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# The Canada School Journal.

VOL. IX.

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No. 4.

## The Canada School Journal

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CANADA SCHOOL JOURNAL HAS RECEIVED

*An Honorable Mention at Paris Exhibition, 1878.  
Recommended by the Minister of Education for Ontario.  
Recommended by the Council of Public Instruction, Quebec.  
Recommended by Chief Superintendent of Education, New Brunswick.  
Recommended by Chief Superintendent of Education, Nova Scotia.  
Recommended by Chief Superintendent of Education, British Columbia.  
Recommended by Chief Superintendent of Education, Manitoba.*

The Publishers frequently receive letters from their friends complaining of the non-receipt of the JOURNAL. In explanation they would state, as subscriptions are necessarily payable in advance, the mailing clerks have instructions to discontinue the paper when a subscription expires. The clerks are, of course, unable to make any distinction in a list containing names from all parts of the United States and Canada.

### ENTRANCE EXAMINATIONS.

In the Report just presented the Senior Inspector discusses this topic at some length. With respect to the examination for admission, he observes that the principles of elementary arithmetic are really few and simple, and that with the improved methods of teaching that subject, the slightly higher standard recently adopted has had a perceptibly beneficial effect. He thinks that the adverse criticism of the arithmetic papers has been confined to a few habitual complainers. A better style of exhibiting the work on paper has been attained, but there is still greater improvement needed in this respect. We fear the root of the evil lies in the teachers, and we cordially invite attention to the undoubted fact that neatness and accuracy go hand in hand in all mathematical studies. Teachers cannot insist too strongly upon having neat work and logical arrangement of all processes. Pupils must be trained to put down the whole work, even the simplest steps, if they are to secure a thorough grasp of the subject. No other time in school is spent to better purpose, than that occupied in making pupils write and re-write on the blackboards or on paper, neat, clear, logical statements of their arithmetical work. It is a piece of training that will be valuable for life, no matter what position the pupils may afterwards be called to fill. It is the best practical cure for careless and slipshod thinking. The Inspector thinks there is no force in the objections to the "outline plan" of teaching history to beginners. On this point, as our readers are fully aware, we hold a different view. We hope to see the course for public schools limited to a special period, say from 1688 to the present time, so that the pupils may gain a real knowledge of the social and political state of England during at least one period. No one pretends to say that under the present plan anything more than "drum and trumpet history" can be possible.

In literature, the present selections are admitted to be very poor, and a separate collection of choice pieces is proposed. This is certainly a good suggestion, especially if the proposed selections were to be made sufficiently numerous to admit of new work for, say, three succeeding examinations. On the papers it would be well also to insist upon the pupils being able to quote from memory most of the pieces set down for study. A pupil's vocabulary is very little enlarged by such a mere study of words as comes to him from the mastery of a spelling book. In this connection it would be well also to exact prose as well as poetry. The reading book should be used for its legitimate purposes alone, and boys and girls should be able to read any page of their fourth reader with a fair amount of intelligence and expression, instead of knowing only the few lessons studied as literature. In reply to numerous enquiries we give in another column the literature selected from the readers for the next examination, which will be held Thursday and Friday, July 3rd and 4th.

### DRAWING.

The Normal Schools are now turning out teachers qualified to teach elementary drawing with considerable skill. This will prove the real fulcrum by means of which the standard of attainment will be successfully elevated throughout the schools. The subject is so pleasant that it is virtually a recreation in school, and a little leaven will be sufficient to leaven the whole lump. Just as soon as our teachers fairly discover the simplicity of the thing they will everywhere begin to use it as a relief from the monotony and tedium of ordinary school drudgery. Penmanship will receive an immense stimulation, and lack of style and neatness in mechanical work will cease to be a standing reproach to our excellent public schools. If geometrical drawing could be well taught in all the high and county model schools also for the next two years the effect would be felt in the public schools for many years to come. Wherever it has been tried it has been found that the youngest children soon become fond of the drawing lesson and spend happy hours over it, while, at the same time, they are cultivating their taste, developing ingenuity, securing dexterity of the hand and quickness and accuracy of the eye.

In the Report for the current year, Dr. McLellan points out the special disadvantages under which the subject has been placed. It has been encouraged, but only nominally. It has not been allowed to become a mark-earning option. There is a continual demand for so-called practical education, and yet drawing, which is really the basis of manual and designing skill, has been either wholly ignored, or only nominally encouraged. There is not a single occupation in this country in which an elementary knowledge of the subject is not of great practical utility to the possessor. The farmer has need of it a hundred times a year, and often has to pay dearly for

his inability to sketch some simple draught. In all trades it is of great utility, and a teacher who can rapidly sketch off an outline picture on the blackboard is worth at least one-third more for general school purposes than the teacher who has no such practical skill. If a boy begins to study Latin or algebra he gets very little value for the time spent unless he can carry on his studies for at least a year, but with drawing he gets full value for the time, even if he is compelled to break off his studies at the end of a single month. Looking simply at the utility of the subject, we heartily agree with the proposal to make it more or less obligatory in all our schools. To the teacher of junior classes it is absolutely an essential requirement. As a means of producing the refinement and culture at which all education aims, it is second to none of the studies on our programme. All that is needed is to secure for every teacher a good systematic course of elementary instruction, such as the Normal Schools and the School of Art now supply, and the rest will soon follow easily and naturally. In the meantime, if those who have not these advantages, would show a little private enterprise and provide themselves with Walter Smith's manuals, they might easily accomplish results that would astonish themselves and very materially assist to prepare their pupils for the practical duties of after life.

## SECONDARY EDUCATION IN THE MARITIME PROVINCES.

It is known to most readers in the JOURNAL that for some years past considerable agitation has prevailed both in Nova Scotia and New Brunswick respecting the modes by which the interests of secondary education are fostered. The Reports of the Superintendents, Dr. Allison and Mr. Crocket, lead us to suppose that early legislation on the subject is probable in both Provinces. We think it will interest our readers to have placed before them the substance of the suggestions offered by the respective Superintendents.

Dr. Allison proposes for Nova Scotia as follows :

I. Let a special legislative grant be provided for all teachers of the Academic class (Grade A) employed in sections (other than those maintaining a Provincial Academy) which have a system of regularly graded Public Schools of at least three departments ; subject to the following conditions :

(1.) That this grant be paid only to teachers employed for at least one year continuously in the section.

(2.) That the teacher claiming this grant be in charge of the advanced department of the school.

(3.) That on an annual inspection and examination of the department by the Inspector in whose district it is situated, a required percentage of the registered pupils show a satisfactory knowledge of the subjects embraced in the first year of a prescribed course of High School studies.

(4.) That proper conditions for prosecuting advanced studies are provided by trustees.

II. Let provisions be made for a class of institutions to be known as PROVINCIAL ACADEMIES, the privilege of establishing which shall be open indiscriminately to the school sections of the Province, due security being taken that such establishment shall always involve a large amount of local effort, and be justified by existing educational circumstances. I would suggest the following conditions as necessary to guarantee High Schools of a bona fide character :—

(1.) The employment of at least two qualified professors or teachers exclusively engaged in Academic Instruction.

(2.) The certified attendance of a minimum number of pupils duly qualified according to a prescribed course of study. It should be the duty of the Superintendent of Education to hold an annual inspection and examination of these Academies, and the passing of a required percentage of the pupils should be essential to participation in Provincial funds.

(3.) Such an outfit of class room accommodation and scientific apparatus, as, in connection with a superior teaching staff, will adequately prepare pupils not only for college and entrance upon the professions, but as educated persons, for intelligent devotion to the varied interests which make up the common life of the people of Nova Scotia.

The general outlines of this plan having been established by legislation, the working out of subordinate details should be left to the Council of Public Instruction. That only communities able and willing to carry it into successful execution, should engage in the attempt to found such institutions, is a point which should be guarded with the greatest care.

For New Brunswick Superintendent Crocket suggests :

1. That the Grammar School Acts be repealed, and that the property held by the Grammar school trustees be transferred to the school trustees in the district in which it lies.

2. That the provision relating to the apportionment of the "superior allowance" be also repealed.

3. That the present apportionment for grammar schools and for superior allowance constitute a grant to be applied under regulations of the Board of Education to the following classes of schools, which boards of trustees should be empowered to establish with such limitations as are set forth :—

(a) *Superior Schools.* Superior schools may be established in each county on the following basis :—One superior school shall be allowed to each 6,000 inhabitants, and if the county after being divided by 6,000 leaves a remainder of 5,000 or over, another such school may be established.

(b) *County Grammar Schools.*—One grammar school may be established in a county, or in lieu thereof an additional superior school.

A grammar school should not be established in the same parish with a superior school.

(c) *Provincial Grammar Schools.*—One provincial grammar school may be established for each 64,000 inhabitants, and the boards of trustees of Chatham or Newcastle, Moncton, St. John, Fredericton, and St. Stephen should be empowered to establish the same in their respective districts.

MR. D. J. GOGGIN.

HEAD MASTER OF WINNIPEG NORMAL SCHOOL.

The numerous friends of this gentleman will be glad to hear of the appointment of such a thoroughly competent man to the highly responsible position of Head Master of the Winnipeg Normal School. Next to the establishment of the Normal Schools themselves, the appointment of the teachers who are to train our teachers is of prime importance. Scholarship is necessary, but scholarship alone can do very little to the purpose unless accompanied by special aptitude for teaching and special preparation for normal work. To place untrained teachers at the head of teachers' training schools is so absurd that it needs only to be stated to be ridiculed.

In securing Mr. Goggin, the Manitoba authorities have placed their young institution under the care of one of the most enthusiastic and thoroughly trained teachers that could be selected. He began his career as teacher in 1868, as master of a genuine old skull-cap log school house in the township of Cartwright, Durham County. In 1869 he was appointed to the school in the village of Williamsburgh, the largest school in the township. During 1870 he attended the Whitby High School, of which Professor Kirkia, now of

Toronto Normal School, was then principal, and at the close of the year was appointed Assistant Master in the High School. The following year he was Head Master of the Millbrook Public School and held that position until midsummer 1873. At that time his reputation as a teacher of more than ordinary excellence was so well established, that he was selected as Head-Master of the Port Hope Public Schools when they were separated from the High School. Here he had thirteen assistants, and a wider field for his talents. It is needless to say how well his distinguished success during the past ten years has justified the wisdom of the selection. Under his energetic and skilful management these schools have gradually risen to the very first rank in this province. In 1877 the County Model School was placed under his charge, and he has thus had already seven years' experience in the training of teachers. In this capacity his peculiar aptitude and talent for this important work have been more and more apparent and have secured him a reputation second to that of no other Model School Master in Ontario. He has enjoyed the fullest confidence of his fellow-teachers, who twice elected him President of the County Teachers' Association, of which he has always been an active and progressive member. His loss will be keenly felt in educational circles here where his faithful and efficient labors have been appreciated far beyond their immediate sphere. He will carry with him to his new field the hearty good will of every fellow laborer and friend of education.

Mr. Goggin holds the highest grade of Provincial Certificate and is an undergraduate of the fourth year in Victoria University. If energy, tact, and thorough training have not lost their ancient power, his future success is already assured, and his present appointment may well be an encouragement to every teacher to do solid work which is sure to stand like the pyramids—"all else is chaff, which let the winds drive where they will."

#### DEATH OF INSPECTOR BUTLER.

We mournfully record the death of another educationist departed from our ranks. Inspector Butler died early in March after a short illness with congestion of the lungs. In the prime of life with his mind in its full vigor he has been called from his work which has been faithfully done.

A. F. Butler, B. Sc., was born at Auburn, Ohio, Oct. 17th, 1833, and was consequently only a little over fifty at the time of his demise. He attended Auburn College in his youth, and began to teach school at the age of seventeen. In a few years he went to Hiram College and spent two years there under the tuition of the late President Garfield who commanded his respect and admiration. Afterwards he became a student at Ann Arbor University where he graduated as Bachelor of Science in 1859 and was married in the same year to Miss Augusta P. King, who now mourns his loss. After successful teaching at Brimfield and at Canton, Ohio, he came to Canada in 1863 and taught the Aylmer public school for four years, and the Fingal School for a short time. In 1868 he was appointed

Local Superintendent of the public school, an office which he filled until 1871 when he was appointed first Inspector of Public Schools for Elgin under the new act. He has resided at St. Thomas ever since and was one of the best known men in the county. He was everywhere a welcome visitor both at the fireside and in the schoolroom, and his genial disposition made him many friends. A man careless of outward appearance, Mr. Butler carried beneath a somewhat rough exterior a warm heart and an active mind. He was a fluent speaker, and possessed some of the magnetism of quiet, commanding eloquence. In 1877 he wrote a history of the county of Elgin which exhibited his literary facility and his genial humanity. He was very fond of good horses and generally drove the finest he could purchase. He was a member of the Masonic Fraternity and also of the United Workmen and his family have the benefit of a \$2,000 policy in the latter society. The sympathy of many warm friends will be extended to his sorrowing widow and to his mother who at the advanced age of seventy-six survives him at the old home in Auburn.

#### DEATH OF INSPECTOR DEWAR.

Contrary to the hopes of a large circle of devoted friends Inspector Dewar of Huron never rallied from the illness which prostrated him some months ago. He passed peacefully away from earth on the 26th of February. He leaves a widow, three sons and two daughters to mourn his loss. He will long be remembered throughout his late inspectorate where his name had become a household word and his genial presence had made him a welcome visitor. He was of Highland extraction and spent his youth in the county of Lanark, removing with his parents to the county of Lambton. At the Sarnia High School he received the first outlines of higher education from Mr. Walker, who was for many years the head master. He attended two sessions at the Toronto Normal School and received the highest grade of first class certificate. He taught the school in the village of Harpurhey for over ten years, and was principal of the Seaforth Public schools for many years previously to his appointment as Inspector of East Huron, a district including a vast area and about a hundred schools. Mr. Dewar was characterized by great earnestness of purpose and sincerity of character; he had an extensive acquaintance with general literature and was familiar with the leading theories of education. His whole life was an example of successful struggle against difficulties, and he goes to his rest honored for the faithful and conscientious discharge of his duties.

The annual Report of Inspector Tilley of Durham County is a model of care and thoroughness. It gives complete information regarding every school in the district and enables trustees and teachers to see at a glance just where they stand relatively to the other schools in the county. We find first the general remarks of the Inspector from which we give a few characteristic extracts in another column. Then follows a special report of five to ten lines on each school in the seven.

townships, in which commendation of good work by teachers and trustees is heartily given, while shortcomings are faithfully yet delicately pointed out. Table A gives the replies to the questions:—How many times has the floor been scrubbed in 1883? Have the walls been whitewashed or tinted? Has woodwork been painted? Have any decorations been put up? What other improvements? This table shows general attention to the beautifying of school premises. Table B gives the results of the two promotion examinations. Table C classifies all the schools into four grades on the basis of efficiency, and Table D does the same thing on the basis of condition of school premises. Table E gives the legal qualification of the hundred and fourteen teachers, their respective salaries and the average attendance at their schools. Nearly eighty hold permanent certificates. The Inspector says: "There is one thing which especially characterizes our schools—the maintenance of good order without having recourse to severity. . . . mutual good feeling seems generally to exist between teachers and pupils."

### REPORTS OF CASES.

There is no doubt that, with a right method and under proper conditions, "object teaching" is a very valuable agent in the intellectual development of the young mind. But as sometimes done, it is a nuisance, because it is a mere glitter of words and takes up valuable time. In a lecture upon the subject by Mr. J. H. Gladstone, of the London Royal Society, the following incident, showing how teaching with objects is very frequently done, is given:

"I have been told of a gentleman who used to teach science in schools; a friend of mine, who knew him, and did not approve of his method, and said so, was invited to come and witness its operation; whereupon he paid a visit to the school, and the teacher said, 'Here you can have botany, astronomy, physiology, or anything else. What would you like to ask my class about?' 'Suppose you take the solar system?' A diagram of the solar system was hung up, and on his pointing to different things his pupil, explained the figure in the centre as the sun, the positions of Mercury and Venus, and so on. When he pointed to a particular circle, they explained that that was the orbit of Venus. The whole thing was gone through with in a very satisfactory way, and they gave pat answers to the questions of the teacher. The visitor then offered to put a few questions. He began by asking, 'What is an orbit?' None of them knew. They had used the word orbit, but did not know what an orbit was. 'But,' he continued, 'can you not give me something near it? Is it a coal-scuttle, or a flower-pot?' One little boy said, 'A coal-scuttle, sir!' That not being right, the rest of the class joined in saying that it was a flower-pot."

An officer had been sent to the house of a boy to inquire the cause of his absence. The officer, on his way back, met the boy and brought him into school. Soon after, the mother came to the building and told the principal that the boy was at home sick; he had been very ill the whole night, and she had had four doctors at his bedside. She was thanked kindly for the trouble she had taken to inform him of the serious illness of her son, and when the boy was called out and punished thoroughly for absenting himself from school without his mother's consent.

## INTERMEDIATE AND SECOND CLASS, 1885.

### LITERATURE.

- ENGLISH. *Scott*.—The Lady of the Lake, especially Canto V.  
*Irving*.—Rip Van Winkle.  
LATIN. *Cicero*.—Cato Major.  
*Ovid*.—Fasti, Book I., lines 1 to 300.  
FRENCH. *Bonnechose*.—Lazare Hoche.  
GERMAN. *Schiller*.—Belagerung Von Antwerpen, Der Taucher.

### FIRST-CLASS GRADE C. 1885.

- Shakespeare*.—Coriolanus.  
*Scott*.—The Lady of the Lake, especially Canto V.  
*Irving*.—Rip Van Winkle.

### FIRST-CLASS, GRADES A AND B. 1885.

- Shakespeare*.—Romeo and Juliet.  
*Chaucer*.—Prologue and The Nonne Prestes Tale.  
*Pope*.—Prologue to the Satires.  
*Addison*.—Selections from his Contributions to the *Spectator*, made by J. Arnold under the headings, (1) Manners, Fashions, and Humors; and (2) Tales and Allegories. (Clarendon Press series.)  
*Wordsworth*.—Sonnets in Matthew Arnold's Selection.  
*Macaulay*.—Life and writings of Addison.  
Books of Reference recommended:—Dowden's Mind and Art of Shakespeare, Gervinivus's Commentaries.

### DATE OF EXAMINATIONS, 1884.

- Intermediate and Second Class*.—Monday July 7 to Monday 14.  
*First Class Grade C*.—Tuesday July 15 to Tuesday 22.  
*First Class Grades A and B*.—Wednesday July 23 to Saturday 26.

## ENTRANCE EXAMINATION JULY 3rd and 4th, 1884.

### LITERATURE.

#### 1.—SELECTIONS FROM ONTARIO READERS.

- (1) The Norwegian Colonies in Greenland.—*Scoresby*.
- (2) The Founding of The North American Colonies.—*Pedley*.
- (3) The Voyage of the "Golden Hind".—*British Enterprise*.
- (4) The Discovery of America.—*Robertson*.
- (5) The Death of Montcalm.—*Hawkins*.
- (6) Jacques Cartier at Hochelaga.—*Hawkins*.
- (7) Cortez in Mexico.—*Cussell's Paper*.
- (8) The Buccaneers.—*The Sea*.
- (9) The Earthquake of Caraccas.—*Humboldt*.
- (10) The Conquest of Peru.—*Annals of Romantic Adventure*.
- (11) The Conquest of Wales.—*White's Landmarks*.
- (12) Hermann, the Deliverer of Germany.—*Jerrer*.
- (13) The Burning of Moscow.—*Segur's Narrative*.
- (14) The Battle of Thermopylae.—*Raleigh*.
- (15) The Destruction of Pompeii.—*Mugazine of Art*.
- (16) The Taking of Gibraltar.—*Oerland Route*.

#### 2.—SELECTIONS FROM ROYAL READER SERIES.

- (1) Stanzas from "The Princess," p. 13.—*Tennyson*.
- (2) The Unwritten History of Our Forefathers.—*Mackenzie*.
- (3) The Sky Lark.—*Hogg*.
- (4) The Soldier's Dream.—*Campbell*.
- (5) Goldsmith.—*Thackeray*.
- (6) The Charge at Waterloo.—*Scott*.
- (7) Harold Skimpole.—*Dickens*.
- (8) "He giveth His Beloved Sleep."—*Browning*.
- (9) The Black Hole of Calcutta.—*Macaulay*.
- (10) Sunset Wings.—*Rossetti*.
- (11) The Black Prince at Crecy.—*Stanley*.
- (12) The Water Fairy.—*Swinburne*.

#### 3.—SELECTIONS FROM CANADIAN READER SERIES.

- (1) Ye Mariners of England.—*Campbell*.
- (2) The Taking of Roxburgh Castle.—*Scott*.
- (3) The Town Pump.—*Hawthorne*.
- (4) The Cloud.—*Shelley*.
- (5) The Sagacious Cadi—I. and II.—*Household Words*.
- (6) The Canadian Boat Song.—*Moore*.
- (7) Dare to do Right.—*Hughes*.
- (8) The Death of Wellington.—*Disraeli*.
- (9) A Psalm of Life.—*Longfellow*.
- (10) The Eve of Quatre Bras.—*Byron*.
- (11) The Burial of Sir John Moore.—*Wolfe*.

Mathematical Department.

ELEMENTARY ALGEBRA.

1. Resolve  $x^{16} - 65536$  into five factors.  
 $x^{16} - 2^{16} = (x^8 + 2^8)(x^4 + 2^4)(x^2 + 2^2)(x + 2)(x - 2)$ .
2. Factor  $729x^{21} + 343y^{27}$ .  
 $(9x^7)^3 + (7y^9)^3 = (9x^7 + 7y^9)(31x^{14} - 63x^7y^9 + 49y^{18})$ .
3. Solve  $(x+a)(2x+b+c)^2 = (x+b)(2x+a+c)^2$ .  
 $\frac{x+a}{x+b} = \left(\frac{2x+a+c}{2x+b+c}\right)^2$   
 $\therefore 1 + \frac{a-b}{x+b} = \left(1 + \frac{a-b}{2x+b+c}\right)^2 = 1 + \frac{2(a-b)}{2x+b+c} + \frac{(a-b)^2}{(2x+b+c)^2}$   
 $\therefore \frac{1}{x+b} - \frac{2}{2x+b+c} = \frac{a-b}{(2x+b+c)^2}$   
 $\therefore \frac{c-b}{x+b} = \frac{a-b}{2x+b+c}$ . Multiplying out and collecting,  
 i.e.  $x(a+b-2c) = c^2 - ab$ .  
 $\therefore x = \frac{c^2 - ab}{(c^2 - ab) + (a+b-2c)}$ .
4. Which is greater,  $\sqrt{5} + \sqrt{14}$  or  $\sqrt{3} + 3\sqrt{2}$ ?  
 Squaring we have  $19 + 2\sqrt{70} > 21 + 6\sqrt{6}$ .  
 Trans. and div. and  $\sqrt{70} > 1 + 3\sqrt{6}$ .  
 Squaring  $70 > 55 + 6\sqrt{6}$ .  $15 > 6\sqrt{6}$ .  
 $5 > 2\sqrt{6}$ .  
 $25 < 24$ .  $\therefore$  The former is greater.

5. Solve  $\left(\frac{a+x}{a-x}\right)^2 = 1 + \frac{cx}{ab}$ .  
 $\left(1 + \frac{2x}{a-x}\right)^2 = 1 + \frac{4x}{a-x} + \frac{4x^2}{(a-x)^2} = 1 + \frac{cx}{ab}$   
 $\therefore x=0$ , and  $\frac{1}{a-x} + \frac{x}{(a-x)^2} = \frac{c}{4ab}$ .  
 $\therefore \frac{a}{(a-x)^2} = \frac{c}{4ab}$ .  
 $\therefore (a-x)^2 = \frac{4ab^2}{c}$ ,  $\therefore a-x = \pm 2a\sqrt{\frac{b}{c}}$ , or  $x = a\left(1 \pm 2\sqrt{\frac{b}{c}}\right)$ .

6. Solve  $\frac{1+x+x^2}{1-x+x^2} = \frac{62}{63} \cdot \frac{1+x}{1-x}$ .  
 $\therefore (1-x^2) = \frac{62}{63}(1+x^2)$ .  
 $\therefore \frac{1-x^2}{1+x^2} = \frac{62}{63}$ , or  $1 - \frac{2x^2}{1+x^2} = 1 - \frac{1}{63}$ .

Hence  $126x^2 = 1 + x^2$ , and  $x = \frac{1}{6}$ .

7. Solve  $\left(\frac{x-a}{x-b}\right)^3 = \frac{x-2a+b}{x-2b+a}$ .  
 Put  $x-a=k$ , and  $x-b=m$ , and we have  
 $\frac{k^3}{m^3} = \frac{k-(a-b)}{m+(a-b)} = \frac{k-(m-k)}{m+(m-k)} = \frac{2k-m}{2m-k}$ .  
 Since  $m-k=a-b$ . Clearing of fractions and transposing,  
 $2km(k^2-m^2) = k^3-m^3$ ,  
 $\therefore 2km = k^2-m^2$ , and  $k^2-m^2$ , i.e.  $(k+m)(k-m)=0$ ,  
 $\therefore k+m=0$ , and  $\therefore x = \frac{1}{2}(a+b)$ .

If we take  $k-m=0$  we get  $a=b$  which gives no root, since the equation then becomes the identity

$$(x-a)^3 \div (x-a)^3 = (x-a) \div (x-a)$$

From  $2km = k^2 - m^2$  we have by restoring values  
 $2(x-a)(x-b) = (x-a)^2 - (x-b)^2$ . Transpose and,  
 $(x-a)^2 - 2(x-a)(x-b) = (x-b)^2$ .

Add  $(x-b)^2$  to both sides and,  
 $\{(x-a) - (x-b)\}^2 = 2(x-b)^2 = (b-a)^2$ ,  
 $\therefore x-b = \pm \sqrt{2(b-a)}$ ,  
 or  $x = b \pm \sqrt{2(b-a)}$ .

which are the other two roots of the cubic equation

8. Solve  $\frac{4x-17}{x-4} + \frac{10x-13}{2x-3} = \frac{8x-30}{2x-7} + \frac{5x-4}{x-1}$ .

Divide each denominator into each numerator, cancel quotients and we have

$$-\frac{1}{x-4} + \frac{2}{2x-3} = -\frac{2}{2x-7} + \frac{1}{x-1}$$

Add the sides separately, and

$$\frac{-5}{2x^2-11x+12} = \frac{-5}{2x^2-9x+7}$$

9. Solve  $(x+a)(2x+b+c)^2 = (x+b)(2x+a+c)^2$ . See No. 3.  
 Put  $x+a=k$ ,  $x+b=m$ ,  $x+c=s$ , and we get  
 $k(m+s)^2 = m(k+s)^2$ .  
 i.e.  $k(m^2+2ms+s^2) = m(k^2+2ks+s^2)$ . Divide by  $km$

and  $m+2s + \frac{s^2}{m} = k+2s + \frac{s^2}{k}$ . Cancel and transpose

and  $k-m = \frac{s^2}{k} - \frac{s^2}{m} = s^2 \left(\frac{1}{k} - \frac{1}{m}\right) = s^2 \frac{m-k}{km}$ .  $\therefore k-m=0$ ,  
 and  $\therefore km=s^2$ . Restore the values of  $k$ ,  $m$ , and  $s$ ,  
 and  $x^2 + x(a+b) + ab = x^2 + 2cx + c^2$ .  
 $\therefore x = \frac{c^2 - ab}{(a+b-2c)}$ , as before.

Also notice that  $k-m=0$ , gives no root, since in that case  $a=b$  and the equation becomes an identity.

10. Solve  $\frac{x+2y}{3z} = \frac{z+2x}{3y} = \frac{y+2z}{2x} = x+y+z$ .

Each fraction =  $\frac{\text{sum of all numerators}}{\text{sum of all denominators}} = \frac{x+y+z}{x+y+z} = 1$ .  
 $\therefore x=y=z = \frac{1}{3}$ .

INTERMEDIATE AND THIRD CLASS.—JULY, 1883.

ARITHMETIC, WITH SOLUTIONS.

1. Add together  $\frac{7}{8}$  of £13,  $\frac{1}{3}$  of  $\frac{1}{2}$  of £2 12s, and  $\frac{2}{3}$  of 9d.  
 Reduce 13s  $4\frac{1}{2}d$  to the decimal of 19s 6d.  
 $(a) \frac{7}{8}$  of £13 =  $\frac{1}{8}$  of £39. = £5 11s 5 $\frac{1}{2}d$ .  
 $\frac{1}{3}$  of  $\frac{1}{2}$  of £2 12s =  $\frac{1}{6}$  of £2 12s. = 3s 8 $\frac{1}{2}d$ .  
 $\frac{2}{3}$  of 9d =  $\frac{1}{3}$  of 6d. = 2d.  
 Sum = £5 15s 11 $\frac{1}{2}d$ .

- (b)  $13\frac{4\frac{1}{2}}{12} \div 19\frac{1}{2} = 13\frac{9}{24} \div 19\frac{1}{2} = 107 \div 156 = 6858 +$ .

2. Find by Practice the value of 8596lbs. @ £10 18s 7 $\frac{1}{2}d$  each.  
 10s = £ $\frac{1}{2}$

£ 8596	0s	0d	= price at £ 1	0s	0d	each.
			10			
£85960	0	0	=	£10	0	0
4s = £ $\frac{1}{5}$	4298	0	0	=	10	0
4s = £ $\frac{1}{5}$	1719	4	0	=	8	0
6d = $\frac{1}{4}$ of 4s	1719	4	0	=		
1 $\frac{1}{2}d$ = $\frac{1}{8}$ of 6d	214	18	0	=	7	$\frac{1}{2}$
	53	14	6	=		
	£93965	0s	6d	= price at £10 18s 7 $\frac{1}{2}d$		

3. A person borrows \$500 April 10th, and on June 22nd pays the debt with \$510.20. At what rate per annum was he charged interest?

Interest for 73 days on \$500 = \$10.20.  
 " " 365 " \$100 = \$10.20 = 10 $\frac{1}{5}$ %.

4. A man having a certain sum of money to invest has an opportunity of purchasing 7% stock @ 95, but delays until it has risen to 110. What per cent. is his income less than if he had purchased at the first price?

1st income would have = sum  $\div 95 \times 7 = \frac{7}{95}$  sum.  
 2nd " " = sum  $\div 110 \times 7 = \frac{7}{110}$  sum.

Difference =  $7\left(\frac{1}{95} - \frac{1}{110}\right)$  sum =  $\frac{21}{11 \times 190}$  sum.  
 And,  $\frac{21}{11 \times 190} = \frac{21}{2090}$  of 7% ; but  $\frac{21}{2090} = 13\frac{1}{2}\%$ .

5. At an international exhibition one country was awarded 5 gold, 9 silver, and 11 bronze medals; and another 4 gold, 15 silver, and 10 bronze. Find a ratio of values for such medals that these countries may be regarded as equally fortunate.

We have 5 gold + 9 silver + 11 bronze = 4 gold + 15 silver + 10 bronze.  
 Take 4 gold + 9 silver + 10 bronze from each and  
 1 gold + 1 bronze = 6 silver.

6. In a box there is a certain number of sovereigns, three times as many guineas, and twice as many marks (13s 4d) as guineas. Total amount in box = £815. How many coins of each kind are there?

$$20s + 3(21s) + 6(13s \ 4d) = 163s.$$

$$815 \times 20 \div 163 = 100 = \text{number of sovereigns.}$$

$$\therefore 300 = \text{number of guineas, and } 600 = \text{number of marks.}$$

7. Find when first after 2 o'clock the hour and minute hands of a clock make an angle of 60 degrees with each other.

$$60 \text{ degrees} = \frac{1}{3} \text{ of circle} = 20 \text{ minutes on face of clock.}$$

$$\therefore \text{space to be gained by min. hand} = 30 \text{ " " " "}$$

$$\text{It gains } 55 \text{ min. spaces in an hour.}$$

$$\therefore \text{ " " " " } \frac{30}{55} \text{ of an hour} = 32 \frac{2}{11} \text{ min. past two.}$$

8. For each of three succeeding months the population of a town rose 50%; and at the end of the third month was 2,700. What was the population at the beginning of the time?

$$\left(\frac{2}{3}\right) \text{ of } \frac{2}{3} \text{ of } \frac{2}{3} \text{ pop.} = 2,700, \therefore \text{population} = 800.$$

9. Leap year is omitted once every century, except those centuries whose number is divisible by 4. What is the average length of a year?

$$\text{In } 400 \text{ years there will be } 97 \text{ leap years and } 303 \text{ com. years.}$$

$$\therefore \text{average length} = (97 \times 366 + 303 \times 365) \div 400 = 365 \cdot 2425 \text{ days.}$$

$$= 365 \text{ days } 5 \text{ hrs. } 49 \text{ m. } 12 \text{ sec.}$$

10. A cube is formed of a certain number of pounds avoirdupois of a substance, and the same number of pounds Troy of the same substance. What proportion will a side of the cube bear to a side of a cube formed of the same number of pounds as before, but all avoirdupois? (175lbs Troy = 144lbs avoirdupois.)

$$\text{1st cube cont. No. lbs. Troy} + \text{No. lbs. avoird.} = \frac{3}{2} \text{ No. avoird.}$$

$$\text{i.e. } \frac{1}{2} \frac{2}{3} \text{ lbs. avoird.} + \text{No. lbs. avoird.} = \frac{3}{2} \text{ No. avoird.}$$

$$\text{2nd cube cont. No. lbs. avoird.} + \text{No. lbs. avoird.} = \frac{3}{2} \text{ No. avoird.}$$

$$\therefore \text{Weights i.e. volumes are as } 319 : 350.$$

$$\therefore \text{Sides " " } \sqrt[3]{319} : \sqrt[3]{350}.$$

$$\text{Or as } 6 \cdot 832771 : 7 \cdot 047298.$$

DALHOUSIE COLLEGE EXAMINATIONS.

JUNIOR MUNRO BURSARY COMPETITION, 1883.

GEOMETRY,

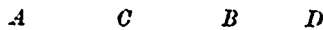
WITH HINTS AND SOLUTIONS.

1. Enunciate the axiom you employ in proving the main properties of parallel straight lines; and thereafter prove them.

The principle is Euc. ax. 12 or H. Smith post. 6. The chief properties of parallel straight lines are those stated in I. 29.

2. "If a straight line be bisected and produced to any point, the rectangle of the whole line thus produced," etc. Complete the enunciation, prove the proposition, and give its algebraic equivalent, with explanations.

Bk. II., prop. 6. For algebraic proof see Potts's Geometry, p. 101. A short proof of this theorem is as follows:—



Sq. on CD = sq. on CB, the rect. CB, BD, the rect. CB, BD, and the sq. on BI (II. 4).

But rect. CB, DB = rect. AC, BD,

And rect. CB, DB with the sq. on BD = rect. CD, DB (II. 3).

Also rectangles AC, BD and CD, DB = rect. AD, DB (II. 1).

∴ Sq. on CD = sq. on CB and rect. AD, DB. See CANADA SCHOOL JOURNAL, November, 1879, p. 253, for short proofs of all the propositions of Book II.

3. On a given straight line describe a segment of a circle containing an angle equal to a given angle. Book III. 33.

4. If a and b units respectively are the lengths of the adjacent sides of a rectangle, find the area geometrically. Hence also deduce a rule for finding the area of a trapezoid.

See Hamblin Smith's Geometry, pages 95, 96 et segg.; Potts' Geometry, page 100.

5. Any chords of a circle are so divided that the rectangles of their segments are all equal. Find the locus of the points of section of the chords.

See Hamblin Smith's fig. 35, p. 166. Take O, the centre, and join it with the points of intersection P, Q, R, etc. It is easily

shown that OP = OQ = OR = etc. ∴ The locus is a circle concentric with the given circle.

6. Make a right-angled triangle with its base equal to a given line and its area equal to the difference of two given scalene triangles. To be done without the aid of any parallelogram.

Place the bases of the scalene triangles in the same straight line. Let x be one-half this line. Draw the perp. from each vertex to the base, and from the greater cut off a part equal to the less. Let y = the remaining part. From the extremity of x draw a perp. = y, and form the right-angled triangle, this triangle = difference of given triangles. If x be not = the given line, take a point, p, in x, or x produced, so as to make it = the given line. Join p and the vertex of the right-angled triangle already described. From the acute angle at its base draw a straight line parallel to the line joining p and the vertex, and meeting the perp. or the perp. produced in k. Join k and p, this is the hypotenuse of the required triangle. It is easily shown that the part it cuts off is equal to the part annexed.

7. BAC is a given angle. The extremities of DE, a line of given length, are in AB and AC respectively, while DE is pushed through its possible positions. Find when the triangle DAE is a maximum.

The areas of all possible triangles having the same base and vertical angle will be measured by half the rectangle of this base into the several perpendiculars from the vertical angles. Therefore the triangle will be a maximum whose perpendicular is greatest. It is easily shown that the perpendicular which bisects the base is the greatest possible, and that in that case the triangle is isosceles.

Correspondence.

To the Editor of the CANADA SCHOOL JOURNAL.

SIR,—You would very much oblige me by giving correct answers to the following questions in the next issue of your JOURNAL:—(1) Can a teacher compel the trustees of his school to put a lock on the school door and on his desk? If so in what way? (2) Can a teacher hold the trustees responsible for any property of his either taken or destroyed through their neglect to furnish sufficient locks for the doors, etc.? (3) Is it unlawful for a teacher to punish a pupil by striking him anywhere excepting on the hand? (4) Is a teacher more liable to be punished for using a rawhide than any other instrument of punishment in school? (5) Is it requisite for a teacher to have a doctor's certificate for only a week's sickness in order that he can collect his salary in full? (6) Can a teacher collect his salary for any days lost through inclemency of the weather? (7) Is a teacher required to stay in school all day with only one pupil? (8) If there are no pupils present at nine o'clock to commence school with can the teacher close the school for that day? (9) Can the trustees compel a teacher to re-admit a pupil (whose presence is injurious to the school) after he has been suspended, without the approbation of the teacher? As I cannot find satisfactory answers to these questions in the School Act, and seeing some queries made by teachers and others in your JOURNAL, I take the liberty of asking you for answers to these as far as possible. And by so doing you will confer a great favor on one of your subscribers.

I have the honor to be, etc.,

Arnott, Feb. 18, 1884.

M. C. H.

REPLIES.

(1) No; but if he has any tact he can easily get all he wants without compulsion. (2) No. (3) No; but the teacher who resorts to indiscriminate beating deserves to be fined. (4) Yes; if the teacher got a taste of the rawhide himself now and then he would soon see the inhumanity of using it. A soft strap, two inches wide and eighteen inches long, is the only instrument allowable, and the strokes should be on the hand and on the hand alone, and they should be counted whenever it is necessary to use the strap. The teacher who uses a rawhide has no case before a magistrate. (5) Yes. (6) Yes. (7) Yes; if the trustees insist on it, but surely very few trustees would be so absurd. (8) We should say the teacher should wait for half or three-quarters of an hour before closing the school. (9) The teacher can only suspend a pupil, he cannot expel without the consent of the Board. If the Board does not consent he must admit the pupil. But he may again suspend the pupil for a definite time if his conduct does not improve. We should say that a month would be about the extreme limit of a teacher's power of suspension. It is highly desirable for the Board and the teacher to act in harmony in all cases of discipline.

## Special Articles.

## READING AND ELOCUTION.

BY C. TURNER, C.M., LONDON, ONT.

The subject of this article is one that no teacher can afford to neglect, but which, nevertheless, has failed to command the attention it deserves.

Every one likes to hear good reading. Still, it cannot be denied, I think, that there are few really good readers amongst us. Many people, otherwise well educated, are sadly deficient in this respect. And even of those who claim to be the instructors of our adult population, such as ministers and lecturers, but few are able to read well even their own compositions, much less those of other authors. Indeed, the art of reading is sadly neglected in many of our universities, English public schools, and other seats of learning—so that while students may be eager enough to qualify for Matriculation, for Honors, for Fellowships, for Degrees, and other distinctions, the great majority of them take little or no pains to fit themselves for reading in public. If they can read for study; read a favorite author for pastime; read the daily papers; read the current literature of the day as found in magazines and reviews, it is too often considered a sufficient accomplishment. Mathematics, Physical Science, Music, Drawing, Authorship, have their votaries, but the art of correctly, forcibly, and attractively rendering one's own thoughts, or the thoughts of others, is so seldom pursued for its own sake, that we are forced to the conclusion,—either that the public do not require good readers to entertain them, or readers themselves fail to see the importance of reading and recitation as an art. It is, therefore, the exception, and a very rare one, to the general run of readers, when we listen to the captivating eloquence and soul-stirring deliverances of a Macready, a Dickens, a Montgomery, or a Bellevue. Thanks to the freedom of the Press, and the spread of education, we have, in both Hemispheres, many eminent scholars, scientists, artists, and divines, but the proportion, I repeat, of really good readers is lamentably small. Yet the school curriculum does not exist, I presume, in these days in which reading is not included as a part, and may be, an important part. I have examined the time tables and schedules of studies in many schools on both sides of the Atlantic, and have not yet met with any that excluded reading; still the fact remains, that reading is *heard*, but certainly not *taught* in many of our schools as it should be.

So far, my remarks have had reference rather to the higher, and, as we say, better educated classes. Here we find culture, refinement, good breeding, and in short, the highest and purest forms of civilization. Is the charge of general deficiency in the power of good reading equally true of the lower orders of society? I believe it is. Speaking from my own experience I do not remember a single school in which reading was taught as a *specialty*. That is to say, there is not within my own recollection any school—night school, day school, private school, public school, college, or university, where reading received the same share of attention as mathematics, or arts, and sciences. Surely, you will say, this is a grave charge to make,—so I grant it is, nor is it ill founded, for, as I have said, I have carefully compared the results presented in Blue Books, Inspectors' Reports, Prize Lists, and other means of reference—such, in fact, as are open to any one of us; and I am driven therefore to the inevitable conclusion, that, though the public are now-a-days *great* readers, they are not by any means what may be called *good* readers. They read *much* it is true, of both good and bad literature, but most of it is done mentally. Very few of us care to read *aloud*, either alone or in *company*. Hence public reading is too often out of the question.

My friends, is this as it should be? Both the English Government and the Canadian Government, and also that of the United States have done much toward remedying the evil I complain of, by providing Programmes of Instruction, in which reading is made to take an important part in every day's routine. The decree has gone forth—Every child must be educated and every child must *read*; and so important has reading been considered as an element in our school curriculum at home, that of the "three R's," as they are called,—Reading, Writing and Arithmetic,—reading has, for many years, been allowed to stand at the *head* of these elementary subjects. The Committee of Council on Education in Great Britain, has, through its responsible minister, the Vice President, so altered what we call Art. 28 from time to time, that reading, like other subjects, has been made more and more a test of the efficiency of a school—and wisely so, for, if children cannot read well, what progress can they be expected to make with the grammars, geographies, and other text books which are put into their hands? So that, if children are not now taught to read well, it is clearly not from any *unwillingness* on the part of your Government or ours. We have Governmental and Departmental sanction and prescription enough, and to spare, I might almost say; yet I fall back on my original statement, and I say advisedly, our people, as a rule, are not *good* readers.

The question then arises—What is it that constitutes good reading? I will try to answer this as briefly and clearly as may be, and then proceed to enquire into the *causes* of this wide-spread fault in our educational system.

I confess I feel some little diffidence in finding fault with the way in which an important branch of school work is accomplished, and I trust I may be pardoned if I say anything at all calculated to discourage any of our number in the great and arduous labor in which we are all more or less engaged, but Holy Writ has declared, "Faithful are the wounds of a friend," and it is as a friend and adviser I wish to be considered. It is perhaps easier to say what good reading is *not* than what it is. For example,—it is not merely the correct pronunciation of the words, or a scrupulous attention to stops, or even a due regard to the laws of emphasis and accent; it is not the rate—now fast, now slow—of delivery, as the case requires; it is not the mere utterance of so many words in parrot-like fashion,—it is all these and more. A person's reading may be highly satisfactory in all these respects so as to please the most fastidious listener who requires nothing further, but *good* reading: it cannot be called, for it lacks the soul, the fire, the nervous energy, the enthusiasm which catches the author's spirit, and, sympathizing with the listener, speaks from *heart* to *heart*. There is something in the kindling eye, the earnest tone, the spirited gesture of such a reader which chains the attention, and enlists the warmest emotions of the listener which is simply irresistible.

It is something more than "reading with expression" that we want. How is it that certain public speakers, lecturers, preachers, and others are called "eloquent"? Just because, in their addresses they have the power of working upon the feelings and persuading the minds of their audiences. It is not only that they are fluent and distinct and polished. Such a speaker invests the subject in hand with a halo of glory, so that the enthusiasm which is his has become yours and you lose sight of the man in the commanding flow of words and burning sentiment. There is, to my mind, no greater intellectual treat than to listen spell-bound to the fervid utterances of a really eloquent speaker. And *Elocution* is eloquent reading or recitation. There is the same charm in the one as in the other. Why is it that people, the most illiterate, as well as the highly educated, take so much delight in listening to plays, operas, and the like? It is not only the scenery, the dresses, the music,



and so forth of the actors, but because we see the genius of the author as it were reproduced, we see the action suited to the word, we listen to men and women who, having studied their part, and grasped its spirit, know how to impress it upon their audiences. An actor makes that seem real which is only apparent to the ordinary observer of the printed page, who only sees the words, but does not discern the soul that dwells in them. On the stage we have elocution in its most cultivated forms, but I see no reason why good reading, expressive reading, polished reading, eloquent reading, should be confined to the stage.

I can never forget the thrilling pathos and fiery enthusiasm which a former pupil of mine used to throw into his reading. His rendering before the whole school of such pieces as Byron's "Waterloo" has many a time chilled my blood, as, with the onward sweep of his eloquence, he has carried us in spirit to that bloody field, there to behold "rider and horse, heaped and slain in one red burial blent." While listening I lost sight of the boy and his name in what he was saying. So too, have I listened to the impassioned delivery of the late Rev. Morley Punshon, whom some of your readers may remember having heard in this country. His style of reciting the "Lays of Ancient Rome" was a treat never to be forgotten. His graphic rendering of the immortal lines describing how "in the brave days of old" the Roman heroes defended the bridge, was such that you could see the characters, the scenes, and the thrilling incidents of the struggle. I have said enough, however, to show that to be a truly effective reader, one must be perfectly natural—the reader must throw himself, heart and soul into his subject; and, other things being equal, his success is certain.

I do not, however, forget that it is not adults we instruct, but children. We cannot therefore be expected to produce results like these. Neither, perhaps, is it desirable that our boys and girls should be trained to be actors and actresses. The public do not expect it, nor is it practicable, if they did. The fitful attendance of many scholars, the incapacity of some, and the indifference of others, are all against us however much we may strive to accomplish great things, and I, for one, do not claim to have made any discovery of what might be done under more favorable circumstances. We must be content to take things as they are and make the best of them. All I contend for is, that, under existing circumstances our youth should be so instructed in the art of reading as at once to increase their general intelligence, and to cultivate their powers to the fullest extent. Is this reasonable, or is it Utopian? Is it not possible to produce better readers with the materials and means at our command? Is it enough for a boy to read or recite the "Charge of the Light Brigade" pretty much as a parrot might be taught to say it? Cannot a child be trained to read "Excelsior" or "Evangeline," "The May Queen," or an extract from Dickens or some other popular author in something of the style that would please the writer himself could he be present to listen? For my part, I believe it is. I have myself heard boys of some twelve or thirteen summers recite the "Evidence of Sam Weller," "The Conjugating Dutchman," "The Spanish Champion," an adventure at the "Natural Bridge of Virginia," and other selections, both grave and gay, in a manner which left little to be desired. Evidently, then, it can be done, and when done is always found to be productive of both pleasure and profit to all concerned. It only remains for me now to proceed to enquire into the drawbacks in our educational system which prevent us from accomplishing as much as we could wish in this matter. These are not far to seek:—

I have said this is an age of readers. It may also be fitly called the Examination age. This is a factor not to be lost sight of, for now, more than ever, requirements are being constantly increased, so that what children knew formerly is a very small portion of what

they must now acquire. Their knowledge is tested and sifted so that little time is left for the due cultivation of reading as it should be. They must write, spell, compose, cast up accounts, and so forth,—all with a view of helping them to earn their livelihood. As for reading, an errand boy, a clerk, a boy behind the counter, need not be very proficient in the art. On the other side of the Atlantic the demand is for technical instruction; here, it seems to be for a business education; so that, provided a boy is expert in figures, and holds "the pen of a ready writer," he is in most cases considered qualified for any ordinary employment, as shop-boy, errand-boy, team-driver, or clerk. If his living depended on his reading powers, we may be sure he would not neglect the reading lesson any more than his daily bread. But the demand is not so much for readers, as for good writers and ready reckoners. Hence, much of the apathy I have complained of.

Then again, the range of subjects is so wide that but little chance is given for the thorough training good readers require. Two hours a day in the higher, and an hour and a half in the lower, is the very least that should be devoted to this subject, in order that every boy and girl may have individual opportunity given for practice. I am persuaded that less than this will not suffice to bring our children up to the standard of excellence I have marked out. Under the present regime can this be allowed? I fear not. All teachers will bear me out when I say, that to give a reading lesson properly requires no little patience and forbearance. I say properly, for of course time was, when teachers were content to listen without any attempt at correcting the mistakes of their pupils. But that day has gone by,—the teacher must now be ever on the alert. He cannot afford now to be merely passive,—simply the "figure head" of his class. He must be quick to hear, careful to point out errors, and firm in requiring the repetition by every child in the class, if need be, of the same sentence or passage, until it be done to his entire satisfaction. All this takes time. It may be a slow process, but it is thorough, and thoroughness pays in the end.

When the lesson is mastered in detail, it is a good plan to call upon one or more to stand out in front of the class, and read the lesson or portion of the lesson through—the class meanwhile being required to take note of the reader's attitude, his pronunciation, modulation of voice, and attention to stops. The class is thus actively engaged in listening critically. A little judicious questioning at the end will serve to bring out the faults, if any. Of course in the lower classes, where the elements are being taught, these remarks do not apply. But in every class a safe rule is—"little and well." You know the amount of time allotted for the lesson; let part of it be taken up by illustration on the blackboard, by explanation of words and phrases, so that the children get an intelligent notion of the subject matter. To read with expression, a child must first understand what he reads, and in order to do this, no lesson should be given without the aid of chalk and blackboard; so that the class may be taught through the eye, as well as the ear.

I have now pointed out a few of the drawbacks in our educational system; I have shown, very imperfectly it may be, what good reading is, and the causes why good readers are so scarce; I have also ventured to suggest a few hints for the proper treatment of a reading lesson, and if I have in any measure succeeded in throwing out a new idea or contributed anything that may be of service, I shall feel myself amply rewarded for my pains.

The teacher's work is often described as noble. It is also arduous and toilsome. If, however, we each act on Solomon's principle of doing everything with "all our might," not merely because our work is to be tested by inspection, but because we are doing what in us lies towards the enlightenment of the rising generation, we shall surely succeed. "In all labor there is profit." We may not live to see the full effects of our labor, but at least let it be said of each of us—"He hath done what he could."

## THE WORLD'S CHEMICAL CONGRESS.

Somewhat more than a century ago the chemical elements determined to organize themselves into an association, the better to become thoroughly acquainted with each other as well as keep abreast of the times, especially in their own department. They could not but recognize and deplore the fact, they said, that seldom without the intervention of man could they be brought together, and when this was the case it was not always possible to preserve the most amicable relations. They determined, therefore, without further delay, to establish a new and better order of things, and for this purpose a general meeting of all the chemicals was immediately summoned. The assembly was to convene at the library of Dalhousie College, Halifax, N.S.; and I, as representative of the Practical Chemistry Class, was cordially invited to be present.

A few minutes before the hour, what a curious spectacle I witnessed! Oxygen, a middle-aged, portly-looking gentleman, entered the room. He was walking at a pretty lively rate and looked as if on very good terms with himself and all the world. Hydrogen, a young gentleman, next stepped along very lightly. Nitrogen soon followed, quite alone and apparently wishing to monopolize attention. I am told this is his usual habit; he seems to have no associates who really care for him, as it is their belief there is nothing in the man. His qualities are not promising, although he has an interesting family of five who follow closely behind. A word about one or two of these may not be out of place. The eldest is not of much account—like his father exactly. The second is, however, a lively chap and full of innocent fun. He is always laughing, and never happier than when he keeps others in a roar. The next two are not so well liked. (One of them, Hyponitric Acid, may be known by his ruddy color.) But the youngest is the best of all the boys. He is extremely useful and unflinching in the cause of right. There is not one of the richest or proudest of the metals—the very chemical *élite* in fact—with whom he will not come in contact if necessary, and will even attack the aristocratic Lord Gold himself, on which occasions, with a little help from his friendly neighbor Hydrochloric Acid, he has been known repeatedly to make his enemy disappear before you could say Jack Robinson.

And so they severally came along; it would weary you to tell all that was seen that day. Mrs. Carbon, an old lady with a large diamond ring on her finger, now hobbled up with the aid of a stick. Her two daughters accompanied her, Carbonic Oxide and Carbonic Acid, each in a blue dress of the latest fashion. In many respects these sisters resemble each other; they are both desperate flirts, and with their dancing steps dazzle many a poor man to destruction. The youngest, especially, has been the death of many by her treacherous arts.

The metals of whom mention has been made walked, I notice, pretty much by themselves, though they sometimes tried to edge closely to Mr. Oxygen, who, quieting each with his usual affability, seemed willing, if possible, to divide himself up among his friends.

But I must hurry on. The meeting, when some forty or fifty persons had arrived, was called to order. Oxygen, owing probably to his important standing in the community, was unanimously voted the chair. One crusty old fellow, Fluorine, seemed to disagree with this and did, it is true, move in amendment Hydrogen, which Squire Alcohol (or Spirits of Wine, Esq., as he preferred to be called,) seconded, but as he was partly in liquor this motion was not put. Thus were these two quietly overruled, the antipathy of each to Oxygen being notorious. Hydrofluoric Acid was made Secretary—he could (sk)etch and write pretty well, making use of a wax tablet that he pulled from his pocket; he performed his work as neatly as you or I could probably have done on paper. Iron

was Treasurer. This position of trust he received, being a very useful person, a tenacious friend, and one to be depended upon at all times. No show or boasting about old Iron! Yet how could any one do without him? It being thought advisable to appoint a policeman, Mr. Silver was proposed, but some one fearing that, like his *confreres*, he might be rarely seen when wanted, and he himself declining the office, Lead acted instead, it being known that he could come down pretty heavy at times, as also his ability to run well might be of service. On a general committee served Chlorine, Potassium, Zinc, Tin, and a few others whose names I didn't hear.

The following constitution was then adopted, additions to be made by a two-third vote of members:—

1. This meeting shall be called the "World's Chemical Congress."

2. Its object shall be to benefit science and promote kindly feeling among ourselves.

3. A Convention shall be summoned, to take place once in a century (hereafter on the anniversary of the birth of our esteemed chairman), in the city that shall, during that time, do most to advance the cause of science.

4. Convention to meet alternately with closed doors. When the public accept our invitation to be present, they will be expected, individually or through delegations, to respond willingly and at once to any suggestion that we, as a body politic, may, for the good of the whole, propose.

(Here, I confess, I uttered a sound, for I could not help wondering what work in this direction might even now be assigned me.)

The chairman then rose and addressed the meeting. He thanked them for the honor done him, said that he was glad to see so many present, especially from among the younger members, as also some that lived, as many knew, at a great distance. He was quite aware it must have been difficult to so many to have put in appearance on so short notice, and the fact that they had done so argued well for the future interest they would take in the cause. He urged them all to proclaim boldly their (chemical) principles everywhere; they were members of a great and glorious Brotherhood, though in its comparative infancy; one that had in fact often rent the globe—(here a whole host of young combustibles, led by the Sulphides and Chlorates, started involuntarily to their feet)—and one that, with their united force, or even that of one alone, could wholly destroy it—(here Nitro-glycerine, taking the compliment to himself, so loudly applauded and gave such signs of excitement, that he had to be publicly reprimanded by the policeman, who, knowing him to be a dangerous and notorious personage, threatened to lead him into "durance vile" if he couldn't keep quiet. This for a time made him subside). Mr. Hydrogen, the Government M.P., was then called upon to speak. He alluded to the friendly relations that subsisted between the chairman and himself. They never ("well, hardly ever") clashed, but had always united for the promotion of the public weal. (Hear!) Did a city require water for drinking purposes? It was they that had laid their heads together until the refreshing fluid flowed in abundance. Had artificial light been required? Again they had done what they could to assist. It was by his almost unaided efforts (he mentioned this modestly) that for years the aeronaut had been enabled to cleave the atmosphere, and he could adduce other instances to prove his use to the community were it necessary. In conclusion, he would earnestly beg each member present to make it a point of doing at least some one thing by which his fellows might be benefited. During the cheering which followed the door suddenly opened, and Drs. Antimony and Arsenic entered. These gentlemen were well-known physicians, of great celebrity. They expressed their regrets at not being able to have been present at the hour named, as they had been detained by a bad poisoning case that had just happened in Paris, (at this their

pale-faced assistant White, of Egg, looked whiter than usual, probably in recollection of the late sad accident, and even Litmus changed color.) Thereupon the Chairman suggested the propriety of a specimen sketch of testing for poisons being given, with diagrams, to which the surgeons kindly assented; and in a short time made the matter so plain that one or two young rascals present were heard to wish that some one might be found to experiment upon. Quicksilver, on hearing this, testified his willingness to procure a fit and proper person, having had experience in the like before, and being nimble-footed, began at once to run. This was going too far, and the meeting was again called to order.

To vary proceedings, a song was now called for. Hydrogen willingly responded, and by the aid of instruments and appliances of glass succeeded in a few moments in making a succession of agreeable sounds which were generally well received, though a few young ladies affected to be very much amused. Lord Gold asked permission to introduce a young friend of his, which request having been granted by the committee on introductions, Thallium, a young marquis who had spent his life abroad, was presented to the audience and requested to favor the meeting. On rising His Excellency said, *inter alia*, that he never remembered being in this country before, but on the occasion of this visit he was so prepossessed in its favor that he hoped that he should be able to spend much of his time in it in future. His Excellency was therefore heartily applauded and cordially welcomed to the platform.

The Congress was not without its laughable incidents too. I remember noticing particularly a young man, who looked as if he couldn't keep still a moment. He was wonderfully excited. Occupying perhaps the coldest part of the room, he yet seemed to complain everlastingly of the heat, and if he heard the slightest thing that differed from his own sentiments he flared up till actually I thought he would fire with rage. What a very inflammable young gentleman he was! All at once he suddenly disappeared, amid the laughter of the greater part of the audience. It seems that in one of his caperings he had gone pretty well back upon the window sill where he had been sitting. Some one (I believe it was that mischievous rogue old Nitrogen) had shyly given him a little push, tipped him over, and here he was cooling himself in the large water butt just outside of the window. No one seemed sorry, nor did any one run to his assistance, all no doubt feeling that he was now in a very safe place. Overhearing two brother metals talking of him, I learned that his name was Phosphorus, a relation of Farmer Phosphate, of Phosphate Grange, and that when the fit was on him he was a most dangerous character.

The entertainment committee now stepped forward and said they would be happy to show the members a few experiments. This was well received, though Magnesium, a lad of about ten years, was bold enough to say, "Only give me a chance and I'll do as much in this way as the whole of you." Aluminium, an Irishman, readily muttered, "Schist (just) wait till I come forward." Major Nitrate, of Strontian, and Colonel Crucible did most of the superintendence and exhibited beautifully colored flames and performed a number of interesting tricks with Pharaoh serpents, fireworks, &c., while between times they recited songs and told laughable incidents. Many a fair cheek blanched and grew pale as the gallant colonel related anecdotes of the war and the fire that he was often called upon to stand. Mineral Chameleon was also induced to act his part, which he did in his usual happy way and with his customary success.

The investigation committee here reported that application to join the Congress had been sought by the organic elements. This body set forth that they were virtually of the same stock as the other, though differing in some things and often separated, and on the principle of union being strength they felt they could be much more effective if united. They contended that a natural benefit might in this may be expected to result. The document was of considerable length and duly signed in proper form, Dowager Starch, Lady Chloroform, Mrs. Ether, and Miss Acetic Acid (a sour

old maid) heading the list. Revds. Drs. Glucose and Glycereno, and Revds. Messrs. Chloral and Morphino had also signed their names. It was decided to grant the request and admit them all—their sisters and their cousins and their aunts, a numerous fraternity, and with a decided similarity in name—with the exception of Strychnine, Prussic and Oxalic Acids. The former was a butcher, a cowardly cruel fellow; the other two ill-fated wretches, according to the statements on oath of Drs. Analysis and Microscope, phrenologists of about sixty years, and who, from long experience and close observation could test pretty well. Further, it was shown that politically they were rabid Nihilists, wishing nothing to exist and always trying to destroy human organizations.

Old Mr. Copper, a shipbuilder here rose and said that as the evening was pretty well advanced, he would respectfully move that the other members be requested to be prepared to do their part by way of entertainment at next meeting, young Nickel, a jeweler, seconding the motion, which was at once carried. Names being solicited, Hon. Bismuth, M.P., an old member volunteered a speech; Calcium to perform a variety of sublime experiments; Lawyer Blowpipe, in a puffy, vigorous style, promised to exhibit the latest improvements in glass blowing; Sodium and Potassium, each an essay, prefaced by a short biographical sketch, while the useful and witty Sodium Chloride volunteered a composition of his own which he had carefully prepared. Ammonium mumbled something, it was hard to know what, but as he lived in dissipation it was thought best not to depend on him. Among the ladies, Mrs. Cobalt promised to exhibit some curious specimens of writing, and Miss Chromium her choice collection of paintings. A debate by four or five of the younger members was also provided for.

Arrangements, too, were made for the celebrated artist, Nitrate of Silver, to be present at the next session and photograph the congress at its early sitting.

The Secretary read an apology for absence from Earl Platinum, than whom none has greater weight and importance. The Earl telegraphing from South America, begged to forward his best wishes for the interests of their cause.

Sheriff Sulphur in a flowery speech proposed, and Farmer Silicion (a Grit) seconded, that the thanks of the meeting be tendered to the following parties:

1. The editor of the *Chemical World* for his gratuitous services.
2. The several travelling companies for their favors, being especially grateful that Judges Nitrogen-Terchloride and Fulmonite of Mercury, both of them shaky old gentlemen of a peculiarly choleric temper, had been carried along in safety, and
3. Mr. Oxygen, for the genial and able manner in which he has discharged throughout the duties of the chair.

I need not tell you that these motions passed unanimously.

The chairman in rising, according to custom, to make the farewell speech, said he begged to thank the meeting for the confidence they had reposed in him, as well as for their cordial vote of thanks. He testified to the good order and harmonious feeling that had prevailed throughout (*hear!*), though a few young molecules and atoms had run about a little, one or two surly chaps, as Chlorine, Bromine, Phosphoretted Hydrogen, and Hydrosulphuric Acid, had with their usual disagreeableness endeavored more than once to interrupt proceedings in their own peculiarly offensive manner. He begged that the conduct of the last however more especially might be overlooked, as he was the most useful and important working agent the society had.

In conclusion, he stated that they would be asked to meet again (D.V.) a century hence, place and time to be definitely stated through the publication committee at a later date. After singing together the national anthem, dedicated to their patroness, the Goddess of Science, the members quietly and sadly dispersed. I regret not being able to give all the words of the hymn. I could only catch a few lines, Red Oxide of Mercury nearly precipitating me to the ground in his haste to get away, and my thoughts being with those who had been my companions, but who even now were rapidly departing. Perhaps by next session, in the year of grace 19—, some other friend of science may be more fortunate and be able to furnish the world with the complete anthem. The lines I remember something like these:—

"May each to other e'er prove true,  
Do all the good that he can do,  
And as the countless ages run,  
Prove God and science ever one."

## NOTES OF TALKS ON TEACHING.\*

## READING.—PHONICS.

I propose to speak to-day of the use of the spoken word in assisting acts of association between the idea and the written word. It is very often urged that the spoken word is sufficient to recall its appropriate idea, and thereby bring about an act of association between it and the written word. That, as the ideas are already in the mind of the child, the spoken word alone is needed to recall them. Those who hold to this doctrine fail to understand the great economy of mental action that is brought about by the stimulus of the object. Were I to teach you a foreign language, German, for instance, how much quicker and easier you would learn the words if I were to present the objects and speak or write their names. This is thoroughly understood to-day by the best teachers of modern languages. If we adults can learn a foreign language so much easier by the object method, it can be readily inferred how necessary the use of objects is to the little child. When the old habit of learning spoken words is carried over into the learning of written words, that is, after a hundred or more words have been learned, probably the spoken word will then be sufficient to bring about the required acts of association. When a child does not need the stimulus of objects, pictures, etc., then their use should cease. Any good teacher will not fail to observe when this time comes to the child. The spoken word, then, aids in recalling the idea, and at the same time names the written word. The spoken word is associated with the written word, so that it recalls the written, and the written recalls the spoken. Deaf mutes learn the written words without the intermediate help of spoken words, and it is found that with the use of objects these unfortunate beings learn written words with as much, if not greater, rapidity than the children who have perfect hearing. Notwithstanding this fact, the spoken word has a use in learning to read, but it may be badly misused. For instance, when it is associated with the written word alone, and the written word is not associated with the idea. In this case, the reading is not the getting of thought, and, therefore, not real reading, but simply mechanical word pronouncing without the slightest inspiration from the thought. There are methods of teaching reading, whose sole aim is to train children to pronounce words with little or no regard to the thought. To the casual observer the results seem surprising. To the real teacher they are the sounding of empty words. The use of the spoken word, then, in teaching reading, must be to assist in acts of association. To use them for any other purpose is a hindrance in learning to read. The question, then, is, How can spoken words be used to help associative acts? The spoken words have been acquired by the child before he enters school. He knows how to make every sound in the language, and to combine them in pronouncing all the words he knows. He has learned the spoken words as wholes, and is not conscious of the elementary parts of a word, although he can combine them without the slightest hesitation. The spoken word consists of the articulation of one elementary sound or a succession of elementary sounds. An elementary sound, with the exception of the sound of *h*, requires for its articulation a certain fixed position of the vocal organs. Change the position of the vocal organs, no matter how slightly, and the sound must change. Between a few combinations of two sounds the articulation continues, producing peculiar modifications of sound brought about by various positions of the vocal organs that they must take in changing from the position required by one sound to that of another. If, however, these glides were made between each and all of any combinations of the sounds of the language, the intermediate

sounds would be innumerable. As it is, forty sounds are all that are given in making the spoken words of the English language. In changing, then, from the position of the vocal organs required to make one sound, to that of another, there must be, except in glides, an actual suspension of sound. In pronouncing ordinarily, these pauses between sounds are too short to be perceptible to the ear. Make these pauses perceptible, and we do, what I think is wrongly termed, spell by sound. As phonic analysis has nothing whatever to do with spelling, is oftentimes a hindrance rather than a help to English spelling, I prefer to call the act of articulating each sound with a perceptible suspension of the voice between two sounds—slow pronunciation, following the German term—*langsamer aussprache*. Now, it should be borne in mind, that in reality the spoken words alone are pronounced slowly, the written words cannot be. It is a mistake to say that certain letters have several sounds, several sounds are represented by one letter. The process by which a word is made to recall a spoken word, or a letter is made to recall a sound, is exactly the same as that by which the written word recalls the idea—viz., the process of association. When the first word is learned, the spoken word is associated with the written word. The spoken word and written word are learned as wholes. I have tried to show that the written word is fixed in the mind by writing it. That when one word, for instance, *rat*, is taught and written, the word *cat* can be more easily seen and more easily copied; for the word *cat* contains two thirds of the forms of the previous word. In this way we see that as the different forms are impressed upon the mind, the repulsion of the word, or the difficulty in grasping it is overcome, and successive associations made easy. In the same way the spoken word may be associated with the written words, so that the written words will recall the spoken with greater ease. As the written words become more clear in the mind, the separate parts of the written word may be associated with the separate articulate sounds, so that the difficulties in the acts of association may become less and less; that is, new words may be pronounced and known at sight. The great danger is, that children may be trained to the skilful pronunciation of words without knowing them. A word is only known when it recalls its appropriate idea.

There are two great obstacles in the way of the successful teaching of the so-called phonic analysis. One is more apparent than real, and that is, the fact that different sounds are represented by the same letter in the English language. In a purely phonetic language (which, by the way, does not exist), each sound is represented invariably by one character. If the English language were phonetic, it would greatly lighten the burden of learning to read and write. But a careful examination of the words learned by a child will show that the difficulties are not so great as they are often represented to be. If we begin, for instance, with the short sounds, a child may learn at least two hundred words that are purely phonetic to him. I have calculated and classified the words in thirty-nine pages of the New Franklin Primer, in the whole of Monroe's Charts, and in the first forty pages of my Supplementary Reader, First Book. There are 456 words in all; 205 of which are purely phonetic, 216 are words whose pronunciation is indicated by their form; and only the 35 remaining may be called entirely unphonetic. After a child learns this number of words he has formed a fixed habit of learning new words, and all active use of primary methods may cease. What, then, is the use of burdening the child with mangled and twisted print or diacritical marks? Phonics may be used as a great help in teaching primary reading, if the natural growth of the child's power is carefully followed.

The second difficulty in teaching phonics is found in the apparent opposition of the word and phonic method. The word must be learned as a whole, and any early attempt at word analysis simply

\* Notes of Talks on Teaching, given by Francis W. Parker, at the Martha's Vineyard Summer Institute, July 17 to August 19, 1882.

retards the teaching. The struggle to analyze a new word, or to build it up from parts, as I have already explained, absorbs the attention and prevents the act of association. These two methods, that seem to be in direct opposition to each other, may be entirely reconciled by closely following well-known mental laws. The child, as I have said, knows how to make all the sounds in the language in their word combinations. He is not conscious of a single separate element. Obviously, the first step to be taken is, to bring these elements slowly to his consciousness. This may be done by training the child to pronounce words slowly (spell by sound). I have found by repeated experiments that the little child will understand me when I pronounce words slowly in a natural manner, nearly as well as when I pronounce in the ordinary way. The child may be trained by imitation to pronounce slowly with great readiness and skill. This should be carefully done before any direct association is made between articulate sounds and the word that represents them.

One of the greatest activities of the mind is the coming together of like to like. It may be called the law of analogies. It begins, as all good things do, in perfect unconsciousness on the part of the child. When a child says, "I seed," for I saw, and "I goed," for I went, the child is unconsciously following this law of analogies. The same law is in operation when the child spells all words phonetically, without regard to the absurdities of English spelling. Using phonics, in teaching reading, in the proper way, simply intensifies this law. If the word method were used, pure and simple, the child's unconscious mental activity would seek out and use the analogies of the language, in associating new written words with the same sounds he has learned to associate with them. When we teach words in phonic order, as, for example, rat, fat, cat, mat, sat pat, this law of like coming to like in the mind is made more effective. But when at the proper time the articulate sounds are consciously associated with the letters that represent them, we use this mental activity in the most economical way. Great care, however, should be taken not to force the growth of this mental action so as to conflict with the other and more important law of learning words as wholes. These whole words cannot be analyzed until they are clear mental objects. The process, then, of using phonics may be given thus: First, train the child to recognize words when pronounced slowly. This may be easily done, if the teacher pronounces slowly in easy, natural tones. The greatest obstacle that I have found in phonics is the inability of teachers to do this. Second, train the child to pronounce slowly by imitating the teacher's voice. All this should be done, as I have said, before any direct association of articulate sounds is made with written words. Third, after a few words are taught, let the teacher in writing words give each articulate sound as she makes the character that represents it. Do not require the children to imitate the teacher until they do so of their own accord. Fourth, have the children begin to pronounce slowly, without even a suggestion from the teacher, the words which she writes. Phonics may be thereafter used with great effect in teaching reading. Thus, you will observe, that by this process the spoken word retains its unity as long as it is necessary, and the way is carefully prepared for the conscious analysis of words when the proper time comes. This will be indicated by the child's own spontaneous action.

All new words, then, that come within the child's acquired analogies of sound may be readily associated with their appropriate idea with little or no aid from the teacher. Give the child the power to help himself as soon as possible, and at the same time please remember not to violate any known laws of his mental growth.

He who is the most slow in making a promise is the most faithful in the performance of it.—*Rousseau*.

## Examination Papers.

### UNIVERSITY OF MANITOBA.

PREVIOUS EXAMINATION, MAY, 1883.

Examiners:—T. C. L. Armstrong, M. A., LL. B. ; Rev. O. Fortin, B. A. ; Rev. Prof. R. Meiloché.

#### MACBETH.

1. State what you know of the history of Shakespeare's *Macbeth*, with dates.
  2. Give proofs from the play itself that it is one of the poet's later productions.
  3. What use does Shakespeare make in his plays of (a) irregular metres, (b) rhyme, (c) prose? Quote instances from *Macbeth* in proof of your views.
  4. Scan the following lines, and paraphrase extract (d) :
    - (a) Ban. "As far, my lord, as will fill up the time  
Twixt this and supper; go not my horse the better,  
I must become the borrower of the night  
For a dark hour or twain."  
Macb. "Fail not our feast."  
Ban. "My lord, I will not."
    - (b) "Authorized by her grandam. Shame itself!"
    - (c) "My thought where murder yet is but fantastical."
    - (d) "Let your remembrance apply to Banquo:  
Present him eminence, both with eye and tongue  
Unsafe the while, that we must lave our honors  
In these flattering streams, and make our faces  
Vizards to our hearts, disguising what they are."
  5. (a) "'Tis safer to be that which we destroy,  
Than by destruction dwell in doubtful joy."  
(b) "Come, seeking night,  
Scarf up the tender eye of pitiful day,  
And with thy bloody and invisible hand  
Cancel, and tear to pieces that great bond  
Which keeps me pale."  
(c) "Rather than so, come, fate, into the list,  
And champion me to the utterance."
- (1) Refer each extract to the speaker and tell the circumstances under which it was uttered.
  - (2) The first, (a), is taken as an instance of poetic irony. Explain.
  - (3) Explain the italicized words in each.
  - (4) Point out any rhetorical figures you detect.
6. Explain the grammar of the following extracts:—
 

"Whiles I threat he lives;  
Words to the heat of deeds too cold breath gives."  
"There's daggers in men's minds."  
"The cloudy messenger turns me his back,  
As who should say," etc.  
"Of all men else I have avoided thee."  
"I am in blood  
Stepped in so far that, should I wade no more,  
Returning were as tedious as go o'er."
7. Contrast the characters of *Macbeth* and *Lady Macbeth*, and show how the punishment of each satisfies the demands of poetic justice.

Time—Three hours.

#### ENGLISH LITERATURE.

1. Write a short note on the alliterative poetry of the Anglo-Saxon period.
2. Give some account of the English drama prior to the time of Shakespeare.
3. Contrast the German and the French influence on English Literature. Mention the periods when each has been felt, and some English authors who show the characteristics of each.
4. Name the chief classes of poetry and the characteristics of each class.

5. Write a note on the ballad in English Literature.
6. Characterize Wordsworth as a poet. Did he conform to his own canons? Name his chief works.
7. What are the great periods of English Literature? Tell the leading features of any of them.
8. Write a note on the progress of English prose, showing its various phases and some of the most distinguished prose writers.
9. Write a short essay on the nature and influence of the modern novel.

COUNTY OF PEEL PROMOTION EXAMINATIONS,  
APRIL, 1883.

ARITHMETIC.

FIRST TO SECOND CLASS.

1. Write in words:—1010; 7009; 62001; MDCCCLXXXIII; CMXLIV.
2. Write in figures:—Nine hundred and eight; six thousand seven hundred and one; and in Roman Numerals:—676; 1475; 893.
3. From 101608 take  $4786 - 235 - 1386 + 48 + 36435 - 72$ .
4. Find the difference between 486923279 and 507843016.
5. A farmer had 14 horses, 16 more cows than horses, and 5 more sheep than the number of horses and cows together. How many animals had he altogether?
6. Willie had a hundred marbles, he lost 50, gave 5 to James, 9 to Tom, and 7 to John; how many had he left?
7. A lady bought 3 hats at \$8 each, 6 pairs of boots at \$4 a pair, 3 pairs of gloves at \$2 a pair, and a dress which cost \$35; how much did all cost?
8. A man paid \$135 for a horse and \$208 for a carriage. For how much must he sell them both to gain \$86?
9. Set down the multiplication table of 4 times, 7 times, and 9 times.
10. John has 186 marbles; he wants to divide them among three boys. To the first boy he gave 47 marbles, to the second 19 more marbles than to the first, to the third the remainder. How many marbles did each boy receive?
11. Find the sum and difference of 876453 and 375674.
12. A owns 475 acres of land, B owns 96 more acres than A, C owns 847 acres, and D owns as much as B and C less 135 acres. How much land do they all own?

ARITHMETIC.

SECOND TO THIRD CLASS.

1. Find the product of 897650 and 65040.
2. Find the product of the sum and the difference of 5089 and 4879.
3. What would 120 geese cost at \$1.37½ cents a pair?
4. How many cows at \$45 each should be given for 480 sheep at \$18 each?
5. How many lbs in a bushel of wheat? of oats? of barley?
6. Find cost of 4800 lbs of wheat at 95 cents a bushel; 1700 lbs of oats at 37½ cents a bushel; 3600 lbs of barley at 70 cents a bushel.
7. Solve by using factors;  $876987 \times 132$ ,  $768940 \div 96$ .
8.  $87698745 \div 1883$ .
9. A and B have together \$7200. A has \$200 more than B. How many horses at \$70 each could B buy with his share?
10. 18 chairs cost £72. What would 24 chairs cost at the same rate?

GEOGRAPHY.

SECOND TO THIRD CLASS.

1. What is a river? a lake? a river basin? a strait? an isthmus? a continent? an ocean?
2. Name two rivers of Peel, and the townships through which they flow.
3. In which river basin are Bolton, Alton, Streetsville, Brampton, respectively?
4. How would you go from Bolton to Brampton by railroad? from Alton to Malton? Keep within the county in both trips.

5. Name the county town of Peel, also its incorporated villages, and the townships in which they are respectively situated.
6. Name the High Schools in Peel and locate them.
7. In what part of the county is stone most abundant? Where would you find sandy hills? Where are there woollen mills?
8. Name the oceans and continents, and tell what oceans wash the coasts of North America.

COMPOSITION.

THIRD TO FOURTH CLASS.

1. Punctuate the following sentences, inserting capitals where necessary:—  
three fishers went sailing out into the west  
out into the west as the sun went down  
each thought of the woman who loved him the best  
and the children stood watching them out of the town  
for men must work and women must weep  
and theres litle to earn and many to keep  
though the harbor bar be moaning  
rev dr mcleod was editor of good words he died ad 1872 when hrh  
the duke of cambridge was conducting the review near london  
the shah of persia presented him with a sword.
2. Transpose into the natural prose order the three stanzas of "The Wreck of the Heperus," beginning "Then up and spake an old sailor."

LITERATURE.

THIRD TO FOURTH CLASS.

(Pages 209 and 210 Third Reader.)

1. What is the meaning of 'solitude,' 'monarch,' 'sages,' 'divinely,' 'sallies,' 'cordial,' 'fleet,' 'despair,' 'reconciles'?
2. Tell what you know about Alexander Selkirk and about Cowper.
3. Verse 1, line 5—Why does 'Solitude' begin with a capital letter? Line 6—Whose face is meant? What charms had sages seen in it?  
Verse 2, line 1—For what noun does 'I' stand? Line 3—What does he call 'sweet music,' and why? Line 6—What were 'tame,' and why?  
Verse 3, line 4—For what nouns does 'you' stand?  
Verse 4, line 4—What land does he mean? Line 7—To whom is this said?  
Verse 5, line 3—How fast does a tempest go? Line 5—What is meant by 'arrows'?
- Verse 6, line 8—What reconciles man to his lot?

HISTORY.

THIRD TO FOURTH CLASS.

1. Give dates for discovery of America, discovery of Canada, taking of Quebec, confederation of Canadian provinces.
2. For what is each of these men famous, viz.:—Jacques Cartier, Wm. Pepperell, Pontiac, Montcalm, George Washington; Frontenac, Marquette, Tecumseh?
3. Give the geographical position of each of the following places, and mention a historical event associated therewith:—Acadie, Montreal, Pittsburg, Niagara, Detroit, Chateauguay.
4. Who were the United Empire Loyalists?
5. In what respects does the Government of Canada differ from that of the United States?

ARITHMETIC.

THIRD TO FOURTH CLASS.

(Full work required; no credit for answers only.)

1. Find the sum of all the following numbers:—Six thousand and four, and eighteen thousandths; eight hundred and fifty, and six hundred and five ten thousandths.  
Nine, and six thousand and fifteen millionths; seven hundred and six, and forty-seven hundred thousandths.
2. A goldsmith manufactured 2 lbs, 3 dwts. 8 grs. of gold into rings, each containing 9 dwts. 16 grs.; he sold the rings at £2 10s. each; how much did he receive for them?

Practical Department.

BLACKBOARD WORK.

BY MISS ELLEN A. FOLGER, CONCORD, N. H.

In these days the blackboard has become an indispensable part of the school room furnishings. I will speak of a few of its uses. We naturally think of it first as being used during recitations in arithmetic. Besides having pupils work out different examples on the board, I have found it a good plan to send the whole class to the board to work the same example. Suppose I am teaching any point in arithmetic and wish to see if it is understood, I send the whole class to the board, having beforehand seen that a supply of chalk and erasers is ready.

Some one may say, "I can't endure such a noise as the whole class will make in going to the board." Very well, assign to each pupil his permanent place, divide the class into sections and number each section, and have pupils take their places as the number of their section is called, each pupil can then quietly and quickly take his place. While the class are doing the work given out by the teacher, she has time to notice what each is doing, and to see the weak points. Some one may think that this gives pupils a good opportunity to copy a neighbor's work if they are so inclined. By being careful in assigning places to pupils this difficulty is almost overcome. It is wise to separate friends. Put the dull children where you can see their work easily, and where no bright one will be near whose work will be a temptation to dishonesty. Put the best scholars in such places that others can't easily see their work. If each pupil is working they will have little time to look around. Sometimes it is well to have alternate ones do the same work.

To get quick work it is a good plan to let the one who finishes first say one, the next two, and so on. If the teacher wishes to test her pupils on processes and not answers, it is an excellent plan to read examples to the class and have them express by figures and signs the operations to be performed. In this way, in a very short time, she can ascertain whether they grasp the relations which the different parts of the problem have to each other. The work of the whole class can be examined much quicker at the board than if they work on slates at their seats and the teacher goes round among them.

But arithmetic is not the only branch in which the blackboard is of use. In teaching language or grammar, whichever you choose to call it, it is equally useful. Suppose you wish the pupil to give you an interrogative sentence; many times the child will give you a correct sentence, but when asked to write it, will end it with a period. While it is often well to send the whole class to the board to write sentences illustrating some point, it is also a good plan to send part to the board and have the others criticize what is written.

In history, geography, or any branch that can be taught topically let part of the class write a topic on the board one day and part another day, if there be not time for all to write or recite in one day. Many mistakes in spelling, pauses, and capitals will be made at first; but train the class to correct the work, and an improvement will soon be visible. Hold the one asked to correct, responsible for all mistakes made in correcting.

While drawing on the blackboard is a good practice, I would not have the boards covered with drawings which are allowed to remain there for months. The blackboards should be for use, and not solely for ornament. Nearly every branch can be better taught by using the blackboard than without it, and it is equally useful in all grades. What is shown to the eye is usually better remembered than if only heard.

3. Divide 228 lbs, 6 oz. 2 dra. 2 scr. by 76.
4. Define measure, multiple, *G. C. M.*, fraction, terms of a fraction.
5. Simplify:  $-682\frac{1}{2} - \frac{2}{3}$  of  $\frac{1}{4} - 1059 + \frac{2}{7} \div 75 - \frac{1}{2}$  of  $\frac{1}{8}$ .
6. What is the smallest sum of money with which I can buy an exact number of pigs at £1 10s. 0d. each, or of lambs at £2 15s. 0d. each, or calves at £5 5s. 0d. each?
7. A man went to town and sold to a storekeeper 5 bags of potatoes, each containing  $1\frac{1}{2}$  bushels, at 55 cents a bushel;  $8\frac{1}{2}$  lbs of butter, at 20 cents a lb; and 66 eggs at 15 cents per dozen. He bought with the proceeds 25 yards of cotton, and had \$3.36 left; what was the price of the cotton per yard?
8. Of what number is  $3\frac{3}{4}$  the  $\frac{2}{3}$  part?
9. Two trains start at 8h. 5m. a.m. from stations A and B, 450 miles apart, and approach each other, the former at the rate of 30 miles an hour, the latter at the rate of 42 miles an hour; when will they meet, and at what distance from B?

10. Prove that if the terms of a fraction be multiplied or divided by the same number, the value of the fraction is not altered.

11. A owned a farm of 240 acres, 3 roods, 4 perches, 10 sq. yds. He sold to B 59 acres, 3 roods, 6 perches, 18 yards, and divided the remainder equally among his three sons. How much did he give each?

12. Arrange in order of magnitude (greatest first) the following fractions:—

$$\frac{2}{3}, \frac{3}{4}, \frac{1}{4}, \frac{1}{2}, \text{ and } \frac{3}{7}.$$

GRAMMAR.

THIRD TO FOURTH CLASS.

1. Analyze:—
  - (a) In the basket he found two parcels.
  - (b) Where was the little boy yesterday?
  - (c) Finish your work before school time.
  - (d) Oh! you hurt my foot.
2. (a) What kind of a sentence is each of the above.—Declarative, Exclamative, Imperative, or Interrogative? Give reason for your answer in each case.
  - (b) Write another sentence of each kind.
3. Parse:—"This horse ran away yesterday and ran down the hill very fast."
4. Combine the following sentences into one simple sentence:—  
A fox saw some grapes. They were in bunches. The bunches were very fine. The fox was passing through a vineyard.
5. Correct errors in the following, giving reasons:—
  - (a) That writing is done very good.
  - (b) It was wrote last night.
  - (c) He had came before I left.
  - (d) Will we help you?
  - (e) Was you or me there first?
6. Write:—
  - (a) A sentence containing a noun in apposition.
  - (b) One containing a predicate adjective.
  - (c) One containing a noun in the possessive case.
  - (d) One containing an adverbial phrase.

(Under-score your example in each sentence.)
7. Write a letter to a friend describing the neighborhood in which you live, and the occupation of some of its people.

GEOGRAPHY.

THIRD TO FOURTH CLASS.

1. Define watershed, arctic circle, tide, delta.
2. What and where are Mississippi, Three Rivers, San Francisco, Regina, Notre Dame, Nelson, Ohio, Alleghany?
3. Name, in order, the States bordering on Canada and the Great Lakes; also give their capitals.
4. Draw a map of Ontario, showing the chief rivers and lakes, and the cities.
5. Give the position of the places named below, and state for what products they are noted:—Cariboo, Fraser River, Madoc, Goderich, Maryland, Ottawa, Black Hills, Petrolia, Georgia.

STRUGGLE ON.—Like it, or dislike it, this is the law, namely, that the teacher must either resolve and strive, or fail. There are no obstacles which will not go down before the fire and charge of enthusiasm and energy.—*Central School Journal.*

Although in many schools the blackboard is used too little, there is such a thing as carrying blackboard or slate-work to an extreme. It is well to accustom pupils to mental work with nothing before the eye representing the subject under consideration, for pupils can't always carry with them a slate and pencil.

The teacher must be careful not to keep her pupils standing too long at a time. I know of one teacher who used to tire her class exceedingly by her thoughtlessness in this matter. Twenty minutes is long enough to keep a class standing at a time. By a little care a teacher can so arrange the work that no one position is kept very long at a time.

The greatest objection to blackboard work is the chalk-dust. That is unavoidable, but it can be lessened by getting good erasers and allowing them to be used only at a given time. Otherwise some children will use them continually, and make much unnecessary noise and dust. Some noise is inevitable, but I agree with the one who said he "preferred the noise of activity to the stillness of death."

### WHAT CONSTITUTES A TEACHER ?

M. E. M.

Is a person fitted for the position of a teacher because he can pass the examination required to enable him to draw his pay in case he can secure a school? In far too many cases he is not, and ought not to attempt school work. It is one thing to be able to get the required knowledge, but a more difficult one to be able to impart it to others understandingly. Sometimes the ability to teach seems to be a natural gift, but that instinct of teaching that does not require cultivation, is very rarely found. The gift of teaching is not given to us as the bird knows how to build his nest, or the spider to weave his silken web, we are to learn it by experience and by constant efforts to be a better and more earnest teacher. Every one acknowledges the necessity of study in order to pass the dreaded examination; but this once over, too many teachers fail to realize the need of further study, forget to search for the best ways and means of reaching the child mind. As the success of our school depends mainly upon our own efforts, we need to make everything work to our advantage; if we fail to reach our highest expectations we become more earnest in our efforts.

In saying that the teaching gift is seldom a purely natural endowment, I do not call it of little importance, far from that, it is of the highest importance, and even with the most liberal talents and the best literary acquirements we often make failures in our work.

In the press of life's routine of duties, we too often forget the souls looking to us for guidance over life's difficulties. We all need the "growth of higher feeling within us, bringing strength to help us in our weakness." We are responsible for the kind and amount of preparation which we make before entering upon our work. We can not measure this responsibility when we consider that the material upon which we are to work is "jewels" of the costliest type, the structure we are to build is to endure through all eternity, and the influence of this structure is to be felt until time shall cease.

There are many faithful teachers in the land; they enter the school room and carry with them love for the work that transforms the dingy room into almost palaces. They are not satisfied with the achievements of the past, but read and think that they may be better workers; although they may not gain attention from the world, they are doing good work, and in after years, amid life's busy scenes, some one will say of their lives, I owe it to my teacher. Such a monument is more lasting than granite.—*The Moderator.*

### THE TEACHER'S POSITION.

It is much easier to see the defects in any system than to suggest feasible remedies, and it is difficult for those who are not actually engaged in the work of teaching to appreciate fully the difficulties in the way of educating the masses. In all professions, except perhaps teaching, some credit is given to experience and professional training. If a man consults a lawyer, he gives the lawyer credit for knowing more about the law than he does, and he governs himself accordingly. So in medicine, the opinion of a physician is entitled to considerable weight. All other professions are treated with a like consideration. There is, unfortunately, in many communities a tendency to treat the educator differently. Many persons with no experience in the work of teaching, and without any appreciation of its difficulties, feel as competent as the most experienced and successful teachers to decide what the needs of the school are, what studies should be pursued or abandoned, and how schools generally should be managed. Years spent in careful study and investigation do not seem to command that consideration in teaching which they receive in other professions.

One of the suggestive lessons of the hour is the periodical election of persons to positions on school boards, who propose to revolutionize entirely the methods and workings of the schools. As a usual thing these revolutionary members, on a better acquaintance with the schools, take a very different view of the whole matter, and frequently become zealous champions of the schools. No more useful members are sometimes found on school boards than these very men.

What the schools need is intelligent and honest criticism. There is no doubt that there are many and serious evils connected with our present system of public schools. It is likewise true, with the crowded condition of our school houses, poor ventilation, absences of pupils from school, teachers appointed not for ability but for other reasons, meagre salaries, little inducements for men of ability to remain in the profession, that the results are at least commendable.

An encouraging sign is the healthy growth of public sentiment, and the prevalence of more rational views on educational methods.—*Educational News.*

### PRACTICAL COUNSEL TO CANDIDATES FOR EXAMINATION.

Mr. J. G. Fitch, one of Her Majesty's senior Inspectors of Schools, in addressing the students of Stockwell College, said:—

"I cannot be unaware that the examination of next week is necessarily uppermost in your thoughts. A great deal of your professional success will depend upon the result of it. Being a person who in his time has been a good deal examined, and one, moreover, who has had a good deal to do with the examining of others, it may not be amiss if I give you a word of practical counsel. I have known well-qualified students fail to do themselves justice through want of attention to two or three simple matters. The knowledge which you have been diligently accumulating in the past years will not tell in the examination unless you can set out, clearly and concisely, the result of that acquisition on paper in a limited time. To do this it is necessary that you should have all your faculties at command. Now, no one is ever made calm or self-possessed by being told to be so, but there are two or three simple devices by which this end may be partly attained. In the first place, then, carefully read through all the questions before you begin to answer any; a little time spent in this way at first is time well-spent. Then I think it is a good plan to begin with the question which you feel



you can answer best. By the time you have come to the end of your answer you will be surprised to find how much of confidence and self-possession you have gained, and how much less formidable other questions appear. Before you attack any question study the terms of it carefully. An examiner generally takes pains to word his questions so that there can be no doubt as to what he does and what he does not want. But in reading examination papers I am often surprised to see how many very good answers are written to questions which are not asked. At first glance a question may seem like one you have seen before, or may seem to demand something which you know well; you begin hastily, and discover too late, or perhaps never discover at all, that your answer is irrelevant. I will give you an instance. At last year's examination this question was set in history: "Describe the causes that led to the American War, and some of the most important consequences that resulted from it?" A number of students plunged briskly into a full account of the American War. Perhaps they had recently had a lecture upon it. So Bunker's Hill, Lexington, the character of Washington, and I know not what besides, were discussed at length; whereas, you see, the examiner had advisedly set a question which did not ask for these details at all; but only for some of the previous and succeeding circumstances. I daresay that as he struck out answer after answer for irrelevancy he grew rather displeased, and, between ourselves, it is never very good policy to put an inspector into an ill temper.

#### THE NEW CODE AND OVER-PRESSURE.

The controversy turns mainly on the one accusation that there is great pressure in Elementary Schools, and that burdens too heavy for them to bear are placed on weak and dull children. The National Union of Elementary Teachers asserts this as a fact of wide application, the Department admits its truth in exceptional cases. "My lords are quite ready to admit that in the 18,000 Elementary Schools now receiving Parliamentary aid in England and Wales, as in all other places of education, instances of overpressure occur; and that in some cases more is required of individual scholars than they are able to accomplish." The important question is, Can the charge be fairly urged in the case of classes of children, or does it apply only to exceptional instances of dull and stupid children?

By the assailants of the Code it is urged that the percentage principle must, from the conditions under which it is applied, press heavily upon large classes of children. The ill-fed, ill-clad, badly housed, neglected children in large towns are to be counted by thousands; and yet the same standard of knowledge is demanded from them as from the well-fed, well-clad, well-housed, carefully tended children of artisans and small tradespeople. On the side of the Department it is urged that "the course of instruction, under the Code, so far as it is obligatory, can be easily mastered by a child of ordinary health and intelligence," who attends regularly and is properly taught. It is hinted that teachers "fail to distribute the work fairly over the whole period of the scholars' attendance, or to teach diligently throughout the year," so that they are obliged to resort "to a system of special effort and preparation during the few weeks or months immediately preceding the Inspector's visit." From our own tolerably wide experience of schools, we must say that this charge is unjust. We have been often struck with the prompt alacrity with which teachers on the day after an examination have begun to prepare for that in the following year. We are convinced that, as a rule, they do their best throughout the year, although as the Inspector's visit approaches they become painfully conscious that unless very strong measures are taken a number of children must fail. They therefore work them up during extra

hours, sometimes, we fear, at the cost of their own health as well as that of the children. We greatly fear that the requirements of the Code are as much in excess of what the very poor children can master, as they are below what children paying 6d. or 9d. a week could accomplish. The Department has not yet learned that classes differing widely from each other send their children to be taught at Elementary Schools, and that we never can have a thoroughly satisfactory Code until this is recognized. In defence of the Department Sir Francis Sandford says that there "is a mistaken, but apparently a common idea, that a sufficient grant is to be earned only by teaching a large number and variety of subjects." Some schools may have erred in this respect, but the mistake is not general: 491, 723 children failed last year to pass in arithmetic, 383,198 in writing, and 228,453 in reading; only 185,137 were presented in specific subjects, and of these about a third failed.

The blame of irregular attendance the Department seeks to throw on teachers and managers, and especially on teachers. "With regard to irregular attendance, it should be borne in mind that this can be checked by nothing so effectually as by the co-operation of managers and teachers with the local authorities in the exercise of the compulsory power. That co-operation is often wanting." We believe, on the contrary, that managers and teachers do, as a rule, their very best to secure regular attendance. Many of them take infinite trouble to effect it. It is true that some teachers are more skilful and attractive than others, and that they can achieve results denied to those who have not their special gifts; but when the great majority work to the best of their ability, it is unjust to throw blame upon the less successful. There seems to be a notion abroad, and we fear that it is entertained in Whitehall, that poor people, with scanty means, liable to sickness, compelled to adapt themselves to the requirements of employers, can send their children to school as regularly as parents who have servants at command, and who never need the services of their children. The Department may mean by their implied censure that managers and teachers are to be blamed because they do not push the powers of compulsion to the extreme point which the law allows, by enforcing fine and imprisonment on the father of every child who does not regularly attend school. If that is the Department's idea of the co-operation which managers and teachers should give to the local authorities, we are not surprised that it thinks them wanting in their duty. On no other hypothesis can they be blamed, and we cannot but think that they would set the country in a flame if they so carried out the law.

We do not doubt the anxiety of the Department to adapt its demands to the fair requirements of the country; we have every confidence in the uprightness and equity of the Inspectors; but it must be remembered that whilst their occasional visits may enable them fairly to test the literary progress of the children and the discipline and manner of conducting the schools, it gives them no clue to the difficulties which children have to conquer in order to attend school and to the obstacles thrown in the way of their learning, by poverty, starvation, frequent removals from school to school, and the incessant demands made upon their time by the exigencies of home life. —*School Guardian (Eng.)*

#### THE TEACHING ART.

In glancing at the reports of the various normal schools one turns naturally to see what specific work is done by each to prepare the pupils to become teachers. Some normal schools take this position at the outset: there is no such thing as teaching one how to teach. In other words, they deny that teaching is an art. This reduces every such school to the position of a high school, and no small number are merely such.

Others give lectures or talks to the pupils that have some relevancy to school-room work; the subject of moral influence is the one usually discussed. But even in these schools the main thing is to drill the pupils in text book knowledge. The principal is: Rouse the pupil to self activity and he will be a good teacher.

A very few normal schools attempt to teach the art of teaching. They discuss the principles of the art daily until a firm foundation is laid in the pupil's mind. This is one source from whence real teachers come.

There is another source. Out of a thousand young men and women who began to teach ten years ago, and who for twelve months tasted the time of their pupils, a number saw they were really blind leaders of the blind. Some determined to come out of their darkness. Continuing to teach and to search for light, they stumbled upon certain rules of action at least. They found at least that when certain things were done in a certain way, the pupils were interested and got their lessons. Some having more of the scientific spirit than others (the scientific spirit being the desire to classify like objects) found fixed principles to guide their action. It is from this source the large part of the skilful teachers of the country have sprung. And in spite of the increase of the normal schools, from that source most of the skilful teachers are to come, for the schools have increased faster than the normal schools.

Thousands of teachers possess no acquaintance with the art of teaching, with them it is the art of hearing lessons. The young man who graduates as a physician is quite likely to follow as dull a routine as the teacher. He concludes a patient has malaria and prescribes quinine, or that he is bilious and prescribes blood-root and sinks back into his old self again.

To acquire the art of teaching, the pupil must set to work to study daily and hourly the mode by which the mind acquires growth. Suppose a man had never heard of elimination of one of the unknown quantities of an equation; suppose he considers the matter, tries experiments, he will, if he goes on, reach at last the three modes by which it is done; then in solutions he will apply one or other of these. It is in this way the mind must work in attacking the problems of teaching.

The teacher has been told that spelling is to be taught by arranging the pupils in rows ("toeing the line" usually), and beginning at one end to "put out words" until all the words have been spelled. The thoughtful teacher will ask, *Why* do I do this? What is it to learn to spell? What position does the word stand in, in relation to the idea? etc., etc.

The questions that could be asked about this very simple (?) matter will set the teacher to thinking; many knotty questions will present themselves. But the teacher must ask and must answer them. In the same manner he will take up the subject of number. In this way he lays a foundation for the art of teaching, and it is the only way.—*N. Y. School Journal.*

## LESSON ON COMMON OBJECTS.

BY E. J. HALLOCK.

### WATER.

*Specimens and apparatus required:* A pitcher of water and two glasses. If convenient, obtain a bottle of salt water, one of hard water, and another of rain water; also some of dirty water and lime water, together with some salt, sugar, soap, charcoal, sand, filter paper, ice.

The teacher may begin the lesson by pouring some water into the glass and asking each of them in turn, or all in concert, to name some of its properties. "What can you tell me about water?" is a good form of question. Tell nothing, but hear everything, and try to draw out such answers as these:

Water is a liquid; it has no color, no smell or taste, is cold, is wet, is heavy.

Then you may ask them if they can see through it, and tell them that such things are called *transparent*.

*What shape is it?* Pour it into different vessels to show that it will take any shape, but is always flat on top. All liquids do this. If you can borrow a carpenter's level, it will interest the class still more.

Fill the glass even-full of water, then insert one or two fingers and ask, "*Why does the water run out?*" A little talk over this will lead them to discover that two things cannot occupy the same space at the same time. If the class are old enough one of them may be told to write the word "impenetrability" on the black-board.

*What is water good for?* Among the answers will be to drink, to wash in, perhaps the boys will say to fish or swim in.

Throw some salt in the water and when it has disappeared ask *where* it has gone. Some will be sure to say it has *melted*; tell them that is not the right word, and after a while, if no one can give the correct word, tell them it has *dissolved*. All through the course care must be taken to prevent the use of *melt* or *fuse* where *dissolve* is intended. The subject of solution can be made very interesting.

If you can't see the salt how do you know that it is really there? Take two glasses exactly alike, fill each half full of water, put salt in one and not in the other; then turn your back to the class and change them so they will not know which has the salt in it, and on placing the glasses before the class ask them to find out (not guess) which is which. Some one will probably think of tasting, and may be allowed to do so. Taste, then, proves the presence of what we cannot see in this case. After a considerable quantity of salt has been dissolved in the water, evaporate a little of the solution to show the class that you can get back whatever has been dissolved in it. A teaspoon two-thirds full of the brine may be heated over any kind of lamp and in a few minutes the water will go off and leave the salt, which will begin to snap and crack (decrepitate). Another proof of a substance in solution is obtained by evaporation.

Continue adding salt and show that a limit is soon reached where the water will not dissolve any more; it is saturated; it can be compared to a person who has eaten his fill and can eat no more. The experiment may be repeated with sugar, but only a small quantity of water should be taken, as sugar is very soluble. They will notice that some things are more soluble than others.

Throw some clean sand in a glass of water; it soon settles. *Is it soluble?* of course not. Stir in some clay or any earth that is near at hand; it does not dissolve nor does it settle.

*How can we get it out?* Some one may say, strain it; and this can be done. A piece of filter paper (to be had of any druggist or photographer), is cut to a circle folded twice to a quadrant, such as is formed by the hands of a watch at 3 o'clock, (also at 9 o'clock), and on partially opening it, it will fit in a funnel; wet it to keep it in place and open the pores. Through this the muddy water may be filtered; a portion, and sometimes all of the dirt will be removed. Show them that salt and sugar cannot be filtered out. *Why not?*

Dissolve hard white soap in water until it will not take any more; if it forms any flocks or sediment filter it, or strain it. Put it in a bottle and label it "soap solution." Fill a small bottle half full of rain water, then pour in a very little of this soap solution, and shake it; call attention to the foam. In another bottle put some hard water, drop in the same quantity of soap solution and shake it; no foam will appear until a good deal more of the soap solution is added. (If naturally hard water is not easily obtained, add a little lime-water to ordinary water, and use this for "hard water.") Try to make soap suds with hard water, and show how difficult it

is to do so. (If the class are quite young omit the hard water paragraph.) A piece of boiler scale or some "fir" from the inside of a teakettle may be exhibited at this point, if to be had.

*What is ice? How can we change ice into water? Water into ice? Effect of heat on ice; on water.* Boil some water and hold a cold plate in the steam and let some condense on it. Ask what becomes of water when it "boils away."

Procure a clay pipe with as long a stem as possible,—some are ten inches long. Fit the bowl over the neck of a small, thin bottle or phial containing some warm water and caulk it with wet paper, or, better, a piece of an elastic band. This forms a rude still, or retort, and several drops of distilled water can be obtained by warming the phial very carefully. (Try this beforehand.) Set the bottle on a sand-bath, made by putting a little dry sand in any small tin dish, or the lid of a baking-powder box, and support it upon three long spikes driven in a block of wood, so that it will be high enough to slip a small alcohol lamp under it. (If a test tube can be had it will need no sand-bath.) The object of the sand-bath is to distribute the heat evenly, but much heat is wasted.

An alcohol lamp can be extemporized from a low, flat bottle, such as an ink bottle, or vaseline bottle. Fit a cork, bore a hole in it, and put in a small tube of glass or metal through which to pass the wick. The tube of a metallic penholder, or the end of a wooden one will answer, and can be made to cut its own way through a soft, thin cork. If you succeed in heating the bottle without cracking it, and the pipe-stem is kept cool, distilled water will drop from the end of it. (Explain *distil.*) By attaching the bowl of the pipe to the spout of a five-cent teapot, by means of a cork, better results are obtained, but the class cannot see it as well.

*What is rain water? Where does it come from? How does this differ from distillation? Why and how does a pitcher of ice water generally "sweat?" Is the steam on the kitchen window on a cold day distilled water?*

Evaporate some distilled or rain water, and show that there is no residue left. Melt some clear ice and evaporate this also.

Put a few drops of black ink in a glass of water, or enough to make it look dirty. Filter this through the filter paper; if it is not clear put some fine sand in a funnel, and on this some charcoal finely powdered. Pour the inky water on this and it will soon run through clear. Repeat with red ink, or red wine. For older classes enlarge upon the importance of filtration for drinking water.

Pour some alcohol in the water; it disappears. *Has it dissolved like the salt?* How do you know that it is still there? The class will answer, "taste it," but you can tell them there is another way, namely, "smell it."

Pour some kind of oil on water and shake well, asking what will happen. As it comes to the top, ask them to explain it. *Has it dissolved like the alcohol? Why does it float?* They will notice that water dissolves some liquids and not others.

If you can obtain some alcoholic tincture, or strong spirits of camphor pour some in water. It is milky. Camphor is insoluble in water.

Pour some alcohol on a plate and set fire to it without telling what it is, and ask, *Is that water? Why not? Will water burn?*

Drop a lighted match or splint in water. *Why does it go out?* Speak of the use of water to extinguish fires.

Rub a very little grease on a pane of glass—the perspiration of the hand will often suffice—and show that water will not wet it, but forms round drops.

Hold any vessel of cold water, which is dry on the outside, over the flame of the alcohol lamp; it becomes covered with dew or drops of water. Even when there is no water in the alcohol this will take place. The water has been made from something in the alcohol, and something in the air. It would be going too far to explain how, but it may be stated incidentally, that water is always made by burning oil, gas, or candles; and that this is why the windows of toy shops are often so covered with water in winter evenings that it is impossible to see through them.

Drop into water various small articles such as pins, beads, pebbles, nuts, and pieces of wood and paper. *Why do some float and others sink?* After a while they will conclude that whatever is lighter than water will float.

*Is water heavy or light? What does a pint of water weigh?*

This involves the use of a scales, also weights and measures. Leave this for the next lesson, telling them to try and make some scales, and if they cannot you will show them how, next time.—*N. Y. School Journal.*

#### WHAT TRAINING-CLASSES SHOULD HAVE AND DO.

(1) They should have lessons,—not lectures, alone,—on physiology and psychology, learning to observe and to analyze their observations; to find principles and to apply them; to discover motives, tendencies, and incentives; to doubt themselves and to accept truth. (2) They should study plants and animals in their life and learn to nurse them. (3) They should become familiar with the history of education, of human thought, and of human progress, in clear and distinct outline, so that in their work they may consciously aid thought and progress. (4) They should learn to handle Froebel's gifts in all directions, and to invent and use new occupations. (5) They should observe in a model kindergarten, and give clear accounts of their observations.—*American Teacher.*

—This journal is an earnest advocate of a speedy reform in our present absurd system of spelling. It believes that by a wise concert of philologists, authors, and intelligent people generally, even a single generation may witness vast improvement. But we must ask our ultra-reformers in this country not to forget the wisdom of "making haste slowly." All reforms are necessarily ahead of the age in which they arise. Let the spelling reform avoid the danger of getting so far ahead of our day that the people will find themselves hopelessly behind. It will be enough for one generation—say, for two or three—if the twenty rules of the American Spelling Reform Association be adopted and thoroughly used. The time has not yet arrived for the adoption of a new alphabet. And no new alphabet can ever find favor that has not the prime requisite of the same simplicity of form that now distinguishes our present letters. No such complex and un-English forms as we see in the *Phonetic Teacher* will ever be favorably considered. They are open to the same serious objections as are the German characters, to which physicians attribute much of the eye-disease so widely prevalent among German students. There is a strong tendency in Germany to adopt our alphabet; let us not make the serious blunder (under the guise of reform) of introducing new characters which shall be neither simple nor easily distinguishable from those already in use. If we must have a new alphabet of forty-six characters, the ingenuity of man is surely capable of inventing twenty new characters simple in structure, and not too closely resembling the old letters.—*The Pacific School Journal.*

#### Publishers' Department.

##### NOTICE TO CLUB SUBSCRIBERS.

In counties where Association Clubs are formed to subscribe for the CANADA SCHOOL JOURNAL the subscriptions should be sent to the secretary of the association for transmission to us; for as he has to keep account of the payments, and in nearly every case to supplement the subscription rate required of each member by an additional amount from the association fund, it confuses matters considerably when club subscribers remit direct to us.

While on this topic we may take occasion to thank very sincerely the numerous secretary-treasurers in the Province who have already sent us lists of subscribers for 1884-5. The prospects of the JOURNAL for this year are, so far, extremely cheering and encouraging. Its success depends on the teachers, and as it is published in the interests of the profession we hope they will not only subscribe themselves but also induce local friends of education to become subscribers.

## Notes and News.

## ONTARIO.

In consequence of ill health, J. A. Clarke, M.A., B.Sc., has resigned his position as head master of Smith's Falls High School. He has been succeeded by S. Burwash, M.A., of Cobourg.

After the change in the law with reference to the licensing of teachers in 1871, no perceptible change in the staff of teachers was seen for about five years. During this period the older teachers who had been teaching under the former law gradually passed out of the profession. Then followed a transition period of about another five years, during which very many of our schools were in charge of young and inexperienced teachers. Many of those young teachers have remained in the profession, have passed through the Normal School and have obtained permanent certificates. Two-thirds, if not three-fourths of the teachers at present employed in the county, have had as much experience in teaching as the majority of those who were employed twelve years ago, have been very much better trained and hold higher certificates. With a proper appreciation of their services by the public, and by the payment of liberal salaries to all who do good work, the annual wage should be fully provided for by the regular supply from the County Model School.—*Mr. Tilley's Report.*

Some time since we noted the necessity for a new high school building in Orangeville as the two rooms now occupied by the high school pupils are part of the Model School building and are too circumscribed and inconvenient—requiring two teachers with their classes in one room. We perceive that the Board of Education intends to build a new high school.

The University of St. Andrew's has conferred the degree of Doctor of Laws on Mr. Sandford Fleming.

Mr. Robert McCausland, Principal of the Bathurst St. Public School, Toronto, was charged in the Police Court recently, with assault on one of his pupils, a boy named McIntosh. From the evidence it appeared that the boy was very insubordinate, and that the Principal when punishing him did not use the strap, which is the recognized *modus operandi*. The magistrate referred the matter to the School Board who reprimanded Mr. McCausland and also issued instructions to all the principals of the city schools to use the strap only as a means of punishment when necessary. Mr. J. L. Hughes, City Inspector of schools, said the proper course for the teacher was to have suspended the boy and reported the case to him (the Inspector).

Dr. J. G. Hodgins, Deputy Minister of Education, visited Hamilton lately and expressed himself much pleased with the manner in which the "no drill" was performed by the children attending the Central school.

CANADA SCHOOL JOURNAL.—The last number of this useful educational publication contains a variety of excellent and appropriate articles, original and selected, which those for whom they are intended will highly appreciate. The *Journal* opens with a paper on "William Crockett, A.M.," which is illustrated with a well-defined and life-like portrait. In addition to the usual subjects of a purely scholastic interest provision is made for a free interchange of opinion on educational matters. The correspondence department is a good idea.—*Canada Presbyterian, March 5, 1884.*

We are pleased to note the high stand taken by the Flesherton Public School at the Intermediate and Entrance Examinations. Its present efficiency is entirely due to Mr. M. P. McMaster, the energetic Principal. Mr. McMaster has now entered on his sixth year as head master of the school, with a highly creditable reputation as a successful teacher. He is at present preparing a large class for the Entrance and Intermediate examinations next July. His popularity is vouched for by having been successively the Vice President, the President, and is now the Secretary-Treasurer of the South Grey Teachers' Association.

The next examinations for entrance to the Collegiate Institutes and High Schools is appointed by the Educational Department to be held on Thursday and Friday, 3rd and 4th of July.

In the Mitchell public school the other day a number of boys were playing with a red hot poker. One of them, either by accident or otherwise, ran the end of it into the eye of a son of Mr. James Sils, and it was thought destroyed the sight. The attending physician, however, has now some hopes of saving the sight.

It is reported in the papers that the schools of Kingston have been so crowded that pupils have had to sit on the floor and on window sills. This is a clear case of the Trustees' Cram to which we called attention a few months ago.

Mr. Samuel McColl, of Duwich, has been appointed by Mr. A. J. Leitch, Warden of Elgin, interim inspector of public schools for Elgin, in place of the late Mr. A. F. Butler, and will hold the office until next June. The selection of a permanent inspector rests with the County Council. Mr. McColl was formerly superintendent of schools in West Elgin.

Much has also been done in the way of improving the condition of the school room. But much still remains to be done before the school rooms become what they should be, viz: models of tidiness, order and taste, which shall permanently influence for good those who assemble in them day by day. The influence of precepts and maxims may be great, but the influence of personal contact must be far greater, and the daily contact with order and neatness will be a powerful agent in directing and moulding the character of the child. It is to the teacher mainly that we must look for this. The trustees may provide school houses, desks and all school requisites, but the teacher is like the engineer who directs the machinery and keeps everything in order. It is but poor encouragement for trustees after having properly supplied their schools to see the fixtures too soon destroyed, the fence become dilapidated, and the whole school premises show but too plainly the absence of proper care and attention. I should like to see much more done in the way of ornamenting and decorating school rooms. Many teachers have done all that can be desired in this direction; some have done a little, and some have done nothing whatever. This is something in which the pupils should be associated with the teacher. Children acquire habits of neatness and order by the daily practice of the same. And the teacher who gives proper attention to these things in the school room and insists upon their observance is a true friend of the child. It is a true saying that a youth's manners shape his fortune, and the cultivation of taste and proper deportment may be equally as beneficial as the knowledge obtained from books.—*Mr. Tilley's Report.*

Mr. George McMurrich, chairman of the Committee on School Management has, through Inspector J. L. Hughes, intimated to all the teachers in the Public Schools of Toronto, that with the view of preserving a record of the many humorous incidents connected with the work of the school-room in our city, and at the same time cultivating the literary abilities of the teachers, he will, at the close of the present year, give a first and a second prize for the best two collections of anecdotes, written by teachers and describing actual occurrences in our public schools. Teachers need not confine themselves to the present year, but may describe any events in their teaching experience in Toronto. The excellence of the stories, and the ability shown in relating them, will both be taken into account in awarding the prizes.

After four examinations have been held and the results made known they can no longer be regarded as an experiment, and I now wish to ask you, as the representatives of the people, to consider the question carefully and decide whether they shall be permanently established or discontinued. I had full confidence in their usefulness at the beginning, and this confidence has been well sustained by the results. They have developed a much deeper interest in school work among both teachers and pupils; they have directed and have helped to unitize the teaching in the different schools, and have secured proper attention to all classes and to all the subjects of the prescribed programme. By placing a direct object before teachers and pupils they have developed a healthy stimulus, and by the testing of the work each half year have afforded a pretty accurate test of the thoroughness of the work done. They have also been very beneficial in training pupils to express themselves properly in writing and to do their work with neatness and accuracy. I regard this as one of their most important functions which cannot be estimated too highly, and the results and improvement during the past two years have been very satisfactory indeed. Early in December of the present year, I sent out another circular in which, among other questions, I asked the following: (1) Do the promotion examinations continue to develop interest in school work among the pupils? (2) Do you wish these examinations to be continued? I have received replies from every teacher in the county, and all, without a single exception, have expressed their approval of them, and have expressed a desire for their continuance. Many teachers were not satisfied to merely answer in the affirmative but expressed this approval and desire

in most emphatic terms. Such a hearty and unanimous verdict of endorsement from such a respectable and intelligent body of educators as is found in this county is very gratifying indeed to me, and it affords me the most sincere pleasure to be thus assured that I have been able, with the hearty co-operation and assistance of the teachers, to devise and put into successful operation a system of promotion examinations which meets with such general approval, and which is accomplishing in so satisfactory a manner the results for which it was intended.—*Mr. Tilley's Report.*

The salary of Mr. Ford, one of the staff of St. Thomas collegiate institute has been recently increased. He has now \$700 a year.

The Committee of Management of the St. Thomas Board of Education recommended that fire drill be held at stated intervals in all the schools of that city. The Board has adopted the recommendation.

Dr. J. G. Hodgins, Deputy Minister of Education, held an investigation lately in Simcoe County which has revealed the fact that candidates for examination were able to obtain the question papers previous to the day of examination, by abstracting them from the Inspector's office. As a result of the inquiry the certificates of twenty-eight teachers who were implicated have been cancelled.

We are continually showing the evil effects resulting from the use of pernicious literature by the youth of this country. Recently we read in the public press the record of a forgery committed in Montreal by a boy in whose home a large quantity of dime novel trash was found. Still later we find a boy shooting his schoolfellow with a revolver in the streets of Toronto as they were returning from school at dinner-hour. It is rumored that in Lindsay also two school boys have been badly wounded by shots from revolvers which they were handling. Firearms are the right sort of equipment for a "boy detective," juvenile "Jesse James," or youthful "Buffalo Bill," and so long as such dangerous weapons are allowed in the possession of inexperienced and incautious youth, just so long will this preventable mischief occur. But that is not all. We find that teachers—in the city schools especially—are so harassed by the insubordination and impertinence of these youthful bravados that they are compelled to resort to drastic measures to reduce the boys to subjection; and because the punishment is considered severe by the over-indulgent, unwise parents, the teachers have to account to their respective Boards, or to the magistrate, for their efforts to correct the evil created by foolish leniency at home, or lack of proper supervision. The importation of filthy books is prohibited by law, and it is time that legislation stepped in to put an end to the introduction into the country of a class of literature just as bad, if not worse; the reading of the former creates disgust and is seldom continued, but the latter has a tendency to arouse an insatiate mental thirst for morbid excitement which frequently upsets the reason of those who read it. We think that the question "What means should be taken to suppress the circulation of pernicious literature among our youth?" might form an interesting and advantageous topic at the ensuing Teachers' Conventions.

The East Huron Teachers' Association have invited Professor Melville Bell, the well-known elocutionist, to give a lecture on elocution, interspersed with a number of his choice readings, at the evening entertainment in connection with their convention to be held at Blyth on the 15th and 16th of May.

The Legislature has granted power to Toronto University to confer the Degree of LL.D. as an honorary degree and without examination. If the University never exercises this power nobody will be hurt. The multitudinous horde of nondescript doctors is not seriously in need of increase.

#### MANITOBA.

The Board of Education, at its session on February 6th had before it applications from Prof. Bryce and James Campbell relative to the use of an additional set of reading books for the Province. It was unanimously resolved that, "Whereas in December, 1881, the present series of reading text books was adopted for use as being at that time considered the best and still give satisfaction, therefore, in view of the expense and annoyance to parents that would follow frequent liability to a change, it is inexpedient at present to adopt any new series."

The appointment of a principal for the Normal School, in consequence of the resignation of Mr. E. S. Byington, was then taken up. From the inquiries made by the Superintendent, by the direction of the Board, the Board was led to the conclusion that Mr. D. J. Goggin, Head Master of Model School, Port Hope, Ont., was eminently fitted for the position. He was therefore appointed by a unanimous vote, his duties to begin on April 1st, 1884, and to consist of the conducting of local model schools for third class teachers from that date until November, when a five months' session will be held at Winnipeg for the training of first and second class teachers.

Arrangements were made by which the Superintendent is empowered to permit rural trustees to dispense with summer vacation when their circumstances may require it. Committees were named also for the selection of suitable Scripture readings for use in schools and for assigning special literary work in connection with the ordinary reading exercises of each day.

The Protestant School Board for the city of Winnipeg made their half-yearly visitation to the city school on Friday, February 8th. Besides the Board and Mr. Fawcett, the Inspector, a number of guests were invited, including the Superintendent of Education, Mr. J. B. Somerset, Archdeacon Pinkham, Professor Hart, Canon O'Meara, D. Agnew, and others. After driving round to the various schools and observing their orderly and neat appearance, lunch was partaken of at the Queen's Hotel, and an adjournment made from that to the Education Offices on the invitation of the Superintendent. Mr. Stewart Mulvey then took the chair and the afternoon was spent in listening to addresses from the visitors, the members of the Board, and others. A feeling of great satisfaction was shown at the condition of the city schools and the determination to support them in a fitting manner noticed by the speakers.

The Government being about to move from the present departmental building to the parliament building now just completed, it is intended to afford the Board of Education and the Senate of the University accommodation in the vacated building. This will supply a long felt want, the present offices being quite inconveniently situated, besides being poorly arranged. The proposed arrangement will also place a suitable room for the reception of the University library, the bequest of the late A. K. Isbister.

The Premier, during his late visit to Ottawa in the interest of the Province, pressed strongly the necessity of the school lands being made more immediately available for the support of new and struggling districts, the present being the occasion when more appreciable benefit can be derived from the help this source of income can bring, than any other.

Rev. Prof. Hart, as one of the inspectors of high schools for the Province, visited lately the Collegiate Department of the Portage La Prairie school. He expressed himself as having been gratified to find a considerable number of students studying the subjects of that department, and giving evidence of the painstaking and successful instructions of their teacher, Mr. Houston, B.A.—*Manitoba Free Press.*

#### NOVA SCOTIA.

The Board of School Commissioners of the City of Halifax has adopted the following resolutions in respect to school privileges for colored children:

1. That a suitable building of two departments fully equipped for school purposes be erected in a locality most central to the colored population of the city, to be used in lieu of Lockman street and Maynard street schools.
2. That the colored children properly graded, be admitted to said departments.
3. That any colored children who shall pass examination on the subjects of grade 7 in the prescribed course of study for common schools, shall be admitted to any corresponding departments in the common schools, such examination to be conducted by the supervisor.
4. That any colored boy who shall pass the examination for the high school shall be admitted to the high school on the same conditions as other pupils.
5. That special attention be given in the colored schools to the subject of sewing for girls, and to the most practical teaching of school studies, such as book-keeping and the use of mechanical formulæ and industrial drawing.

The Board has also decided that the annual examination of the Common Schools be held on the 21st, 22nd, 23rd, 24th, and 25th of April, instead of being extended over the whole month of April and portions of June and July as in former years.

The *Chronicle* thus summarizes the Report of the Superintendent of Education :

The sixth annual report of the Superintendent of Education was submitted to the legislature on Monday. It is gratifying to learn from it that the record for the past year shows a marked improvement in the attendance and general working of our public schools. More money has been appropriated for the erection of new school buildings than in any previous year, while as a general thing, better methods have been adopted for imparting instruction with satisfactory results in a majority of cases. Perhaps the surest indication of increasing interest and a desire to secure the fullest benefits of our educational system is furnished by the fact that there has been a considerable advance in the average salaries paid to teachers of all grades. The necessity of making the profession as remunerative as its high character and important functions deserve has been too frequently overlooked hitherto. It is therefore a hopeful sign to find the people in different sections appreciating in due measure the advantages of systematic training which have happily been placed within the reach of all. The very small number of sections without schools during any portion of the year is another encouraging feature.

The Provincial Normal School is reported as very efficiently carrying out the objects of the institution in giving a thorough training to those under its care. The fact is evident from the relatively large number of graduates who were licensed last summer. Of the one hundred and twenty-five students enrolled in the Normal School, Colchester furnished 35, Cumberland 23, Hants 12, Kings 11, Annapolis 10, Halifax 6, Pictou 5, Guysboro 5, Digby 3, Queens 3, Inverness 3, Yarmouth 2, Victoria 2, Richmond 2, Antigonish 1, New Brunswick 1. Eighty-two diplomas were awarded, including three of grade *superior*, forty-four of *good* and thirty-five of *fair*.

"County Academies," the report says, "were in operation during the year in all the counties not having special academies within their limits. The high school department of the model schools at Truro is conducted as a county academy for the County of Colchester. The academic department of St. Francis Xavier College, in which a very excellent class of work is done, continues to sustain by arrangement with the public school trustees a similar relation to the County of Antigonish." In this connection the Superintendent refers to a plan formerly submitted by himself for the reconstruction of the present system of academic education. He gives it as his opinion, which will doubtless be shared in by many others, that decisive steps should at once be taken to secure for the grants of that branch a more judicious and equitable distribution than is obtained under the prevailing method.

The reports of the Inspectors for the various districts are as full as usual. They speak, on the whole, very favorably of improvements which have been effected and suggestions which are being acted upon by the people for the advancement of their educational interests. Yet it is also quite evident that much remains yet to be done. There are prejudices, as well as indifference, to be overcome in many places before real progress can be looked for. It appears that the Act making attendance at school compulsory, in such sections as choose to adopt it, has not received the attention which it would seem to merit. It is somewhat remarkable that reference is made to that subject by six Inspectors only and they give it very brief mention. They state that the new law has been adopted in quite a number of sections under their jurisdiction, and that a fair test will be given to its practicability. While it is not doubted that wherever its provisions are fully understood and properly applied, the results will be largely beneficial, it is as yet too early to speak with any certainty as to its present working.

D. A. Murray of the Graduating class of Dalhousie, has been chosen to fill the post of classical instructor in the Dartmouth High School. Mr. Murray holds a Grade A Provincial License, and in 1882 was a Senior Munro bursary in Dalhousie College, which he has held for the past two years.

The next ensuing session of the Teachers' Association of Inspectoral District No. 4 (Counties of Annapolis and Digby) is to be held at Bridgetown, Annapolis County, on the 1st and 2nd of May.

Over-examination and over-inspection are among the most deadly evils of the present day. The fussy officials, who are never content to let thing go on at their natural pace, but who are continually pulling up the corn to see how it is growing, are the evil spirits of the educational world. Supervision is one thing but the modern species of continual distrust is quite another. It is no new thing to say so in our own columns, but the truth is not always thrust so plainly before the public as it ought to be. It is not the teacher only who suffers by this continual inroad of the many-headed interferers with the natural progress of the school; but the public also are affected by the arts which are the accomplishment in regard to the instruction of the young.—*Schoolmaster*.

A NEGRO'S PRAYER.—A teacher in one of the colored schools at the South was about to go away for a session, and an old negro poured out for her the following fervent petitions: "Go afore her as a leadin' light, an' behind her as a protectin' angel. Roughshod her feet wid de preparation ob de Gospel o' peace. Nail her ear to the Gospel pole. Gib her de eye ob de eagle dat she spy out sin far off. Wax her hand to de Gospel plow. Tie her tongue to de line ob traf. Keep her feet in de narrier way and her soul in de channel ob faith. Bow her head low beneath her knees, an' her knees way down in some lonesome valley where prayer and application is much wanted to be made. Hedge and ditch 'bout her, good Lord, an' keep her in the straight and narrier way that leads to heaven."—*Et.*

## Readings and Recitations.

### A GREAT INHERITANCE.

Let the boys remember that this great world, with all its wealth and woe, with all its mines and mountains, its oceans, seas, and rivers, with all its shipping, its steamboats, railroads, and magnetic telegraphs, with all its millions of men, and all the science and progress of ages, will be given over to them—boys now assembled in school-rooms, or playing without them, on both sides of the Atlantic, will soon control them all. Let them look abroad upon the inheritance, and get ready to enter upon its possession. The kings, presidents, governors, statesmen, philosophers, ministers, teachers of the future, are all boys.

Boys, be making ready to act well your part. Become good scholars. Read only what is instructive. Spend no time with trashy novels. Study science and government, and the history of the world. Study agriculture and mechanism. Become as nearly as possible perfect in the occupation you may choose. Learn prudence and self-control. Have great decision of character. Take the Bible for your guide. Become familiar with its teachings, and observe them. Seek wisdom and prosperity from your heavenly Father. As you grow in stature, in bodily strength, and in years, grow in piety, in intelligence, in caution, in activity, in firmness, and in charity. Aspire to be men of the noblest character. Cherish the feeling that you were born to receive good and to do good. Be manly in spirit and in action.

### NEVER SAY FAIL.

In life's rosy morning,  
In manhood's firm pride,  
Let this be your motto,  
Your footsteps to guide;  
In storms and in sunshine,  
Whatever assail,  
We'll onward and conquer,  
And never say fail!

### WHAT BOYS ARE WANTED.

Boys of spirit, boys of will,  
Boys of muscle, brain, and power,  
Fit to cope with any thing;  
These are wanted every hour.

Not the weak and whining drones,  
That all trouble magnify—  
Not the watchword of "I can't,"  
But the noble one, "I'll try."

Do whate'er you have to do  
With a true and earnest zeal;  
Bend your sinews to the task;  
Put your shoulder to the wheel.

Though your duty may be hard,  
Look not on it as an ill;  
If it be an honest task,  
Do it with an honest will.

At the anvil, on the farm,  
Wheresoever you may be,  
From your futuro efforts, boys,  
Comes a nation's destiny.

### TWO WAYS.

Where two ways meet the children stand,  
A fair broad road on either hand;  
One leads to Right, and one to Wrong,  
So runs the song.

Which will you choose, each lass and lad  
The right or left, the good or bad?  
One leads to Right, and one to Wrong,  
So runs the song.

## THE LIGHT-HOUSE.

High o'er the black-backed Skerries, and far  
To the westward hills and the eastward sea,  
I shift my light like a twinkling star,  
With ever a star's sweet constancy.  
They wait for me when the night comes down,  
And the slow sun falls in his death divine,  
Then braving the black night's gathering frown,  
With ruby and diamond blaze—I shine!

There is war at my feet where the black rocks break,  
The thunderous snows of the rising sea;  
There is peace above when the stars are awake,  
Keeping their night-long watch with me  
I care not a jot for the roar of the surge,  
The wrath is the sea's—the victory mine!  
As over its breath to the furthest verge,  
Unwavering and untired—I shine!

First on my brow comes the pearly light,  
Dimming my lamp in the new-born day,  
One long, last look to the left and right,  
And I rest from my toil—for the broad sea-way  
Grows bright with the smile and blush of the sky  
All meand'rous and opaline.  
I rest—but the love best day will die—  
Again in its last wan shadows—I shine!

When the night is black, and the wind is loud,  
And danger is hidden, and peril abroad,  
The seaman leaps on the swaying shroud;  
His eye is on me, and his hope in God.  
Alone in the darkness, my blood-red eye  
Meets his, and he hauls his groping line.  
"A point to northward!" I hear him cry,  
He goes with a blessing, and still—I shine!

While standing alone in the summer sun  
Sometimes I have visions and dreams of my own,  
Of long-life voyages just begun,  
And rocks unnoticed, and shoals unknown;  
And I would that men and women would mark  
The duty done by this lamp of mine;  
For many a life is lost in the dark,  
And few on earth are the lights that shine!—*God Words.*

How MOZART DIED.—Wolfgang Mozart, the grand composer, died at Vienna, in the year 1791. There is something very touching in the circumstances of his death. His sweetest song was the last he sang—the "Requiem." He had been employed on this exquisite piece for several weeks, his soul filled with inspiration of the richest melody, and already claiming kindred with immortality. After giving it its last touch, and breathing into it that undying spirit of song which was to consecrate it through all time, as his "Circian strain," he fell into a gentle and quiet slumber. At length the light footsteps of his daughter awoke him. "Come hither," said he, "my Emilie—My task is done, my 'Requiem' is finished." "Say not so, dear father," said the gentle girl, interrupting him, with tears in her eyes; "you must be better—you look better, for even now your cheek has a glow on it. I am sure we shall nurse you well again—let me bring you some thing refreshing." "Do not deceive yourself, my love," said the dying father, "this wasted form can never be restored by human aid. From heaven's mercy alone do I look for help in this my dying hour. You spoke of refreshment, my Emilie—take these my last notes—sit down to my piano here—sing with them the hymn of your sainted mother—let me once more hear those tones which have been so long my solace and delight." Emilie obeyed, and with a voice enriched with the tenderest emotion, sang the following stanzas:

"Spirit! thy labor is o'er,  
Thy term of probation is run,  
Thy steps are now bound for the untroubled shore,  
And the race of immortals begun.  
Spirit! look not on the strife  
Or the pleasures of earth with regret—  
Pause not at the threshold of limitless life,  
To mourn for the day that is set.  
Spirit! no fetters can bind,  
No wicked have power to molest,  
There the weary, like thee—the wretched shall find  
A heaven, a mansion of rest.  
Spirit! how bright is the road  
For which thou art now on the wing,  
Thy home it will be, with thy saviour and god,  
'Their loud hallelujah to sing.'

As she concluded, she dwelt for a moment upon the low melancholy notes of the piece, and then turning from the instrument, looked in silence for the approving smile of her father. It was the still and passionless smile which the rapt and joyous spirit left—with the seal of death—upon those features.

## Teachers' Associations.

The publishers of the JOURNAL will be obliged to Inspectors and Secretaries of Teachers' Associations if they will send for publication programmes of meetings to be held, and brief accounts of meetings held.

CITY OF TORONTO.—The semi-annual meeting of the Toronto Teachers' Association, was held February 29th, in the school-room of the Carlton-street Primitive Methodist Church. The President, Mr. Samuel McAllister, occupied the chair. Nearly all the teachers of the various city schools were present, and the presence of one or two members of the Public School Board was also noticeable. At the conclusion of the teachers' roll call, a communication was read from the Women's Christian Temperance Union requesting that temperance text books be brought before the pupils of the Public Schools; also offering the services of Mrs. Mary Hunter, of the National Women's Temperance Association of Massachusetts, to lecture on scientific temperance instruction for the benefit of the pupils. This matter was left to a committee composed of Messrs. Doan, Clarke, and W. J. Hendry to deal with, and report on. Owing to the illness of Mr. A. F. Macdonald, who was to have addressed the teachers on the subject of mental arithmetic, Mr. J. L. Hughes took his place, and in a very able manner suggested the best methods of instruction in this particular branch of study. A vocal quartette was next given by four members of the association, who rendered the piece entitled "How Fair the Maiden" with marked ability. After recess Miss A. Freeman spoke on the subject of "How to direct the private reading of scholars," and was followed by Mr. Hughes who, in a lengthy and most masterly manner, showed the advantages accruing from "object lessons," illustrating his ideas by means of leaves distributed among the teachers. Mr. J. A. Wismer then took up the subject of "The teaching of hygiene," a class of boys from the Victoria-street school being in attendance. Another quartette ("Evening Bells") then followed by members of the association. At its conclusion Mr. J. Boddy presented his report to the Inspector, which was the cause of a lengthy discussion. The idea in view is to secure uniform monthly reports from the different schools to the Inspector. Business was resumed Saturday morning at 9 o'clock, with the President, Mr. S. McAllister, in the chair. After roll call the election of officers took place, which resulted in the re-election of Mr. S. McAllister as President (Mr. J. L. Hughes having requested his name to be withdrawn); Vice-President, Mr. Doan; Secretary, Mr. R. McCausland. Executive Committee—Messrs. J. L. Hughes (*ex-officio*), W. J. Hendry, Cassidy, McCachren, Mrs. Arthurs, and Miss Williams. The Treasurer submitted his report for the past year which shows a credit balance of \$171.55. The report was received and adopted. Mr. Doan, on behalf of the Committee appointed on Friday to deal with the communication received from the Women's Christian Temperance Union in reference to placing temperance text books more prominently before the scholars, reported that it was desirable, in view of the enormous amount of evil caused by intemperance, that special attention should be directed to the matter of temperance in connection with the study of hygiene in our public schools, and that an improved text book on temperance be asked for by the teachers, and also that should the Committee on Scientific Temperance Instruction, decide to send Mrs. Mary Hunter to lecture in this city, the members of this association will assist her to the utmost in their power. The report was unanimously adopted. The committee, to whom was referred the consideration of Mr. Bryant's recommendation in his paper, read last year before the Ontario Teachers' Association, that a Chief Superintendent of Education and a Council of Public Instruction instead of a Minister of Education should be appointed, reported;—That in the opinion of the committee it is inadvisable that any change be made in the way of directing the educational affairs of the Province by the appointment of a Chief Superintendent and a Council of Public Instruction in lieu of a Minister of Education. The committee recommend that the delegates of the Ontario Teachers' Association do support this resolution should the matter be introduced at the meeting of the Provincial Association. Mr. Boddy moved in amendment seconded by Mr. Crane, that in the opinion of this association, a Chief Superintendent and a Council of Public Instruction would best serve the interests of education in this Province. A protracted discussion ensued, in which Mr. Boddy strongly opposed the adoption of the report, calling attention to the fact that political influence might be used in granting certificates to teachers. Mr. Doan replied that while the committee highly appreciated the manner in which Mr. Bryant had treated the subject, yet he thought that the gentleman who was now at the head of the Education Department, and who had had experience in the work, having commenced at the foot and having worked himself up to the highest pinnacle of the educational ladder, should have a seat in the Legislative Assembly and having won the confidence of all interested in school work they should retain the present system and give it a fair trial. After some further discussion the amendment was lost and the report adopted by a large majority. The hearty thanks of the association was tendered to Mr. J. T. Slater for having engrossed a copy of a resolution passed by the association on the departure of the Rev. Dr. King from the city.

On motion of Mr. Hughes, seconded by Mr. Doan, it was decided to devote one day of the association's work during the last half of the present year to the meetings of the several grades independently, and that the Executive Committee be instructed to take steps to carry this resolution into effect in the several schools for the purpose of observing the practical work of the schoolroom. After some unimportant work had been disposed of, the singing of the National Anthem brought the meeting to a close.

The conversation of the Association was held in the Normal School buildings on the succeeding Friday evening and proved an unequalled success in every respect. The museum and halls were thrown open for those who wished to promenade to some excellent orchestral music, while in the theatre the attractions were so interesting that there was hardly a vacant seat to be found after the entertainment commenced. Hon. G. W. Ross, Minister of Education, presided, and there was present on the platform Principal Caven, Mr. Hallam, and Mr. McAllister, President of the Association. Hon. Mr. Ross gave an address, which partook more of the character of a friendly talk with the teachers than of a prepared speech, and which was the principal feature of the evening. In the course of his remarks he said that a teacher must keep his mind in training by frequent reference to journals, etc. He should read books of travels, etc., in order that he might become posted in other countries, and be able to make the lessons more interesting. He would have to adapt himself to the idiosyncrasies and individualities of scholars, and for this he should try to broaden his literary horizon. The musical portion of the programme was ably supported by Misses Maggie Barr and Agnes Corlett and Messrs. Schuch and Hurst. Prof. Bohner presided at the piano.

**ALGOMA.**—The semi-annual meeting of the Algoma Teachers' Association was held in Manitowaning, on Thursday and Friday, 29th and 30th February, and although the weather was anything but propitious, quite a number found their way to the Convention, and a very pleasant and profitable time was spent. After calling the meeting to order, the President, Mr. G. F. Payne, delivered an excellent address, which contained some very original and striking remarks upon "School Books, what they are, and what they should be." After routine business was disposed of, the Librarian read his report, which shows clearly that the library is appreciated by teachers from all parts of the district. This was followed by a well prepared paper on "School discipline," by Miss Munro, which treated the subject very exhaustively. Mr. Thos. Flesher then read a very interesting paper on "Why the Teacher's Business is Desirable," after which the "Permanency of the Teacher" was discussed. A well prepared and very interesting paper on "How to Teach Geography" was read by Mr. Thos. Sims, which was followed by a paper on "Proper Method of Questioning and Answering," by E. J. J. Ferguson. The officers for the next year are:—G. F. Payne, President, Thos. Sims, Vice-President, E. J. J. Ferguson, Secy. Treas., T. Flesher, Librarian, Misses Pentland and Flesher, Auditors. Mr. Payne was appointed a Delegate to the Provincial Convention. Messrs. Brown and Cole were made Honorary members, and as both are men of practical ability the association will no doubt be benefited by their membership. This Association is steadily progressing, having risen from a state of almost insolvency to a flourishing institute with a good library and a surplus in the treasury. The next meeting will be held at Gore Bay, at such time as the Inspector may be able to attend.

E. J. J. FERGUSON, Sec.-Treas., Manitowaning.

**EAST MIDDLESEX.**—The meeting of the association was held in London, on March 1st, at 10 o'clock a.m., President Dearnness in the chair. There were over eighty teachers present. The secretary read a communication from Miss A. Orchard, secretary of the Women's Christian Temperance Union of Ontario, memorializing the association to co-operate with them in urging the introduction of scientific temperance instruction into the public schools of the Province. After some remarks in praise of the movement, Mr. McQueen moved, seconded by Mr. N. Jarvis, that the secretary be instructed to reply, expressing the sympathy of this association in the said work and informing them that in this inspectorate temperance and hygiene have been placed on the curriculum of studies in the public schools and is taught in the majority of them. Mr. Jarvis gave an illustrative and amusing address on "Venerating in Teaching." He would divide the subject into two classes, legitimate and illegitimate. He illustrated the latter, and applied it to teaching. He thought it wrong to cripple the minds of youth by storing them with useless knowledge for the purpose of making a show. Mr. Smith took up the subject of "Literature." He would cultivate an insatiable desire to know. He would endeavor to have pupils learn the author from his work. Reproduction was of great value. The early introduction of literature would decrease the labor in other subjects, as it, correctly taught, would increase the vocabulary of the child. Discussed by Messrs. Liddicoatt, J. McLaughlin, and R. M. Graham. Moved by Mr. R. Walker, seconded by Mr. Smith, that our thanks be expressed to those who took part in the programme on Friday evening and to Mr. Colwell for use of organ. Carried. In the afternoon, Mr.

Liddicoatt took up the subject of assigning a lesson in history. He would assign a lesson, always keeping in view the idea that by laying a platform the pupils had, as it were, guiding lines for their own reading. The details could then be gradually added. It was a well-worded and instructive address, exemplified by means of the blackboard. Mr. Dearnness solved a number of typical questions in arithmetic. The Nominating Committee appointed by the President, reported the following officers had been chosen:—President, John Dearnness; 1st Vice., W. H. Liddicoatt; 2nd Vice., Miss Fannie Geeson; Secretary, A. McQueen; Treasurer, W. D. Eckert; Librarian, Wm. Bell. Moved by Mr. Graham, seconded by Mr. W. F. May, that the report be adopted. Carried. Moved by Mr. Liddicoatt, seconded by Mr. Kerr, that in future the meetings of the association be held on Thursday and Friday instead of Friday and Saturday. Carried. Moved by Mr. McQueen, seconded by Mr. Jarvis, that the Management Committee have power to communicate with West Middlesex Teachers' Association for the purpose of amalgamating with them in conducting promotion examinations. Carried. Moved by Mr. Harlton, seconded by Mr. Walker, that the Management Committee have power to settle accounts contracted at this meeting. Carried. The first question from the question-drawer was taken up by Mr. Harlton: "A large boy prompted a small one to commit an offence. I punished both alike. The parents of the large boy are very angry that their son was punished. How should I have acted in the cases?" Mr. Harlton thought it was justifiable to punish both. Votes of thanks were passed to the press and County Council. The association then adjourned.

**STORMONT.**—The usual half-yearly meeting of the Stormont Teachers' Association was held in the high school building, Cornwall, on the 7th and 8th February. The president, Mr. McNaughton, I. P. S., in his opening address, gave the teachers some useful information regarding the recent uniform promotion examination. The following important motion was passed at the commencement of the meeting: Moved by James Smith, B.A., seconded by Mr. R. B. Carman, that "No amendment or alteration of the constitution of this Teachers' Association shall be made, unless notice of said amendment shall have been given at one regular meeting of the association, and voted upon and passed by a two-thirds majority of the members present, at the next following regular meeting." The election of officers for the current year resulted as follows: Mr. Smith, President; Miss Carpenter, Vice-President; Geo. Bigelow, Sec.-Treas.; Messrs. McNaughton, Relyca, Talbot, Miss Loucks, and Mrs. McLeod, Committee of Management. Messrs. Carman and Talbot were appointed auditors, and their report showed a balance in favor of the Association of \$76.68: adopted. Mr. Talbot was appointed delegate to the Provincial Association, necessary expenses to be paid out of the funds of the society. The question of text-books was laid over until the next meeting, to be held in Cornwall, on the 2nd and 3rd October of the present year. Mr. Harrington introduced the subject, "Minister of Education versus Chief Superintendent"—an interesting paper, and a lively discussion of the matter resulted in the passing of the following resolution:—Moved by M. F. Harrington, seconded by Judge Carman, that "It is the opinion of this Association that the Minister of Education should be retained, but that a change should be made in the Central Committee so as to give greater representation to the public school teachers and inspectors." Mr. Bissett gave a paper replete with useful instruction as to the teaching of geography, especially co-junior classes, calling attention to the several important topics in connection with it,—object lessons; the development and expression of ideas; local geography; natural scenery; the cardinal points, constant reviews; the use of maps; the order of topics; etc. Mr. Smith dealt with "Entrance examinations" in such a manner as to make those interested feel grateful that their teaching processes were conducted under auspices so favorable. The advantages of the present system were made apparent by contrast with the past. The following points of excellence were emphasized: Educationally they have improved our public schools and laid a better foundation for higher education. Financially, they prevent the crowding of unprepared pupils into schools for the sake of the increased grant; and socially, they prevent the high schools from being utilized as fashionable resorts for the upper and wealthier classes. Mr. Carman strongly advised the teachers to send their pupils to Cornwall High School Entrance Examinations. A very important action was taken with regard to the Temperance Question, and perhaps the best part of the work of the present session was done when this subject was under consideration. Surely there is hope for the country when the educators of youth give no uncertain sound upon this most important topic of the day. The eloquence of Judge Carman was never used to better purpose than in advocating the introduction of a Temperance Text-book into the public schools. We are encouraged to look forward to a time when humanity's progress towards its ideal will be unimpeded by the terrible evils condensed in the world of intemperance. A petition issued by the Women's Temperance Union was introduced by Mrs. (Judge) Pringle, asking the Minister of Education to authorize for teaching purposes a book setting forth the effects of alcohol upon the human system. The petition was signed by all the members present. The teaching of history in the



public schools was explained by Mr. Somerville and very important ideas as to the best methods were advanced. A point strongly emphasized by the speaker was, "the teacher is the living text-book." Practical discussion followed the reading of this interesting paper. Mr. Talbot next favored the meeting with his method of teaching Fourth Book Literature. This subject, like the others, underwent a thorough analysis. Criticisms and opinions were freely expressed and doubtless some were benefited thereby. Mr. McNaughton strongly recommended the teaching of drawing. "Very profitable indeed!" was the verdict of all who were privileged to be present at the fourteenth meeting of the Association. GEORGE BIGELOW, *Secretary*.

## REVIEWS.

**THE MAKING OF ENGLAND:** By John Richard Green, M.A. With Maps, Svo., pp., xx, 434, \$2.50. *Harper and Brothers, N. Y.*

**THE CONQUEST OF ENGLAND:** By John Richard Green M.A., LL.D. With full Portrait and Maps. Svo., pp. xxvii, 607, \$2.50. *Harper and Brothers, N. Y.*

These are the latest works of one who has won a high, if not the highest, place among English Historians. Of the historian, Freeman says: "Nowhere does Mr. Green's power of painting and narrative come out in greater fullness than in the earlier part of the 'Making of England.' Mr. Green keeps his strength unabated to the end." Under the clearer light which the author throws upon the earlier period of English History, one may "see that the advance of the invaders and the struggles of the Heptarchy" were not mere "battles of kites and crows," but "the birth-throes of our national life." The work is the most interesting that has ever been produced on the period of Eng. History of which it treats, and shows throughout all the author's fascinating charms of style.

*The Conquest of England* contains passages as brilliant as anything Mr. Green ever wrote. The story of the conquest is told with his usual graphic force; and the work must prove of great value to all students of this part of English History and will be especially suited to those—and they are the many—who can never find time to grapple with the voluminous work of Freeman.

Green's Historical works should be in every school library in the Dominion, and Harpers' is probably the handsomest edition yet published.

**A SYSTEM OF RHETORIC:** By C. W. BARDEEN. 12mo, pp. cxi, 674, \$1.50. *New York, A. S. Barnes & Co. (Just published.)*

This work is a new departure on the subject of which it treats—and a departure, we venture to say, in the direction of the useful and practical. It is divided into six parts, treating respectively of Sentence-making, Conversation, Letter-writing, The Essay, The Oration, and The Poem. Each of these subjects is treated with considerable fullness, and always in an eminently interesting and suggestive manner. In designating the work as "practical," we do not mean that it ignores principles, but that its explicit statements of principles are accompanied and enforced by striking and interesting examples. There is great force, as every teacher knows, in an apposite example, and it is not too much to say that wit and wisdom have been culled from a wide field of English literature to illustrate the rules and principles given in several parts of the work. The book is written from the "stand-point of one whose daily work it has been for some years to read and select and publish manuscripts, who knows from experience the actual difficulties and faults of young writers and who would like to help them." So says the author; and from a careful examination of his book, we believe that his is an *intelligent* experience, and have not the slightest doubt that he has succeeded in his laudable undertaking "to help" the young student to a mastery of his mother tongue. We heartily recommend this work to every teacher and student of English.

**A BRIEF HISTORY OF ANCIENT, MEDIEVAL, AND MODERN PEOPLES,** with some account of their Monuments, Institutions, Arts, Manners, and Customs, 12mo, pp. xxvi, 600. *A. S. Barnes & Co., New York.*

This is one of Barnes's "Brief History Series," which has met with general approval among teachers in the United States, and to which we called attention in our columns some time ago. "In this work the political history, which occupies most, if not all, of the ordinary school-text, is condensed to the salient and essential facts, in order to give room for some account of the literature, religion, architecture, character and habits of the different nations. Surely it is as important to

know something about Plato as all about Caesar, to learn how the ancients wrote their books as how they fought their battles; and to study the virtues of the old Germans and the origin of our customs in English home-life, as to trace the squabbles of Alexander's successors or the intricacies of the wars of the Roses. From this may be inferred the general plan of a work which must prove very useful to teachers and students. No intelligent teacher can afford to be ignorant of the matter which this book contains, yet few teachers and still fewer pupils can afford the time to wade through the ponderous terms whence such matter has to be gathered. The value of the work is much increased by the numerous dates in parentheses, the black-board analysis, the pronunciation of the names in the Index, the Genealogical Tables, the Novel Historical Recreations in the Appendix, and especially the choice *Reading References* at the close of each general subject. The teacher as well as the general reader will find this *Brief History a multum in parvo*. We recommend our readers to send for catalogues of A. S. Barnes & Company's excellent school publications.

**THE PUPILS' COMPANION:** *C. W. Hagar, 697 Broadway, New York.* This is just the thing required for supplementary reading in our schools. The selections are amusing, entertaining, and instructive. Coming weekly it supplies plenty of fresh and healthy reading, such as boys and girls delight in, and is well calculated to foster a taste for good literature. Every teacher should get specimen copies and endeavor to get his pupils to subscribe for the Companion which is only seventy-five cents a year.

**WEBSTER'S UNABRIDGED DICTIONARY.** New Edition with Enlarged Supplement and Reference Index. *G. & C. Merriam & Co., Springfield, Mass.*

We welcome cordially an old, valued, and time-honored friend, enlarged in size, improved in appearance, extended in usefulness, and of considerably increased intrinsic worth. The "Unabridged Webster" fully keeps pace with the times. The body of the work remains almost unchanged, but there is a supplement of between four and five thousand new words, or new important meanings of old ones. A specially good feature has also been added to the Appendix, namely, a Biographical Dictionary which contains nearly ten thousand names of important personages, ancient and modern, giving the pronunciation of the name, the nationality, profession, date of birth, and (where deceased) death of each. The regular Dictionary gives the definitions with all relative information, of over 118,000 words, forming an Encyclopædia of Knowledge of the greatest possible utility. The work has about 3,000 pictorial illustrations which readily convey intelligent description through the eye, and there are also four colored plates that are both useful and attractive. The Vocabulary of Fictitious Persons and Places (those that are often referred to in literature and conversation, such as the characters and places mentioned in the works of Dickens, Scott, Shakespeare, etc., locating and describing each) is a special feature in this remarkable work, and a most valuable one for handy reference. As regards the varied and instructive information which abounds within this ample and portly quarto volume of nearly 2000 pages, it seems in this shape like a vast literary store-house where knowledge is laid out to the view in regular order, so that the consulter can, in a moment, reach and obtain a condensed yet exhaustive supply of the choicest and best. Quick and ready reference is secured by means of a useful and ingenious device called Denison's Patent Reference Index, whereby the part required to be opened at can be found instantaneously by a movement of the finger. This new mechanical feature is certainly a vast improvement.

As a rule a Dictionary is a dry book, not often used—at least, not as often as it needs to be—but no one could go through even one page of the "Unabridged Webster" without feeling his mind refreshed by the perusal. For the student, the professional man, the teacher, the school, the family—in fact, for every one who cares to add to his store of knowledge—we consider this splendid work eminently suited, and, as an investment, it is one that re-pays a hundred-fold the cost of it.

**WENTWORTH AND HILL'S EXAMINATION MANUALS.** No. 1, ARITHMETIC; No. 2, ALGEBRA. *Boston: Ginn, Heath & Co., 1884.*

These handy little volumes contain about 200 examination papers each and are in many respects suited for testing pupils and reviewing the subjects. They supply a fresh list of questions taken from English, French and German sources, and are not too difficult. The answers are printed separately and may be had on application to the publishers. For Entrance and Intermediate work they supply an excellent praxis of about 150 pages each.