 inches ? 36 inches ? 60 inches ? 96 inches ?

This oral drill is carried up to as large numbers as the children can do quickly in their minds ; then the slate-drill follows with larger numbers till this work is mastered.

Of course both kinds of reduction are carried on together, the old-fashioned terms *ascending* and *descending* being entirely discarded.

Some practice in judging the length of various objects in feet will now be a pleasant and profitable exercise. The children put the number judged on their slates, then the teacher measures the object to see who judged nearly right :

* * * * *

How many inches in 39 yards 2 feet 11 inches ?

Right at this stage I fancy I can hear some teacher ask : "But how do you teach them the plan of doing these examples ?" I answer, "That's the very thing I don't show them, I let them make their own plan."

Mr. Brown concludes his lesson by saying that he has tried to emphasize the following points :

(a) Teaching the pupils to know each measure practically so as to be able to judge measures by the eye ;

(b) Giving an immensity of oral drill at every step, followed by slate work ;

(c) Allowing the children to make out plans or processes for themselves.

Contrary to the last, "Labore et honore" lays much stress on the statement of the steps of the problem :

Some would work the question in this manner :

1 qt. = 2 pts. ; 12 qts. = 12 times as much as 1 qt. ∴ 12 qts. = 2 pts. × 12 = 24 pts.

Others might work it in this manner :

Since there are 2 pts. in 1 qt., there will be twice as many pints as quarts, and ∴ 12 qts. = 12 × 2 or 24 pts.

Without stating his reason he gives his preference to the later method and insists on his pupils using it.

In the solving of all examples, in this early stage, care should be taken to get the full reasons for each step, and to write out the full work. For example, in reducing 3 pks. 1 gal. 2 qts. 1 pt., the full reason for multiplying the 3 by 2, in reducing the pecks to gallons is :— "Since there are 2 gals. in 1 pk., there will be twice as many gallons as pecks ; this is found by multiplying 3 by 2." The full work would be somewhat as follows :

3 pks. 1 gal. 2 qts. 1 pt.

2

6 gals.

1

7 gals. 2 qts. 1 pt. = 3 pks. 1 gal. 2 qts. 1 pt. the pecks changed to gallons.

4

28 qts.

2

30 qts. 1 pt. = 3 pks. 1 gal. 2 qts. 1 pt., the pecks and gallons changed to quarts.

2

60 pts.

1

61 pts. = 3 pks. 1 gal. 2 qts. 1 pt., the pecks, gallons and quarts changed to pints.

One of the other competitors would state that operation thus :

1 pk. = 2 gals.

3

∴ 3 pks. = 6 gals.

and 3 pks. 1 gal. = 7 gals.

1 gal. = 4 qts.

7

∴ 7 gals. = 28 qts.

and 7 gals. 2 qts. = 30 qts.

1 qt. = 2 pts.

30

∴ 30 qts. = 60 pts.

and 30 qts. 1 pt. = 61 pts.

* Question Drawer. *

J. A. C.—The Governor-General of Canada is appointed by the Queen, which means, of course, by the British Government, the Queen's advisers. The Premier of Canada is appointed by the Governor-General, who is, however, guided by constitutional usage and always selects the leader of the political party which has at the time a majority in the Commons. The Premier of Ontario is appointed by the Lieutenant-Governor, subject to same conditions. The Leader of the Opposition is chosen by the members of that party in the House of Commons. The Speaker of the Commons is elected by the House of Commons, but he is really chosen by the Government, the usage being for the Premier to propose him. This ensures him the votes, at least, of the Government majority, and, consequently, his election. All judges are, under the constitution, appointed by the Dominion Government. The mayors of cities and towns, and wardens of municipalities, are elected either directly by the ratepayer or indirectly by the members of the Council (aldermen). The latter are elected by the ratepayers. Magistrates are appointed by the Provincial Government. Postmasters by the Dominion Government, through the Postmaster-General ; school inspectors by the Provincial Government, through the Minister of Education. Registrars, sheriffs, etc., by the Provincial Government. Municipal clerks by the municipalities. The members of the Senate are appointed by the Government. (1) Sir John A. Macdonald was Premier from 1857 to 1858, from 1858 to 1861, from 1861 to 1863. (2) Neither temperance nor agriculture is at present compulsory. For some reason or other we have to be perpetually answering this question.

A. McG.—We cannot undertake to give you advice on what is really a legal question, but we have no doubt whatever that the trustee, in cancelling the word "half-yearly" in the agreement, after you had signed it, and without your knowledge or consent, invalidated the document. It is quite clear that you could collect your salary quarterly under the School Act. It is always better, however, to assume that no wrong was intended, and to try to reach a friendly understanding.

J. G.—If by "School Medicine" you mean the Medical Faculty of Toronto University, you had better write to the Registrar of the University for the information you want.

A. B. McT.—The lines beginning—

"This is human happiness !
Its secret and its evidence are writ
In the broad book of nature. 'Tis to have

Attentive and believing faculties ;
To go abroad rejoicing in the joy
Of beautiful and well-created things, etc."

are almost unmistakably Wordsworthian, but in the few moments we could spare for such a purpose we have been unable to put our finger upon the passage. Perhaps some subscriber may be able to help us. Had you told us where the lines are quoted it might have assisted us.

M. H. I. M.—Books 5 and 6 of the Public school course or their equivalents are required for Entrance, and at least two books of drawing course prescribed for the Fifth Forms for P. S. Leaving.

M. B.—(1) There are only eleven cities in Ontario. (2) See answer to J. A. C. above. All except warden, who is a municipal officer, hold office during life or till superannuated or removed for cause.

B. C. H. B.—We cannot give you the exact dates of strikes that have taken place on the Grand Trunk Railway. Probably the information may be obtained from the Ontario Bureau of Industries.

J. F. H.—It is not necessary that the candidate for Senior Leaving Examination shall have passed the Junior.

CLARENCE.—Your pupils cannot write for the Public School Leaving Examination unless they have written successfully at the Entrance.

J. A. C.—Yes. The drawing and copy books presented at the last Entrance may be submitted again.

SUBSCRIBER.—The regulation in respect to age for entering School of Pedagogy is still in force.

✻ Literary Notes. ✻

WITH the March number the *Review of Reviews*, as a distinct American publication, completed its second year. To many minds the relationship between the English and American *Review of Reviews* is something of a mystery. It is not strange that the public should imperfectly understand an arrangement so entirely unique. The truth is that the American *Review of Reviews* is a distinct periodical, edited absolutely by Dr. Albert Shaw and owned by a company of which Dr. Shaw is the president as well as the chief stockholder. But the vice-president of this company, and the next largest stockholder in it, is Mr. W. T. Stead, of London, who founded the English *Review of Reviews* and who edits and entirely owns that brilliant and far-famed London periodical. Under the terms of the perfectly intimate relationship existing between the English and American *Review of Reviews* each periodical has full access to duplicate copies and advance proofs of all the articles prepared for the other, and each is entitled to a duplicate set of all the illustrations devised by the art department of its trans-Atlantic colleague. Dr. Shaw has the fullest and freest liberty to use in any way he pleases, with curtailment or amplification, the materials supplied by Mr. Stead, and Mr. Stead has on the other hand the same liberty as regards the materials prepared for the American *Review of Reviews*. The American magazine has been, upon the average, some twenty or thirty pages larger than its English contemporary, and has therefore been enabled to make very extensive use of the English and foreign materials. The *Review of Reviews* never goes to press until all the other magazines are printed, and it gathers up the latest events of the world and presents them summarily, with abundant illustrations and in a well-digested, succinct fashion that saves the time of the reader and carries him on a straight, clear line through the complexities of the month's events.

IN *The Popular Science Monthly* for March, Prof. C. Hanford Henderson completes his illustrated account of "The Glass Industry." Considerable light is thrown upon the problem of irrigating our Western lands in an illustrated article on "Artesian Waters in the Arid Region," by Robert T. Hill. A strange phase of life in colonial times is exhibited in Colonel A. B. Ellis's paper on "White Slaves

and Bond Servants in the Plantations." An explanation of "The Decrease of Rural Population" is attempted by John C. Rose. Under the title "An Agricultural Revolution," Prof. Clarence M. Weed describes, with illustrations, the operation of spraying fruit trees with insecticides and fungicides. Grant Allen's study of "Ghost Worship and Tree Worship" is concluded in this number. Edith Sellers tells "The Story of a Colony of Epileptics," which gives excellent testimony to the beneficial effect of steady occupation in nervous diseases. "The Brooklyn Ethical Association," a society for the study of social problems by scientific methods, is described by Dr. Lewis G. Janes, its president. Other articles are "Notes on Palæopathology," by Dr. R. W. Shufeldt, "The Scheele Monument at Stockholm," by Fred Hoffman, "East Central African Customs," by James Macdonald, and a "Sketch of Robert Hare," with portrait. In the Editor's Table, "The Everlasting Ghost," "A Shattered Argument," and "Stoves without Flues," are sharply dealt with. New York: D. APPLETON & COMPANY. Fifty cents a number, \$5 a year.

Scribner's Magazine for March contains several remarkable articles in the line of "personal reminiscences and memoirs" which were announced to be one of the features of the year. Through the courtesy of a granddaughter of the great naturalist, J. J. Audubon, the publishers are able to present in this number "Audubon's Story of his Youth," a charming bit of autobiography written by the naturalist for his children, and accidentally found in an old calf-skin bound volume where it had been hidden for many years. Another striking article of personal reminiscence appears in the Historic Moments' series, and is a description of "The Death of John Quincy Adams in the Capitol," by the Hon. Robert C. Winthrop of Massachusetts, who was Speaker of the House of Representatives forty-five years ago, when Adams rose to speak and fell back unconscious. The recent completion of "The Jaffa and Jerusalem Railway," and the running of the first train over the road in August last, is described by Selah Merrill, United States Consul at Jerusalem, who was an eye-witness of that event which linked the region of biblical history with the most modern feature of civilization. In the "Poor" series, Prof. W. J. Tucker, of Andover, describes the work of "The Andover House in Boston," the very successful experiment in Toynbee Hall work which is being carried on under the direct super-

vision of Robert Archey Woods, who wrote the first article in this series. It is illustrated with sketches among the Boston poor and Boston institutions by Walter Shirlaw. These are but a few of the many interesting features of this number.

THE *North American Review* for March contains a number of important articles upon subjects that are engaging public attention at the present moment. The Hon. J. M. Rust, Secretary of Agriculture, contributes an interesting paper on "American Farming a Hundred Years Hence." The question of Hawaiian annexation is authoritatively treated from two different points of view. Under the title of "Fads of Medical Men" Dr. Cyrus Edson, Sanitary Superintendent of the New York Health Department, writes entertainingly of the different cure-alls and patent medicines which have from time to time enjoyed an ephemeral popularity. "Modern Insurance and Its Possibilities" is discussed respectively by four presidents of insurance companies. The Comptroller of the Currency, Hon. A. B. Hepburn, treats of "National Banking and the Clearance House." Archdeacon Farrar writes on "Conceptions of a Future Life," and Madame Adam contributes some interesting "Recollections of George Sand." In "England in the Orient" Prof. Arminius Vambéry, the well-known Oriental scholar, points out the beneficial results of British rule in Asia. Among other interesting articles is: "The Canadian Question," by George Stewart.

THE publishers of the *National Magazine* have acquired the *Magazine of American History*, which was edited by Mrs. Martha J. Lamb, until her death on January 3rd last. With the February issue these two leading historical journals are merged into one, and the name, *Magazine of American History*, that of the older periodical, now in its 29th volume, is retained. General James Grant Wilson, well-known as an editor of important historical works, including Appleton's *Cyclopædia of American Biography*, edits the new magazine which is enlarged more than thirty pages, while the price is reduced from \$5 to \$4 per annum. The historical prize competition, inaugurated by the *National Magazine*, and offering \$2,000 in fourteen prizes is continued by the *Magazine of American History*. The conditions of the original contest are unchanged and particulars can be had by sending a stamp to the *Magazine of American History*, 132 Nassau Street, New York City.

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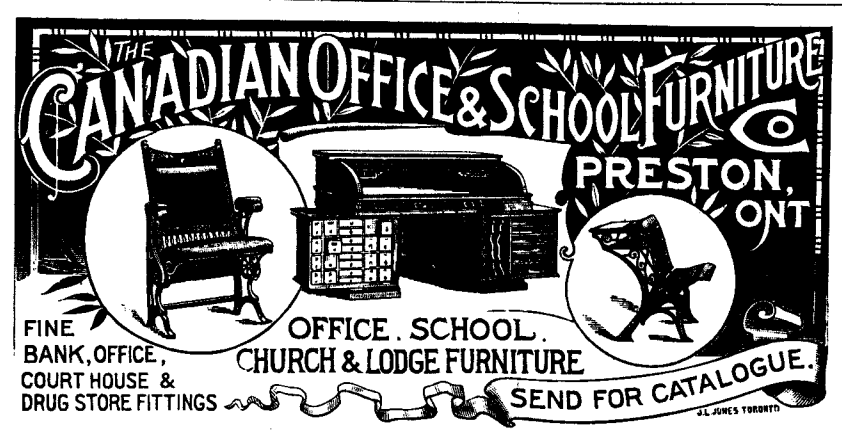
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