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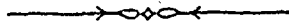
CANADA SCHOOL JOURNAL,

—DEVOTED TO—

The Interests of Education and the Teaching Profession

IN THE

DOMINION OF CANADA:



Recommended by the Minister of Education for Ontario.
Recommended by the Council of Public Instruction in Quebec.
Recommended by the Chief Supt. of Education for New Brunswick.
Recommended by the Chief Supt. of Education, British Columbia.
Recommended by the Chief Supt. of Education, Nova Scotia.
Recommended by the Board of Education, Manitoba.

VOLUME VI.

TORONTO:
W. J. GAGE & CO.
1881.

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LINDSAY SCHOOLS.

The Separate School for boys is attended by about 200 pupils, and has attained a high degree of efficiency during the past four years, during which it has been conducted by Mr. White, the gentleman who won the prize offered through the liberality of His Grace Archbishop Lynch to the Roman Catholic student who first obtained a First Class Provincial Certificate Grade A.

The Separate School for girls is one of the best school buildings in Ontario. Everything pertaining to the health and comfort of the pupils has received due attention in its construction. The furniture and fittings throughout are of the most approved modern pattern. The intellectual and moral culture of the pupils in both schools is attended to with the greatest possible care, but Father Stafford has recognized the fact, that it is not in either of these departments that the schools of the country are weakest, and has wisely made the most thorough arrangement for the recreation and physical development of the children attending these schools. The Boys' School has a large, well-fitted gymnasium, as well as a good playground, and the girls have a large field surrounded by a high board fence, in which they are encouraged to enjoy in a real, hearty manner, games of ball and other exercises which have too long been misnamed "manly sports." These girls have an organized "snow-shoe club," and their large field affords ample opportunity for practice tramps during the winter season. Father Stafford claims to be a leader in introducing this and other games calling forth vigorous physical exercises into Girls' Schools. So far at least as snow-shoeing is concerned we think he is entitled to the credit of first introduction. Foot ball, base ball, &c., have for some time been practised in appropriate costume in Vassar and other schools for young ladies. We cannot too highly commend the wisdom and justice of the man who recognizes the fact that the physical constitution of a human being is a most important element in deciding his success or failure in life, and who believes that one of woman's best rights is a vigorous body. Such a man Father Stafford is, and he never allows a theory to grow cold or stale before putting it in practice.

MISCELLANEOUS PRIMARY-SCHOOL QUESTIONS.

- What are newspapers for? What are the uses of water?
- How many toes has a lion on one foot?
- Why cannot a hen swim as well as a duck or a swan?
- Why does it take eight shoes to shoe an ox?
- Where does the rain come from, and what does it do?
- What can you tell about the clock?
- What would you probably see in a farm-yard?
- What numbers could you write with the figures 1, 3, and 5?
- How should children treat old persons?
- Of what use are our thumbs?
- Name some articles made of iron. Of wood. Of tin.
- Tell me all you know about hay. Corn. Flour.
- What are some of the things you can do with snow?
- Of what use is a thermometer? A weather-vane?
- What places have you visited in any city?
- What is an apothecary shop? A retail store?
- Name the different kinds of fruit trees you have seen.
- In what position should you stand when reciting?
- What must you do in order to become good scholars?
- Of what are baskets made? Boxes? Bags?
- Tell me something the horse can do. The dog.
- Mention some things formed from water.
- Name some articles of food. Of dress.
- What did you see on your way to school?
- What are domestic animals? Name some of them.
- Where and how is coal obtained? Wood? Oil?
- Why do we not see the stars in the day time?

- Can a blind person read? If so, by what means?
- Where does tea come from? Sugar? Rice? Raisins?
- What is the difference between a village and a city?
- What season of the year is it? Month? Day? Time of day?
- What do people use for fuel? For light?
- Name the different modes of traveling.
- Where do the different kinds of fruit we eat grow?
- Name the different kinds of animals that you have seen.
- What would you find at the sea shore?
- What kind of vegetables do you know about?—Our School.

WHY SOME TEACHERS FAIL.

A recent number of the *Lansing (Mich.) Republican* contains the following article. It is in reply to the inquiry why some teachers do not succeed. The answer is:

- They are too lazy.
- They neglect details.
- They have no eye to order.
- They hope to get along without effort.
- They are easily discouraged.
- They fail to know what the world is doing.
- They do not find out what other teachers are doing.
- They do not try to improve.
- They have too much outside business.
- They talk politics too much.
- They philosophize on everything but their own business.
- They fail to have new ideas.
- They fail to use such as they have.
- They are penny wise and pound foolish.
- They have become dry, stale, and repulsive to live children.
- They think inferior work does just as well as good work.
- They are not polite enough.
- They think most things take too much trouble.
- They use poor judgement.
- They fail to practice what the educational papers tell them.
- They rely on the little stock of goods they began business with.
- They do not study the children.
- They forget that the art of teaching is an art that requires study.
- They can see the weak points in their scholars, but not in themselves.
- They are stingy towards themselves.
- They read no educational papers or books.
- They know so much they will learn no more.
- They think they cannot learn anything more about their art.
- They are trying to go into something else.
- They do not determine to be the best teachers in the place.
- They are rusty and without ambition.
- They begin with a small stock of ideas, and have not increased it.
- They follow the same method with each class.
- They keep away from their pupils.
- They never visit the parents.
- They attend no teachers' meetings.
- They do not seek for information by studying the methods of the best teachers.
- They complain too much.
- They do not see that the profession is as high as the teachers themselves raise it.
- They do not study the great masters of the art.
- They drop the school when it is over, and never think of it again until they come up before their pupils next day.
- They under-rate the business.
- They think anyone can teach who knows a little about studies.
- They over-estimate themselves.
- They under-estimate the pupils.
- They think the school was made for them.
- They neglect to think of the pupil's good at every point.
- They do not take common sense as the guide, but hug a formalism handed down from the dark ages.
- They do not study over the lessons.
- They do not travel, etc., and all to use a better teacher.
- They fail to manage with tact.
- They are not in real earnest to teach, so that "to-morrow finds them farther than to day."

Addendum.—They do not take THE CANADA SCHOOL JOURNAL.

Teachers' Associations.

DIV. 1, LAMBTON.—The next meeting of Div. 1, Lambton Teachers' Association will be held at Alveston, on the 2nd and 3rd of February, 1882.—C. A. BARNES, President.

STORMONT.—The tenth half-yearly meeting of the Stormont Teachers' Association will be held (D.V.) in the High School building, Cornwall, on the 2nd and 3rd of February, 1882. The opening Session of each day will commence at 9 a.m. *Thursday*—Opening Address, by the President; Reading Minutes, Secretary; Drawing, Mr. Castleman; Reading (3rd and 4th Books), Mr. Wallace; Duties of the Teacher out of School, Mr. Relyea. *Friday*—Business of the Association—History, Mr. McGregor; Book-Keeping, Mr. Malen; Geometry, Mr. McCallum; A Reading, Miss Loucks. How should Public School Examinations be conducted? Moods and Tenses as treated in Mason's Grammar. A. McNAUGHTON, President, Newington; GEO. BROELOW, Sec.-Treas., Aultsville.

GLENGARRY.—The semi-annual meeting of the Glengarry Teachers' Association will be held at Alexandria on Thursday and Friday, the 2nd and 3rd Feb. *Programme.*—Hygiene, Dr. McDermid, P.S.I.; "School Master," Alex. Kennedy, H.M. Model School; Teachers' Qualifications, natural and acquired, Alex. B. McDonald; Gerunds, Participles, and Inflections, R. Seldon; History for Beginners, D. D. McDonell, Grammar Text Books, D. J. Hunter; Object Lessons, Misses Ross and Simpson; Fourth Class Literature, J. C. McCabe; Vocal Music, Miss McDonald; Recitations, Miss Smart; Intermediate Literature, A. B. McDonald; Algebra, H. D. McDonald; How to Teach Composition, J. D. Houston. A full attendance of teachers is requested. D. McDERMID, Esq., M.D., President; W. D. JOHNSTON, Secretary.

WEST HURON.—The Semi-Annual Meeting of the West Huron Teacher's Association will be held in the Exeter Public School, on Friday and Saturday, Feb. 17th and 18th, commencing each day at 9 o'clock a. m. *Programme.*—President's Address, Mr. J. R. Miller, I. P. S.; Reports of Committees; Penmanship with Illustrations, Mr. J. H. Grassick; Time Tables, Mr. W. M. Leigh; Music in Schools with Illustrations, Mr. J. Connolly; Teachers' Home Reading, Mr. F. Crassweller; Hygiene, Mr. Geo. Holman; Discount, Mr. P. Strang; Common Errors of Speech and their Corrections, H. I. Strang, B.A.; Question Drawer. On Friday evening the Session will be held in the basement of the C. M. Church, at which one or two of the subjects on the programme will be taken up, together with Readings and Music.—J. R. MILLER, I.P.S., President; S. P. HALLS, Secretary.

WEST VICTORIA.—The ninth semi-annual meeting of the West Victoria Teachers' Association was held at Woodville, on Friday and Saturday, 9th and 10th December, 1881. The Convention was opened by the President, Mr. Reazin, I.P.S., with devotional exercises. S. Gilchrist introduced the subject "Decimals," and illustrated his method of presenting each successive step to a class by means of examples. A discussion followed, and the Convention adjourned to meet at 1.30 p.m. Convention re-assembled at 1.30 p.m. The minutes of the previous meeting were read and adopted. It was moved and seconded, that in future our Convention shall meet on the first Friday and Saturday of February and September. Carried. Some business of minor importance was then transacted, and the programme resumed. Mr. Cundal introduced the subject "Deductions in Euclid," and handled it in a masterly style. A short discussion followed, after which Mr. D. B. Carmichael gave some neat solutions of difficult "Problems in Arithmetic." Inspector Knight followed with an address on "School Registers," and gave many useful hints as to the best methods of keeping them. The Convention then adjourned, to meet in the basement of the Presbyterian Church. At 5.00 p.m. a large and attentive audience met in the basement of the Presbyterian Church to hear the Rev. D. Watson, M.A., deliver one of his scientific lectures on "Astronomy." His lecture was eloquent, interesting and instructive. At the close, it was moved by Dr. McKay, and seconded by Mr. Grant, that a vote of thanks be tendered Mr. Watson for his able lecture.—Carried. *Saturday.*—The Convention was re-opened in the usual form by the President. W. E. Tilley, M.A., Head Master of the Lindsay High School took up the subject "Classifications of Fractions." He dealt with the leading points in fractions, and made it a very instructive lecture to the teachers and others present. A very interesting discussion followed by Inspector Knight, Reazin, and Mr. Tilley. Inspector Knight was asked to take the subject "Mental Arithmetic." He threw out many useful hints as to when it should be introduced and how it should be carried out. He also showed some of the errors made in teaching this subject. The Question Drawer was now opened, and the answers to some of the questions led to interesting discussions. It was moved and seconded that a vote of thanks be tendered to Messrs. Knight and Tilley for their able assistance at our Convention.—Carried. The Convention adjourned, to meet on the first Friday and Saturday of February, 1882.

H. REAZIN, President.

HALTON.—The regular half-yearly meeting of the Halton County Teachers' Association will be held in the Palermo Public School, on Thursday, Friday, and Saturday, 23rd, 24th, and 25th February, 1882. *Programme, Thursday*—Morning Session, 9.30 a.m.—Opening; Reading Minutes and Correspondence; Appointing Committees. "The Unitary Method" vs. "The Rule of Three," J. A. McLellan, Esq., LL.D., High School Inspector. Afternoon, 1.30 p.m.—Grammar: "Function" vs. "Etymology," J. McN. Malcolm, Georgetown; "Reading in the Schools and How to Improve it," Dr. McLellan; *Treasurer's Report.* Evening Session, 7.30 p.m.—Lecture in the M. E. Church, by Dr. McLellan, Subject: "Parents and Teachers in Relation to the Schools." *Friday*—Morning Session, 9 a.m.—Grammar: "Rational Analysis," Dr. McLellan; "Statics," N. J. Wellwood, B.A., H. M. Oakville High School; "Principle of Symmetry," Dr. McLellan. Afternoon Session, 1.30 p.m.—"Writing," H. Husband, Oakville; "Good Questioning and Bad," Dr. McLellan; "Spelling," W. H. Grant, Zimmerman; *Auditor's Report.* Evening Session, 7.30 p.m.—Lecture in the M. E. Church, by Jas. L. Hughes, P. S. I., Toronto, subject: "School Room Humor." *Saturday*—Morning Session, 9 a.m.—Librarian's Report; "History," W. Davidson, Trafalgar; "A few notes on the Entrance Examination," Earnest W. Maas, Trafalgar; Election of Officers. All teachers attending the Association can be supplied with temporary homes by applying to C. C. McPhee, Esq., Teacher, Palermo, P. O.; please send name in full, and at an early date. Convoynances will meet the morning trains on the H. & N. W. Railway, at the Zimmerman Station, and on the G. W. Railway, at the Bronte Station, on Thursday, February 23rd. Please note this arrangement. No persons are appointed to lead the discussions at this meeting, but every teacher is requested to come prepared to take a part in the work of the Convention. All friends of education are cordially invited to attend the Sessions of the Convention. N.B.—Teachers who attend the Convention will please note the fact in their next half-yearly return, so that there will be no loss to their sections in the apportionment of the Legislative Grant.—R. COATES, Secretary.

EAST BRUCE.—The annual meeting of the East Bruce Teachers' Association will be held in the Model School, Walkerton, on Friday and Saturday, February 24th and 25th, commencing at nine o'clock, a.m. *Programme.* Essays—Miss Fletcher, Mr. McCool; Readings—Misses Davidson, McLean, and Messrs. Butchart, Reddon. *TEACHING:* Grammatical Analysis—J. Morgan, B.A., Master, High School; Geography of Canada—Messrs. Irwin and McGill; Composition—Mr. Telford, Master, Model School; Writing—Miss I. McBride, Mr. Richardson; Arithmetic—Mr. McKay, Assistant, High School. *DISCUSSIONS:* Cramping versus Education—Messrs. J. King, Robb; New Readers for Our Schools—Messrs. McArthur, Adolph; Desirable changes in Public School Programme—Messrs. McKechnie, McIntosh; Incentives to Study—Miss Hicks, Mr. Clendenning; A Teachers' Leisure Hours—Messrs. R. McBride, Hunter; Miscellaneous—The following teachers will introduce subjects of their own selection: Misses McNaughton, Sang, and Messrs. Lyles, Munroe. Election and Reports of Officers. Question Drawer—Difficulties in Grammar, School Discipline, Mathematics met with in actual teaching, &c., will be handed in on the first day, and answered on the second by a Committee. Friday evening—Arrangements will be made for an interesting public meeting. Persons appointed to lead in any subject may choose either a dress or essay. Substitutes may be obtained. Any two may exchange subjects. Any teacher refusing to take the part assigned, will please notify the Inspector at once. The initial is given when there are two teachers on the same District of the same name. Fellow-laborers, allow not indifference or a slight inconvenience to prevent you from being present at this meeting; consider it a duty you owe to the noble work in which you are engaged. Meditate upon the subjects previously, assemble early, and come determined to assist in making the meeting a decided success. If possible let each teacher perform the part assigned, and make thorough preparation, and not leave it until the day before the Convention. *School Journals.*—The regular subscription price of the CANADA SCHOOL JOURNAL is \$1, of the *Canada Educational Monthly* is \$1.50. Any teacher on the District, or any member of the Association, who, during the month of January, sends the Inspector 45 cents for the former or 65 cents for the latter, will receive either paper for 1882, commencing with February; the balance of the club rates is added by the Association. *Inspection.*—Classes using Kirkland's Arithmetic will be examined as follows: 2nd Junior, commencing with Mul.; 2nd Senior, Div.; 3rd Junior, Can. Money; 3rd Senior, Frac.; 4th Junior, Dec.; 4th Senior, Aver. Classes using Campell's or Lovell's Geographies, as follows: 3rd Junior, World, N. and S. Am.; 3rd Senior, Can., Ont.; 4th Junior, Brit. Emp., Eur.; 4th Senior, As., Afr. For the present, teachers may require pupils to study History or not at their discretion. The Inspector will not exclude for irregular attendance when the teacher has not posted the Summary at the beginning of the Daily Register, monthly. Each inspection will be reported at once to the Trustees on blank forms provided by the Minister of Education.—W. S. CLENDENNING, Inspector; ANNA ROBERTSON, Vice-President.

The Canada School Journal.

Vol. VI.

TORONTO, JANUARY, 1881.

No. 44.

The Canada School Journal

IS PUBLISHED THE FIRST OF EACH MONTH AT

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CANADA SCHOOL JOURNAL HAS RECEIVED

An Honorable Mention at Paris Exhibition, 1878.
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Recommended by Chief Superintendents of Education, New Brunswick.
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Recommended by Chief Superintendents of Education, British Columbia.
Recommended by Chief Superintendents 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.

A MISTAKE CORRECTED.

We are glad to correct a statement in our article on co-education to the effect that the authorities of the University refused the use of the room for the meeting of undergraduates on the co-education question. It appears that the use of the room, as a matter of fact, was not actually refused, although such was certainly the impression, at the time our article was written, among most of those interested in the subject.

1881.

The close of a year marked by an experiment of unusual effort and money expenditure in enlarging the CANADA SCHOOL JOURNAL, and adding considerably to its staff, has brought results that have more than repaid the promoters of our paper for their enterprise. The merits of the CANADA SCHOOL JOURNAL as a representative educational paper have been widely acknowledged by the educational press in England and in the States. To quote an instance of this, and it is but one among many, the *Institute Worker*, a new journal of education under the able editorship of Mr. T. W. Field, recommends all interested in teaching to take both their own State School Journal, and in addition, the CANADA SCHOOL JOURNAL. But apart from literary merit, the year 1880 has brought abundant evidence of the greatly increased acceptance of the CANADA SCHOOL JOURNAL as a paper specially and *par excellence* representing the teaching interest of this country. This has taken the unimpeachable shape not merely of extended circulation, but of entire teachers' associations unanimously resolving to send the CANADA SCHOOL JOURNAL to every teacher in their county at the expense of the association.

In pursuance of the policy which aims at supplying to the teachers of Canada, at the smallest possible cost, the maximum of value, it is the intention of the proprietors of this JOURNAL,

during the year 1881, to fully maintain the efficiency of its several departments. The Mathematical Department will, as before, be conducted by a mathematician second to none in Canada for scientific acquirements, and whose high position as a mathematical teacher in the University of Toronto brings him in continual contact with the difficulties of practical work. The very great importance of this department to our readers will justify the prominence assigned to it, and the care expended in furnishing a continually fresh series of mathematical exercises.

The department of Teachers' Associations and Conventions will receive increased attention, a facility being given for this by the greatly enlarged size of the JOURNAL. In the proceedings of these associations is centered the vital action of the teaching profession. It is of the utmost importance that our readers should fully inform themselves of all that goes on at each convention. The meetings will, as before, be in most cases attended by a practical short-hand reporter representing the CANADA SCHOOL JOURNAL, and large extracts from the most important papers read will be printed.

The Practical Teachers' Department will as before be in the hands of a gentleman whose writings on similar questions have been stamped with the hall-mark of sterling merit not only by the approval of the great English educational journals, but by the fact that his Manuals of Teaching have been republished for school use in several of the leading cities of America. No pains will be spared to illustrate and develop new ideas as to methods of teaching. This is a subject which no teacher can afford to neglect, as the freshness and *verve* which is obtained by observing the continual progress of the teaching art in the hands of its most intelligent exponents is the only salvation from the fatal facility of routine.

As before, marked attention will be given to the Examination Papers department. It is of the utmost importance, not only to those preparing for examination, but to all teachers, to test and measure their knowledge by a continual use of this invaluable adjunct to study. A large number of original examination papers, as well as a selection from the best already extant, will be furnished by experienced teachers for the pages of the CANADA SCHOOL JOURNAL.

We desire also to remind our readers of the teaching profession that this journal has an extended circulation among School Trustees and those interested in education, outside the class of teachers. It has thus at command a powerful leverage, which it is the intention of the proprietors to exert to the utmost in promoting the two most important practical needs of the teaching profession—the increase of salary and the full assertion of that social position without which no profession can maintain its self-respect. On these subjects the CANADA SCHOOL JOURNAL will have the courage of its opinions, and will speak very plainly when plain speaking is so very

much required. The present remuneration of the labor on which the intellectual future of Canada depends is very far behind what it ought to be. It is true that a considerable advance has taken place, especially in the Province of Ontario, in this respect during the last ten years, a result due in no small degree to the wise policy of the present Minister of Education in raising the standard of examination, and in consequence the character of the teachers. The same thing is taking place in the provinces of Nova Scotia and New Brunswick, where the efforts of Dr. Allison and of Dr. Rand have been energetically directed to the same object. But the average pay of the teachers is still inadequate, and it will be one of the chief objects of our paper to promote reform in this respect. Every step gained, every school put on a better footing as regards salary, every trustee who can be impressed with the conviction that the vulgar parsimony which curtails the teacher's salary is as mischievous as it is illiberal, is so much progress made. In conclusion, the proprietors of the CANADA SCHOOL JOURNAL respectfully invite the co-operation of teachers in writing to the columns of this paper on all subjects of professional interest. And we desire to submit it to their notice that one of the staff of editors will be present daily at the office of this journal between the hours of nine and six, and will be happy to confer on matters of educational interest with any of our readers who may honor him with a visit. We wish that the teaching profession should look on the CANADA SCHOOL JOURNAL not merely as a literary representative, but as a trusty champion and professional and personal friend. In which spirit we give our readers the kindest of greetings for 1881.

"PLEASE STATE SALARY REQUIRED."

Most thinking persons are aware that there are some kinds of human labor in regard to which the maxim "Buy in the cheapest market" is false political economy. In all work that is done by machines or cattle, or by those serfs of feudalism and capital who have little more free action than cattle or machines, the "cheapest market" maxim is master of the situation. Such work commands its minimum value and no more. It is at the mercy of that which is most merciless—competition.

But in all labor of which skill is an element, such as teaching, it is evident that *quality* must be considered in determining its cheapness. Teaching is good or bad, according as the interest and personal effort of the teacher is induced to make it the former and not the latter. The cheapest teaching may be, in most cases, and under proper conditions will be in all cases, that bought in the dearest market. That is to say, it is self-evident that the great city schools, which are liberal and not niggardly as a rule, as a rule purchase the best work in the profession.

Does this mean that we are to urge our school-trustee readers to make an effort to raise artificially the teachers' salaries? By no means. For it would be equally false political economy to attempt to change the balance of demand and supply. The teacher's salary will be exactly in proportion to

the value set on education, and the degree to which the trustees and the section are ambitious for their children's advancement. Let them weigh fully the fact that the teacher's services are worth more to their children in the present and the future than any other necessary for which our people, poor as a rule, pay out their hard-earned dollars. Then let them state in their advertisement what they are able to give. They will thus deal fairly with the teacher, and will deserve to secure the best labor available in the market, *at the price which they are able to give*. But there is a device very current just now which attempts to disturb the balance of demand and supply, by seeking to establish an underhand competition among teachers. It is this. At the present season, when charity and good-will are "on the cards"—the Christmas cards at least—we frequently see advertisements in the papers ending "Please state salary required." The object of this is to make teachers *underbid* each other, and thus artificially lower the market value of their labor. It is most unfair to the teachers, who are thus made to act as agents in cheapening each other's work. It is still more injurious to the true interests of the school section, by offering such a low salary, to which no one could object if no larger one could be afforded, but an *artificially* low salary, the result not of legitimate competition in open market, but of a hole-and-corner process of underselling, discreditable to all who engage in it. If trustees can only give \$200 a year, let them say so, and get the best value the profession, in open competition, offers for that price. But to attempt to gain popularity in the school section, by reducing his \$200 to \$150, or by securing (for a time) a teacher, the market value of whose labor is \$300 for their \$200, is sure to react injuriously on the *school* and the *scholars*—the true interests concerned—by ignoring which vulgar stinginess, like vaulting ambition, "overleaps itself."

POLITICAL EDUCATIONISTS.

It has not been the custom of this journal to lend its columns for the furtherance of any individual interests, still less for the discussion of personal quarrels. But when it has unfortunately happened that a newspaper, eminent for literary ability, has fallen so far under the influence of a clique as to attack, in season and out of season, the Minister of Education, the Central Committee, and two of the ablest and most respected of Canadian men of letters connected with education, it becomes the duty of this journal, in the interests of the teaching profession which it represents, for once to depart from its rule of not paying the compliment of notice to what is nothing more than the merest and most baseless slander. To say that the Minister of Education is incompetent or discourteous, is slander. To call the Central Committee "a ring," to talk of its "abominations," to say that it deserves only to be swept away, is slander, and slander wanting the piquancy of slang or the point of sarcasm.

The *Mail* has for the last six months been incessant in its attacks on the Education Department; it has raked up every old grievance, and built up on the shallow foundation that

certain members of the Central Committee, are also the authors of School Manuals, a superstructure of denunciation which is so much in excess of the ground it rests on, as to show that all this assumption of interest in Education is only the sorry political trick of mud-throwing at opponents whom it cannot otherwise injure. We will examine the grounds on which it justifies its remarkable bursts of rhetoric—"abominations," "ring of conspirators," and other such expressions, scarcely compatible with the dignity of a first-class journal, and in the present instance only justifiable on the maxim of the French philosopher who said "Mentons, mentons, il y a restora toujours."

Well, then, the accusation when put into plain words amounts to this: some of the Central Committee have written books. It has hitherto been the cue of the *Mail* to decry the quality of the books in question. But that can hardly be done any longer in the face of the fact that of late months these Manuals have received the emphatic approval of all the leading educational journals and many leading educators in Great Britain and in America, and that they have been republished again and again, in several cities in the States. The *Mail's* entire scheme for reconstructing the Department hinges on its claim that no author of a school manual is to be a member of the Advisory Committee, for it suggests that the Central Committee be swept away, and replaced by something very like the old Council of Public Instruction, with Mr. Goldwin Smith, and others not named, as members. But this self-denying ordinance would exclude Mr. Goldwin Smith himself, who was a member of the Council of Public Instruction after he had published his Lectures on History. Cowper's Task will soon be one of the text books for examination, and we should be sorry indeed that the virulence of political animus should force on the Education Department an arbitrary rule which would deprive that Department of the right to select as member of an advisory body such a man as Mr. Goldwin Smith, merely because he is the author of one of the best aids to understanding the Task which the student could employ, his admirable Life of Cowper.

HIGH SCHOOL ADVERTISING.

We are glad to acknowledge the receipt of several letters from masters in Collegiate Institutes and High Schools and from others, heartily endorsing the views expressed in the November and December numbers of the JOURNAL concerning the system of advertising practised by certain Principals, especially by the Principal of Hamilton Collegiate Institute. The following quotation from a letter sent by the Principal of a Collegiate Institute fairly represents the opinions of others who have written to us:—"I am satisfied the course Hamilton Collegiate Institute has taken in inducing students to leave parts of the province where there are good schools, is causing a great deal of dissatisfaction among many of the masters of institutes and schools. You could advocate no more popular views than those you have so ably expressed in the JOURNAL, and I shall

have much pleasure in doing what I can in January to get up a large club in this county. The tactics which some are pursuing in drawing students are in my judgment *infra dig.*, and will do a great deal of harm if teachers do not frown down such as entirely unprofessional." We do not object to announcements of the dates of opening schools, with a statement of the names of the masters in the various departments, fees charged, etc., but protest most earnestly against puffing circulars intended to give the school a fictitious reputation, and mislead intending students, who are often induced to incur large expenses by leaving home to attend an institution which cannot give them so thorough a training as the High School or Collegiate Institute near home. Perhaps the most unfair method of trying to undermine other schools, and gather students from the districts of fellow-teachers, is the issuing of a "magazine," so that inexperienced young people may accept the puffs given in it as the opinion of "that mysterious personage," the editor. We are glad to know that such advertising is now pretty generally understood, and that high school masters are not likely to continue to aid in securing the upbuilding of any one school at their own expense. We insert in another column a letter on this subject from "A Teacher," whose experience is feelingly related, and refer our readers to the report of the St. Thomas Institute for further confirmation of our views.

CO-EDUCATION AND A COLLEGE FOR LADIES.

On this most interesting question much may be urged upon either side. It is a pressing one, of immediate practical interest, and our columns will be open to letters on either side, although we do not wish to commit this journal to a decision which might prove hasty. As Mr. Mulvany has said, in a letter in advocacy of co-education in our present issue, all interested in female education owe a debt of gratitude to the President of the University for having some time ago delivered a course of very interesting lectures on the subject, chiefly, however, to the ladies of the wealthier class in Toronto. The opinions of such a man are worth mature consideration—they are well expressed in a paper in the *Canadian Journal* of November, 1869, well deserving of consideration just now, some portions of which we hope to submit to our readers, as an aid to their judgment on the subject. In the course of this paper, Dr. Wilson lays the greatest stress on the need of a Ladies' College. In the December CANADA SCHOOL JOURNAL we offered a solution of the difficulty which had not been put forward in any other journal, that the Upper Canada College should be utilized as a Ladies' College for the Province. This would meet all the requirements of the case. The University, we are confident, with the full and willing co-operation of one so forward in every good work as its President, would do all strictly University work for the Ladies' College, such as holding examinations and granting degrees—that of Lady Bachelor not of necessity connoting celibacy. The suggestion thus made with regard to Upper Canada College, we regard as one of great practical value. It gave us pleasure to see a similar proposal in the January *Bystander*.

A GOOD PROFESSIONAL JOURNAL A NECESSITY TO THE TEACHER.

This vitally important truth is put forward with as much force as literary merit in the following article, which we extract from a New England school journal :

There are thousands of teachers in our country,—too many of them in the most cultivated centres of school life,—who are destined to failure from the narrowness of their professional outlook. They read no book on the art of instruction; they neglect the study that keeps the mind alive, they have money enough for social entertainments and personal adornment, but not a cent for an educational journal. They are living in almost complete ignorance of the great stir in the school-life of the land. Now and then, through the daily paper or an accidental collision with a rough critic, they learn that there is a great deal of fault found with the teachers, and a tremendous hubbub over the schools. But all this is treated like a thunderstorm, or any disagreeable state of the elements,—simply as a warning to get indoors, close the shutters, make yourself comfortable, and let things rage outside. Too many of our young women-teachers who have excellent stuff in them, and are capable of a vigorous push for self-culture and true professional success, are now suffering from this narrowness of outlook. They are putting on fine airs of personal dignity in the face of this storm of criticism, and treating all public exception to their work as a personal affront to themselves. We know many a high-strung and really charming young schoolma'am who puts the public, by whose favor she stands in the school-room and by whose money she lives, on the same footing as the forward young gentleman who pushes his attentions freely, or ventures on a remark not flattering to her personal pride. The spectacle of a spirited young lady in the teacher's desk affecting to snub the town or city whose public official she is, shirking the institute and the convention, too busy about her own private affairs to read professional books, or even to join a club that subscribes for an educational paper, is not inspiring.

The thing that should be done by at least a hundred thousand American teachers, this month, is to subscribe for a good educational journal. There they will learn what the superior part of the American people are saying about them and their schools. They will see there against what odds the friends of the best education are contending, and realize how many unfriendly tendencies are conspiring to block the wheels of popular intelligence and stay the coming of new light to the republic. There they will see their own weakness, even the most unpleasant qualities of their own personality, reflected in a mirror that is their best friend in revealing them as they are. They will find there the heartiest and the most thoughtful and delicate recognition of their merits—a hand stretched out as they are about to sink in the slough of despond—a word of good cheer for a dark day—a tender whisper of consolation for a hidden sorrow—a friend that will come to them every week, or month, and lift them out of the narrowness of the present into an ideal realm of aspiration and cheerful hope. Many a teacher owes her awakening to a new professional life, and her final achievement of genuine success to the few dollars she was persuaded to invest in educational journals. No little mistress is too poor or obscure, no great master is too busy or famous, to afford to dispense with such a mirror of the educational world of to-day. Begin the school-year by investing in this mirror, and study yourself in it every morning and evening as the days go on.

UPPER CANADA COLLEGE.

A very general opinion is expressed by High School supporters that it is difficult to see on what grounds, other than the merest sentiment, Upper Canada College is to be maintained at the public expense in the face of the indisputable fact that better work is done at the High Schools throughout the Province. As to the argument put forward in some quarters that it is expedient to maintain it as a school for those boys "of the

upper class" who would otherwise be sent to school in England, that is only calling in Snobbery to defend Injustice. We want no "schools for the upper classes" maintained at the expense of this Province. If "the upper class" want such a school, let them pay for it themselves. But the fact of it is, as has been shown in a trenchant article in the current *Bystander*, the English aristocratic school cannot be reproduced here. Its peculiar faults, among which Mr. Goldwin Smith enumerates idleness and extravagance—he might have added cynical morals and subserviency to rank—are the very faults most objectionable in Canadian life. It seems to be the belief of those best qualified to judge, that Upper Canada College cannot be tolerated except, as we suggest, it be utilized in the very capacity to which it is exactly suited—as a Ladies' College for Ontario.

"EDUCATION."

It is an evidence of the increased attention given to the development of the science of education, that an international magazine has been established by Mr. Thomas W. Bicknell, of Boston, bearing the title "Education," and having for its contributors nearly every living educational writer of note. The two numbers already issued are volumes of great value, and contain articles written by men eminent in their departments on most of the great educational questions of the day.

We hope that every teachers' association in Canada will subscribe for a copy, and that many Canadian teachers will realize how greatly it will be to their advantage to read this magazine. Even financially, to look at the question from no higher standpoint, we are convinced that teachers will find themselves improved by it. It costs four dollars per annum, but any teacher who reads it carefully will increase his "market value" to a much greater extent than four dollars a year. Teachers are short-sighted generally in this particular, as there is no other field of labor in which outlay made in improving the ability to do good work is so quickly or so largely repaid.

Mr. Bicknell is deserving of encouragement in his new enterprise, and we advise our readers to secure a sample copy of *Education*.

NEWSPAPER CRITICISM ON SCHOOLS.

The *Thornbury Standard* has an excellent editorial on the Thornbury and Clarksburg schools, giving an account of a visit to those institutions by the editor. The article is sensible, and has the great merit of being critical without puffing. A word in season is addressed to the School Trustees on the evil of frequent change of teachers. It were devoutly to be wished that the journals of Canada would more frequently make editorial comment on educational matters. Much good would be effected—in particular the influence of the press as one of our greatest moral agencies would be strengthened by its criticism of the one public question which is outside the

demoralizing associations of party politics. It is our intention to keep record of the course taken on this subject by our contemporaries. In contrast to the judicious criticism of the *Thornbury Standard*, is the too intrepid utterance of the *Lindsay Post*, a case of "editors rushing in where trustees fear to tread," which has brought on the Lindsay suite no less than four libel suits at \$5,000 each. A great deal worse than the *Lindsay Post*, which at least has the courage of its opinions, is the *St. Mary's Journal*, whose editor points against the poor teachers who have no libel suit remedy to resort to, an attack worse than any libel, on that most vulnerable point, the pocket. The *St. Mary's Journal* actually censures the good town of Mitchell for paying "too good salaries to teachers!" The *Journal* imputes it as blame to the Mitchell trustees that only two of the Mitchell teachers are paid less than \$200 a year." The editor of the *St. Mary's Journal* seems to set a particularly small value on education. He might remember that it was a cheap school system that produced Mr. Squeers and Dotheboys Hall.

The *Bowmanville Statesman* of November 19th has a good leading article on the present condition of the Public and High Schools of that town. It has some rather trenchant criticism of the work done by the Kingston High Schools, which, according to the *Statesman*, is inferior to that of the Bowmanville institutions. If this be so, better things ought to be expected from a High School which has liberal money grants, and the respectable city population of Kingston to draw on for support.

SHOULD ABSENTEES BE SUSPENDED?

The Supreme Court in the United States has reversed a decision of a Circuit Court against the Jefferson City School Board, which had suspended a scholar absent for six half days in four consecutive weeks. The Court disposed of the fallacy that truancy is injurious only to the truant, and of the equally fallacious assumption that a right to be absent results from the right to be present in school. Every child has a right to attend the school. "This is true; but this right of attending school necessarily requires, when the school is joined, and whilst such attendance continues, a submission to the regulations of the school. Suppose rule 11 be inverted, and instead of reading as it now stands, should read thus: 'Any pupil is at liberty to go a fishing during school hours, and be absent a half a day or a whole day, and as many days as he pleases, provided he conducts himself decently when in attendance on school.'"

NIGHT SCHOOLS AND MECHANICS' INSTITUTES.—We are glad to see, by the large posters inviting attention to the subject, that night schools are being established in Toronto during the winter. These will supplement the day work of the public schools, and do something not only to supply educational facilities for those who cannot attend during the day, but for those, no inconsiderable class, for whom there is not room in the existing school buildings. It were to be wished that the Mechanics' Institutes, now that this work is to be taken off

their hands, would turn their energies into the direction of industrial classes. A vast field of usefulness is there open for them.—*Exchange.*

—The Right Hon. A. Mundella, M.P., the Minister of Education in Great Britain, is fulfilling the arduous duties of his position in a way that merits the approval of all parties. He has lately travelled in Europe with a view of investigating the best systems of education. The following remarks, taken from an address recently made before the Mechanics' Institute, at Kingsley (Yorkshire), will be of interest to our readers. He said:

They had now direct compulsion established for the whole of the United Kingdom, and although the Act did not come into operation until the 1st of January, it had been adopted already by the whole population of England and Wales within one million. He had no doubt, without the least pressure from the Education Department, that on the 1st January, 1881, the whole population of England and Wales would be under compulsion. (Cheers.) If there was any complaint of the hardship of the Education Act, it arose when the child came of age to work and could not pass the necessary standard.

The factory employers and parents present should bear in mind that British children had a shorter school life allowed them than any other children in Europe, where there was anything like a compulsory system. In Switzerland, no child could leave school to work until he was thirteen years of age; in Bavaria, also, the age was thirteen. In Prussia the half-time system began at twelve years, continued to fourteen years, and then it was compulsory, if required, for two or three years longer, if necessary up to seventeen years, for six or eight hours a week; it might be in the night, but it must be continued until the standard was passed. It was most important to economise before everything, the short school life of the English child.

Alluding to the controversy on the subject of voluntary and Board schools, he said he prayed that that might all come to an end. (Hear, hear.) There was enough for good men to do, to whatever sect or party they might belong, in rescuing the rising generation, without maintaining a bitter feud about which should do the work which had to be done. It was all the Masters' work; and he served best who served in the best spirit and threw his best energy into the work.

He wished that the School Boards should, as far as was consistent with the Acts of Parliament, have perfect freedom, and that they should be responsible rather more to the ratepayers, and rather less to the Education Department. It was for the ratepayers chiefly to decide how far the School Boards should carry out their various schemes.

In our School Board reports of Keighley and Huddersfield next week we shall give longer extracts from the right hon. gentleman's speeches.

—When on the point of going to press, rumours have reached us that several suits are being instituted against the Hamilton Collegiate Institute for non-fulfilment of promises as to money payment—promises put forward in the advertisements of the Hamilton Institute, to which allusion has been made in our leading articles. We have received a number of letters from teachers on this subject which are too late for this issue, but will be published in the February number of the *SCHOOL JOURNAL*. One such letter from a teacher we print in the present issue, and we are in a position to state that the editors of this paper have during the last few days received visits from High School teachers of the highest respectability, who have afforded us fresh information on this subject which it will be our painful but inevitable duty to lay before our readers.

—The following extract from the *Toronto Mail* furnishes a very telling comment on the teaching of a deservedly popular clergyman of Toronto, with regard to moderate drinking as a remedy for intemperance, and to the reasoning of an able writer in the December number of the *Canadian Monthly*, who endeavors to support the same platform. Here is a case of what may be called "Moderate Drinking on Principle," and of its results. The Public Schools in England are now, though in a tentative manner, beginning to teach temperance principles. It is the intention of the CANADA SCHOOL JOURNAL not to let a number be issued without urging, with what force of utterance is given to it, the duty of the Education Department to make distinct and uncompromising temperance teaching, with clear information as to the physical as well as moral evils of strong drink as part of the programme in every public school. We ask the special attention of teachers to the following extract, as a story which points a vitally important moral:

"Miss Degrew was sent to jail at Williamsburg as a habitual drunkard. The prisoner was formerly active in her efforts to reform unfortunate women, and acquired a taste for liquor in attempting to show the latter how it could be used without being abused."

—Toronto is cavilled at by certain journals among our exchanges for the honors bestowed on Hunlan, the *Bystander*, strangely enough, leading the chorus against a practice of rewarding athletic prowess which was held in honour by the most cultured nations of antiquity. The CANADA SCHOOL JOURNAL values physical training as the complement of mental development, and endorses the action of those who think some recognition is due to him who has placed Canadian athletic skill foremost in the world. Thucydides or Plato would not have cavilled at "a mere oarsman."

—We are sorry to record the death of Mr. Mark Firth, the munificent benefactor of Sheffield, who, having made a large fortune in trade, devoted considerable portions of it, from time to time, to the advancement of education, religion, and good morals amongst the working classes. His many acts of munificence have been recorded in the papers within the last week: but the principal were the Firth Almshouses, costing 25,000*l.*; the Firth Park, 30,000*l.*; and the Firth College, estimated at 50,000*l.* at least. These splendid benefactions lend a great dignity to trade, and are a noble example to all classes.

Contributions and Correspondence.

LETTERS ON CO-EDUCATION.

No. I.

BY THE REV. CHARLES PELHAM MUYVANT, M.A.

Certain opponents of co-education, who are apt to fancy that they can make hard words do duty for solid argument, are given to accusing its advocates of confusing two distinct things—the right of women to equal education, and the right of women to co-education with man. We do not confuse these things,

but we regard them as *steps in the same direction*. Those who now shriek against co-education as unfeminine, immoral, etc., would on just the same grounds have shrieked against Ladies' Colleges, University Examinations and Degrees for Women, thirty years or so ago. They did shriek against co-education of boys and girls in the Public Schools on exactly the same pretext, that of "Morality in Danger." Now that co-education of boys and girls has been tried successfully, morality, strange to say, surviving the shock, it is plain enough that the main position of the opponents of co-education has been turned.

We regard every educational step gained for women as part of the same logical process—that leading to her complete mental and industrial emancipation. Some of those most hostile to co-education have done much to advance these previous steps to promoting that higher education of women, which is, in *their* way of looking at things, completely separable from co-education. No one is more entitled to the gratitude of all who value what has been gained in this way for woman's education than such men as the President of Toronto University, whose excellent lectures to the ladies of Toronto are still remembered with pleasure. It is a satisfaction also to know that Dr. Wilson never refused the use of a room for the free discussion of this subject. We would all wish to believe that the distinguished President's courtesy is equal to his literary fame. While fully acknowledging this, and at the risk of being thought a "stupid blunderer," I am free to confess that to my thought all that has hitherto been done to promote Female Education is part of a movement which tends in the direction of co-education. The opponents of the latter measure, I must confess, appear to my limited capacity to hold a position well illustrated by a "society" drawing in the last issue of *Punch*, in which a charming little girl tells her mamma that she wishes to adopt a profession, which, on inquiry, turns out to be that of a "Professional Beauty." That is the profession to which our opponents would in effect limit women.

No, we do not "confuse" two distinct things, but we look on every onward step as so much gained towards an end that we consider as the logical result of every advance from the convent and the gynæceum, and therefore those interested in the advance of liberal views as to the Education of Women will hail the reinforcement now given to the movement for granting the degrees of the English Universities to women, by the fact that the last published class-list of the University of Cambridge contains the names of three ladies who have passed the examination for B.A. In France, the liberal advance in this respect is evidenced by an article, as sparkling with Parisian gaiety as it is incisive in its logic, by M. Valbert, in the current *Revue des Deux Mondes*. Amid the irritation caused among large classes, and those the most cultured of French society, by the violent changes lately made in the school law, it is to be feared that true educational progress will for a time be checked. M. Valbert's essay, however, shows a liberal spirit.

On the other side of this question, a book of some merit has appeared—Miss Hardaker's "Ethics of Sex." This writer, herself no insufficient illustration of woman's literary ability, sets the laudable example of treating the subject on scientific grounds. She argues that as women, having inferior muscular power to men, are inferior in strength of body, so women, having (as can be proved) less average brain-volume, are necessarily inferior in intellectual strength. This seems cogent reasoning at first sight; its fallacy consists in the incompleteness of the induction. In order to test the matter fairly, we should see within some generation of co-education an energetic emancipation, enough to give scope to the law of heredity, might but equalize the brain-volume of the sexes

But the question is seldom met by its opponents as the "Ethics of Sex" meets it, on grounds of argument; the usual weapons are the somewhat over-worked sarcasms against strong-minded women, and insinuations more or less broad as to the possible consequences to morality. As to the latter, a morality cannot be very healthy which cannot face the light and air. And the result of co-education in the public schools proves the converse. So does the co-education which is the rule in the public schools of Scotland. As to "unsexed girls," an expression whose wit seems to consist in its being wholly without intelligible meaning, if it is meant as an objection to a certain proportion of women being withdrawn from the necessity of contemplating matrimony as a profession, or the rearing of children as their sole vocation or duty to society, we reply that so far from being an evil, such a result must be regarded as a gain, if we consider the modern doctrines of political economy as to increase of population, and the need of making some provision for the female half of that increase in relation to the increasing complexity of social relations. As to the "morality" objection, which, in the face of facts, will, we suppose, be made to do duty again and again, we hold that the education of the sexes cannot be perfect till it is thoroughly in common, and that colleges for women, and women's literary clubs, though a step in the right direction do not meet the need. Not only do young men require the refining influence of intimate and constant association with women of the noblest type under the most favourable condition for intellectual evolution, but it is only by meeting young men as intellectual equals that girls can learn how to value adequately what is worthiest in manly character, can unlearn the sickly sentimental ideal of the "society" novels. The need of co-education is patent to any man who considers the mental attitude on social, literary, or philosophical questions of the average lady of his acquaintance. Is it too much to say that on such matters there is at present a gulf between the sexes—that one sex, in breadth of views and culture, is some years, say half a century, behind the other? The "History of the Wives of Men of Letters" among us, as a rule, illustrates only too uniformly the unhappiness caused by intellectual incompatibility. Literary biography has too few such pleasant pictures as the intellectual support give to Macaulay by his sisters, to Goethe by his friend, to Shelley by his wife.

But co-education is not an æsthetic or philosophic grievance, it is a very practical issue, for it is the necessary prelude to the opening to woman's industry of every career to which her powers are adequate; to the obtaining what at least every man who has daughters or sisters should wish, what the great Napoleon describes as the principal result of modern Progress, "*La carrière ouverte aux talens.*"

PHYSICAL TRAINING AND MORAL CULTURE IN SCHOOLS.

BY JOHN E. BRYANT, M.A.

A paper read before the Teachers of the County of Durham, and published by request of the Association.

Nothing, perhaps, has been more generally agreed to among educationists than that education to be complete should be threefold, that is, should embrace intellectual education, physical education, and moral education. But though so generally admitted is this opinion in theory, it seems to have but little influence in directing the course of practical education, or that education which is regulated by law, supported by taxes given by authorized teachers, and pursued by our students in our schools. Although upon the correct working of the organs of our bodies, their due performance

of their proper functions, more than upon anything else depends our happiness; though our capacities for enjoyment, our abilities for work, the vigor and activity of our brains, the quality and capacity of our minds, the very duration of our lives, depend upon the equal and moral development of the different parts of our physical constitutions, and their preservation in such adjustment as is necessary for the due discharge of their functions, in short upon our perfect health both until maturity is reached, and during the continuance of our lives, yet but very little, if any, of our regular education is devoted either to the practical exercises of the organs of our bodies, so that they may become best fitted to do their work, or to such a study of the human organism, and of the laws which govern it, as will enable us to live in any way conformable to these laws. The actual state of affairs is this, that not only is a study of the constitution of the human body in no way a part of the school curriculum, not only are the laws which relate to the working and preservation of the human frame untaught and their very existence ignored, not only are those general laws by which nature regulates the healthy growth and continued existence of all life entirely disregarded, not only is a study of the simplest laws of nature unthought of, and even the simplest and most evident, and for that reason the most important, facts of nature left unnoticed (with the exception perhaps of such physical geography as is found in our text-books),* but also our system of education does not stop here in its one-sidedness; for while we occupy ourselves, as we do, with one phase of education, that is, intellectual culture, we do so often in direct violation of those laws which pertain to our physical well-being; and our intellectual culture is gained at the expense of physical debilitation, bodily hurt, a partial development or altogether wrong development of the organs of our bodies, resulting in bodily weakness, organic incapacity or physical failure. Now this is a grave charge to bring against a system of education as much lauded as is ours, but there are two things that must be taken into account when the charge is made. First, that this opinion concerning the deficiency and one-sidedness of current education is not only shared but strenuously advanced by some of the wisest and best thinkers of the day, among whom it will be sufficient to name Mr. Herbert Spencer and Professor Huxley; and second, that while the charge is made, it is made with feelings of regret rather than as blaming any one, even our educational legislators and authorities, for this state of affairs. For it is not to be expected that any legislation will be useful which goes far in advance of public sentiment and desire, or that those who have the care of our educational system can be expected to demand or establish any large departure from regularly received and recognized methods and courses of instruction. Their principal duty is to see that such methods as the public desires to have pursued, and such courses as the public sentiment demands, are maintained with the utmost possible excellence. But still the fact remains, as a sad lack in our educational system—a lack which is having its result in a nation of people who are dying before their time, and who when living are incapacitated from doing the full measure of a man's or woman's work by reason of possessing frail constitutions and physical organisms which are a prey to every sort of disease, that physical education—by which I do not mean simply a course of gymnastics, no matter how scientifically devised, although this is

* I am, of course, aware, that in the authorized "course of study" for Public Schools, Hygiene is set down as a subject to be taught to the fourth, fifth, and sixth classes. But no text-book is prescribed, and the subject is to be taught by lectures. Partly on account of general indifference to the matter, partly on account of lack of knowledge on the part of the teacher, but principally on account of the demand of other subjects in order to meet the requirements of examinations and inspections, the regulation as to teaching Hygiene, in the vast majority of schools, is nothing more than a dead letter. A somewhat similar remark holds good with Chemistry, which is the single branch of natural science prescribed for Public Schools. Even this branch is optional. In High Schools of course chemistry is taught; in many instances quite thoroughly. But my remarks have a special reference to Public Schools.

important, but an education which embraces a knowledge of the human body, and of the laws which govern its growth and development, a knowledge of the structure and functions of its organs, and of the laws which relate to their healthy preservation and repair, as well as that thorough gymnastic drill which would secure a correct development of bone and sinew and muscle and nerve, their due relation and proportion one to another, and their maintenance in strength and vigor—that this physical education finds no part in our system of education, and our people grow up with no real or scientific knowledge of that which most concerns them and their offspring—the laws of life and especially of human life—or if they do possess a knowledge, it is but such as they may chance to have picked up after they have left school, with their minds unfitted to arrange and set a value upon what facts they do observe by reason of an entire absence of scientific training when at school. Now while this state of affairs is to be lamented, yet our regret should be not without hope; nay more, our very recognition of this want in the training of our people should but impel us to set to work and remedy matters as soon as possible. And we, educationists of Canada ought to feel our professional pride urging us in this direction. The study of value in general and of life in general, and thus in due course and as a proper sequence the study of human nature and human life, is part of the elementary work of the German system; the people, and especially the leading educationists of England, are demanding—I shall not say the introduction, but the extension of elementary physical science teaching there; the American system of education also recognizes its importance, and much has been done by American educationists towards establishing it; and if we wish for our national system a first rank, and that it should retain its place among the educational systems of nations, we must take care that the study of nature be not neglected here; and that our children in schools obtain a training in habits of observation and perception, and in methods of reasoning from observed facts and sequences to general laws, that thus they may grow up with powers of observation and generalization so quickened and strengthened that they may be able to avail themselves of those sources of help which nature places all around us, and, too, be enabled to ally themselves with the forces and laws of nature, and thus be stronger, wiser, and better men and women. This plan for elementary scientific training ought to be put forth by every ardent educationist in the country, until it be granted; and among the many arguments in its favor—and they are certainly many and weighty—I do not think this one ought to be overlooked which I am now trying to set forth, that to secure a just proportion of wise physical education, which is certainly very desirable, and as certainly does not now exist, there must be a demand for it, and this demand will not come from a people insufficiently educated as ours are in scientific methods of observation and thought; that to secure this demand there must be a general looking up, or elevation, or perhaps I should say a general building up of scientific knowledge and culture, and that this can be done only by a beginning at the beginning, a wise laying of the foundations, that is, by a wise and efficient system of elementary science training in our elementary schools. And here let us say a word or two as to the *practicability* of elementary scientific training. There are several opinions prevalent as to the inadvisability of attempting elementary scientific training, as for example that it is impossible with young children such as we have at our schools; that it would be by far too costly; that science cannot be taught rationally in elementary schools, and that since but a smattering of science could be obtained were it attempted, it therefore had better not be taught at all; that it is not practical, and but of little value, and hence ought not to occupy any portion of the already well-grossed time of our students; and lastly, if taught thoroughly, it

would crowd out subjects more important than it, or so diminish the time to be given them that they could not be studied properly. Now I do not know but that the real truth as to elementary scientific education lies in statements completely contradictory of these. It is not the purpose of this paper to discuss this matter fully, but I think it is capable of proof both *a priori* and from experience, that at no time of life can the scientific method be so quickly gained and thoroughly made a mental habit as in youth; in fact, it may be said that the scientific method is but the inquiring curious spirit of childhood developed, strengthened and systematized. Again, it can be easily proven that proper scientific training, education which is really worth being called scientific, is, in its elementary stages, as little expensive as other kinds, costing no more than the price that must be paid for the intelligence of the teacher; for nature's laboratory and museum are ever open, and to her professors and students, and those who worthily serve her, she yields up her treasures with lavish hands. But, perhaps, the most strenuous opposition to scientific education comes from those who advance the opinion that science cannot be taught rationally in elementary schools, and that as nothing but a mere smattering of any science can be obtained at school, it is far better that none should be attempted. This objection is as baseless as any, though it has some show of reason for its existence in the fact that very much of the elementary science which has been taught has been taught in a manner the very reverse of scientific, and that because too much has been attempted, anything like scientific training has been impossible. And yet, I cannot but think that the knowledge of science gained in this unscientific way—that is, at second-hand, and without personal observation, verification and generalization—is of much more value as a mental product than much of that which is now gained at school. But if the acquisition of scientific knowledge were made in a scientific way—that is, by direct questioning of nature, by personal investigation, by observation of facts and sequences, and the establishment of laws in accordance with these—then not only would the mind become one vast storehouse of facts which would be of incalculable benefit in the battle of life, and which now one has to pick up in the most empiric way possible, but it would be exercised and made skilful in the only kind of reasoning it is permitted by the circumstances of existence to set much value upon in actual life, a quick and accurate determination of the relation existing between events which are connected in order of occurrence, or, as we popularly say, of the relation of effects to causes. That is, as so much of our well-being depends upon our ability to determine what may be expected to happen in any given set of circumstances, an early training in this matter of scrutinizing the objects and processes of nature would be of incalculable advantage. An elementary and when I say an elementary, I in no way mean an unscientific knowledge of, say Botany, or Physiology, or Physical Geography, or of Natural History, can be acquired by children from eight to thirteen years of age, that would inspire them with the keenest interest in nature all through life, that would include a stock of facts, and develop a power of questioning nature and discovering her secrets and her laws that would result in a manhood of intellectual activity and skill. The objections that scientific knowledge, even elementary scientific knowledge, can have no practical value, will have but little weight with those who reflect that the vast material and intellectual progress of the present age is due to scientific study and research, and that, should this progress continue, it must be through a continuation of scientific enquiry, which can only be maintained when proper elementary scientific education supports it; and that for the world even to retain its present degree of advancement, there must be thorough training in every branch of physical science. It cannot then be said that any subjects of the

school curriculum, with the exception of the purely basal subjects, reading, writing, and simple computation, can be reckoned as more important than those which are concerned with the study of nature; and therefore, as things now are, the true complaint is, not that other subjects are likely to be crowded out by elementary science, but that elementary science is already crowded out by other subjects less useful.

Thus we have seen that of the three branches of education, intellectual, physical and moral, intellectual education receives considerable, let us say the main attention; but that not only is physical education unattended to in the matter of scientific drill and exercise of the body, so that it may properly develop and reach a state of healthy maturity, and be maintained therein, but also that on account of defective scientific education, physical education in its true sense is impossible—that is, an education embracing a knowledge of the structure and functions of the body, and of what is necessary for its maintenance in healthful activity.

It remains then for us to consider how the third branch of education, that is, moral education, fares in our educational system. And here I am afraid that at first sight we should say that our system is as deficient in this respect as it is in the matter of physical education. For the part in our school curriculum which is allotted to moral education is but very little. In fact, in the Public School programme it is especially excepted, and in the High School programme no mention is made of the subject at all. In the lists of authorized text-books for Public and High Schools, no work on Morals is provided. And yet it must be said that the necessity of moral education is not altogether overlooked. In the administration of the school system care is taken that only teachers of good moral character are employed. In a minute for the guidance of Public School teachers it is said that "they are expected to use their influence with their pupils in the subject of morals, as in all others, for their permanent good." In the single lecture on moral duties which is prescribed to be delivered to intending teachers at County Model Schools, the student is told that as a teacher he should cultivate gentleness and forbearance among his pupils; that he should frown down rudeness, boisterousness and quarrelling; that he should not allow the strong to impose upon the weak, nor that any pupil should be ridiculed on account of natural infirmity; that he should cultivate respect for the aged, sympathy with the infirm or unfortunate, and a generous regard for each other's rights; that he should himself be a pattern of gentleness, kindness, forbearance and true politeness; in fine, that he should be a man and a gentleman in every sense of the word. However, in the subjects of study for the students who intend to present themselves for second-class and third-class certificates, and the prescribed subjects of lectures to be delivered to students-in-training at the Normal Schools, morals is not found. In the working of the school system, then, it will be seen that whereas moral education is not altogether neglected, the steps taken to secure it are preventive and cautionary rather than operative; that they are negative rather than positive; that care is taken that immorality shall not be taught either by precept or by example, but that not much is done towards having morality taught. The only part which that which, for want of a better term, I may call *didactic morality*, has in the system, is the single lecture delivered to teachers-in-training of the third class at the County Model Schools, and which, because it is the only part, I have copied out *in extenso*. But being a single lecture, one out of many delivered in six weeks, amid a host of new and strange matters, it is not to be wondered at if it made no deep impression. But though, as I have said before, at first sight, we might be disposed to criticize very adversely a national system which provides so little, does so little, or to speak more truly, is so wanting in the matter of moral train-

ing, yet there are considerations which make us soften this criticism, if not withdraw it altogether. And first it must be noticed that our public schools are *day schools*, and not schools of residence; and hence, and also because of the Saturday and Sunday holidays, the *home* life of pupils does not come under the cognizance of teachers; and thus, since it is in the greater freedom of the house, when children are thrown upon themselves, when their wills are less restrained, and their impulses more easily gratified, in that the regular discipline which school organization enforced is relaxed or wanting, that moral forces are most needed, and conduct becomes a matter of voluntary effort, and thus may have all the various shades of quality from morally excellent to morally depraved, moral education as a part of regular school work is omitted, and the duty of inculcating moral truths, and of securing moral conduct by enforcing moral discipline, is relegated to parents. So that on this consideration, it is not to be imputed to our system as a fault, that little time is required to be devoted to moral education in schools.

But there is a second consideration, which may justify our educational authorities in not imposing upon our system moral education as a part of school work; though at first sight the reason may not seem a valid one. But the truth is, that it is difficult if not impossible to frame a formal system or theory of morals that will satisfy the different schools of philosophy and religion. What is the criterion of a moral act, despite our attainments in morality, is still a vexed question. Whether by a divine power we have had revealed to us what is wrong and what is right, wrong and right being arbitrary determinations of this divine will and therefore independent of our reason; whether the goodness of an act depends upon its tendency to fulfil the pleasure and conform to the will of a divine being, our reason thus being acknowledged necessary to determine the fitness of the act to meet this end; whether an innate moral sense exists which has the power of determining the moral quality of an act, as the eye has the power of discerning the forms and colours of objects, and the ear the power of distinguishing the qualities of sounds,—what this moral sense approves being necessarily what Deity commands, or otherwise Deity could not be thought good and just; whether there is an eternal and intrinsic *fitness* in the things considered as right and a like *unfitness* in the wrong, which the reason of all rational beings, divine and created, must accurately discern; whether, as Adam Smith maintained, the criterion of right is the sympathetic feeling of the impartial and well-informed spectator, thus making morality a positive institution depending upon a consensus of opinion among the good and enlightened of a community; or whether, as Paley held, "virtue is the doing good to mankind in obedience to the will of God, for the sake of everlasting happiness," which may be designated the modern theory of Christian morals; or whether morality is founded upon a regard for the happiness of the greatest number, which is the utilitarian theory; and which in the statement that conduct is good when it secures or tends to secure in self, in offspring, and in fellow-men the maximum quantity of life and the maximum quantity of happiness in life, is the ethical theory propounded by the last great writer on morals, Mr. Herbert Spencer; to sum up, whether one or other of these different theories of morals is to be accepted, or can be rationally established, or ought to receive more than a curious attention, is a question which, so far from being really settled, was probably never so vexed as at the present day. And even going farther, and admitting the authority of what is called Christian ethics, it is equally hard to frame a theory of morals which would obtain universal sanction among Christians. For if there is one point in ethics which is established it is, that when an act merits punishment it is immoral, and when the neglect of an action merits punishment the action is

obligatory—that is, morally necessary to be done. But even in Christian morals the nature and extent of the punishment due to the neglect of a moral act, or the commission of an immoral act, and hence the degree of the morality or immorality of the act, are questions far from being decided. And taking divine revelation as the basis of determining the moral quality of acts, it is impossible to make any distinction between acts which are, as we say, morally obligatory, and those which are imposed by religion, that is, between moral duties and religious duties, for no distinction exists between them, divine will being the basis of the obligations of the one class as of the other; but the moment we enter the region of religious duties we are where a logical and generally admissible doctrine is impossible; we are in the region of endless controversy and difference of opinion. So that if it has been found impossible to attempt the teaching of Christian doctrine in our public schools—if it has been found impossible to engraft religious education upon our national system, or, to speak more truly, to retain it as a cardinal element, or anything more than a nominal element in our public education, so it will be found equally impossible to frame a logical and generally admissible theory of morals for use in our public schools, in which pupils may be instructed with the same mental confidence as the teacher feels when he is teaching any branch of mathematical and physical science.

So that on account of the shortness of time of regular school occupation, the frequency of holidays, and the absence of home life, our school system does not demand the exposition of what may be called practical and experimental, as distinguished from doctrinal morality, and because of the uncertainty, or rather want of agreement as to the foundations of doctrinal morality, it, also, is not attempted. It should also be said, that were it possible to frame a theory of morals as logical as any one of the deductive sciences, say geometry, it would be impracticable to make any use of such a system in the school room; for to understand the moral quality of conduct as depending upon the greatest totality of life in self, in offspring, and in fellow-men, as in the modern scientific theory of ethics, or as depending upon its conformability to right reason, this reason also being in harmony with the divine will, as in the Christian theory of Dr. Cudworth, supposes a power of mental apprehension, a maturity of mind, which cannot possibly be expected in public schools.

The remainder of the paper will appear in our next issue.

THE SUPERANNUATION FUND.

BY C. H. ASHDOWN, SANDWICH, ONT.

That much dissatisfaction exists in the minds of many teachers respecting the Superannuation Fund, none will deny; but when the question is put, "Why are you dissatisfied?" the answer is frequently vague, illogical, and sometimes stupid. One objects to compulsory taxation, another would like to know where the money goes to, and a third "doesn't believe in it anyway." Upon further enquiry as to whether the objectors have looked into the matter, have investigated the facts and figures of the reports, have made themselves acquainted with the origin and history of the Superannuation Scheme, the replies go far to show that but little attention has been bestowed on the subject.

Again, on the other hand, the friends of superannuation are not better prepared for argument than their opponents. In a sort of general way, they feel it is a good thing to have some provision for old age, will favor you with platitudes about the laborer being worthy of his hire—the arduous duties of the teaching profession—inability to lay by for a rainy day, and four dollars a year not being

much one way or the other; and that is nearly all they can say about the matter.

Feeling my own lack of information upon the Superannuation question, when called upon to express an opinion, I have availed myself of such material as I could command, and make bold to lay before my fellow-teachers the results of my investigation.

In 1844, Dr. Ryerson was appointed Superintendent of Education for Upper Canada, and in 1853, upon his recommendation, a grant of \$2,000 was made by the Legislature in aid of teachers who had grown too old for the service. This grant was the first step towards forming a Superannuation Fund. In the next year, 1854, a bill was passed, the principal provisions of which were:—

First.—That all teachers desirous of availing themselves of the benefits of the fund should, from that time, subscribe to it at the rate of four dollars per annum.

Second.—That they should attain the age of sixty years, unless disabled earlier, before participating in the fund.

Third.—That upon the teacher retiring from the profession on account of age or ill-health, he should be paid at the rate of not more than six dollars per year for every year he had taught in Upper Canada; and

Fourth.—In the event of the fund for any year not being sufficient to pay at the rate of six dollars per year, then the fund was to be divided *pro rata* among those entitled to it.

And here we notice, the subscription was *not* compulsory. Let us see how it worked.

In 1860, six years after the passing of the bill, the number of teachers employed was 4281—male, 3100; female—1181. This would make the income to the fund for the year 1860, had male teachers only subscribed the four dollars each, \$12,400; had all subscribed, the income would have amounted to \$17,124. For the same year there were 150 recipients, their average length of service being twenty-one and a half years, representing 129—4, i. e., \$125 each, or an aggregate of \$18,750. Now, what are the facts? With a grant of \$4,000, the department had only \$4,084, instead of \$18,750, to divide between the 150 recipients, because the subscriptions for the year were only \$450, less a refund of \$101, leaving the net subscription to the fund \$349, instead of \$12,400, or \$17,124. But perhaps the Report for 1867 will give a better showing; let us see. The number of teachers employed during the year 1867 was 4890, of whom 2849 were male, and 2041 female. In this year, had the males subscribed, the receipts would have been \$11,396; had all subscribed, the income would have been \$19,560. The number of pensioners for 1867 was 147, their average period of service, twenty-one and three-quarter years, representing \$18,595. Had the \$19,560 been subscribed, it would have left a balance of \$965 for investment to the credit of the fund.

We now turn once more to the facts. The grant for this year was \$4,500; the amount paid was \$4,161, instead of \$18,816; the subscription was \$175, with a refund offset of \$153, leaving the net subscription \$22.

For the year 1868, the total number of teachers was 4,996, representing a subscription of \$19,984. The recipients numbered 143, with an average service of twenty-one and a half years, representing an aggregate of \$17,875, leaving \$2,109 to the credit of the fund. The account for this year shows that only \$5,957 was available instead of \$17,875 called for; and the net subscription was \$408, less \$177 of refund, that is, \$231.

From the evidence now given, every candid reader must be convinced that the Superannuation Fund, with a voluntary subscription basis, was a failure. The teachers in active service took little or no interest in the scheme, and the Legislature did not feel called upon to grant seventeen or eighteen thousand dollars in aid of the fund. The result was that men up in the "seventies" and

"eighties," who really needed help, men with their thirty or more years of service behind them, were in receipt of an annual pittance of \$50 or \$60. In his report for 1870, Dr. Ryerson says:—

"In reply to the question 'On what principle should this fund be supported?' we answer, on the principle already laid down in its establishment, that of the mutual co-operation of the teachers and the Government. This principle is one which commands itself to the judgment of teachers, and yet they have not carried it out. While the Government has generously contributed to the fund \$4,000 per annum, and has even increased the fund, of late years, to \$6,500 per annum, the teachers, as a body, have done—nothing. An isolated case, here and there, of an expectant claimant on the fund, does send in his four dollars a year, but the teachers, as a body, have failed to do their duty in the matter. Low salaries, selfishness, and a temporary interest in a profession which they did not mean to follow, have operated to produce this state of things. Now, however, the country is prosperous, salaries have been increased, the profession has been placed on a recognized footing, and it is right and proper for the Legislature which has thus afforded facilities to elevate the teaching profession, to see that the old, worn-out members of the profession shall be provided for, and not remain as a hindrance to progress."

A change was now decided upon, and in 1871 a clause was introduced, making the subscription compulsory on the part of male teachers. The results can best be presented in the following tabulated statement from the Reports and Public Accounts for 1872 and 1878, both years inclusive :

	Male Teachers	Estimated Subscript'n	Legislative Appropriat'n	Number of Recipients	Average.		Paid	Refund
					Age	Service		
1872	2656	\$10,504	\$12,000	141	67	23	\$11,942	\$ 236
1 73	2581	10,324	19,608	153	63	22	18,995	442
1874	2601	10,404	23,100	189	65	22	22,602	787
1875	2645	10,585	29,000	229	64	22	26,500	1,220
1876	2780	11,120	35,500	266	63	22	31,768	1,252
1877	3020	13,030	35,500	293	63	22	35,325	1,576
1878	3060	12,240	35,500	330	63	21	41,192	1,591
		\$77,257	\$190,208				\$183,533	\$7,104

I would call the attention of my readers to two points in the foregoing statement.

First,—The difference between the appropriation and the annual subscription. The aggregate appropriation for the seven years amounts to \$190,208, while the total estimated subscription for the same time is \$77,257, showing that \$112,951, or an annual average of \$16,136, was appropriated to this fund by the Legislature. And here I would correct a false impression generally entertained respecting the appropriation. Any of us, in turning to the Report, say for 1877, will find the appropriation was \$35,500, and at once jump to the conclusion that this appropriation was made over and above the subscription received. But the Public Accounts show the Legislature is not quite so munificent as we, in our happy ignorance, give it credit for. In the receipts, \$14,283 of subscription is acknowledged, and in the estimates, the appropriation of \$35,500 is given, and the actual cost to the Government is \$21,217 and not \$35,500, as at first we might be led to suppose.

Second,—The refund account. This account shows (a) the amount returned to those retiring from the profession ; (b) the amount returned to relatives of deceased teachers.

As the law stands at present, one-half of the amount he has paid in is remitted to any teacher upon his leaving the profession. And in the event of the death of any teacher in active service, the whole amount paid in by him is returned to his legal representative, with interest at the rate of 7 per cent. per annum. The refund account shows that \$7,104, or an average of a thousand dollars a year, has been expended in this way. Some of the particulars of this expenditure are as follows :

Of the 1068 to whom money was repaid, 44, i. e., 4 per cent., were representatives of deceased teachers ; and of the \$7,104 disbursed, \$754, or 10 per cent. of the refund, was paid to them. To ten other special cases \$635 was paid, leaving a balance of \$5,715 to be divided among 1017 persons leaving the profession. The average period of teaching of this retiring 1017 was two and a half years, and they were enriched to the extent of \$5.61 per pocket.

50	of them taught for	½	a year.
222	" "	1	year.
235	" "	2	years
245	" "	3	"
145	" "	4	"
73	" "	5	"
35	" "	6	"
11	" "	7	"
and 1	" "	8	"

In my next paper I shall take up the question of "Payments to those under Sixty years of Age."

THE FAILURE OF FREE SCHOOLS.

BY DAVID ALLISON, LL.D.

Last month I referred incidentally to the severe arraignment of the Public School System, by Richard Grant White. My reference was to a much quoted article which appeared last July in the *New York Times*. The attack has been followed up by Mr. White in a more elaborate, and, if possible, more illogical paper in the December number of the *North American Review*. The teachers of Canada, taught to regard organic provision for free public education as in the highest degree beneficent, may be interested to learn what so distinguished a *litterateur* as Mr. White can urge against systems of instruction in all main points analogous to their own. The renewed attack opens thus :

There is probably not one of those various social contrivances, political engines, or modes of common action, called institutions, which are regarded as characteristic of the United States, if not peculiar to them, in which the people of this country have placed more confidence or felt greater pride than its public school system. There is not one of them so unworthy of either confidence or pride; not one which has failed so completely to accomplish the end for which it was established. And the case is worse than that of mere failure; for the result has been deplorable, and threatens to be disastrous.

According to independent and competent evidence from all quarters, the mass of the pupils of these public schools are unable to read intelligently, to spell correctly, to write legibly, to describe understandingly the geography of their own country, or to do anything that reasonably well-educated children should do with ease. They cannot write a simple letter; they cannot do readily and with quick comprehension a simple sum in practical arithmetic. . . . As to such elementary education as is alike the foundation of all real higher education, and the *sine qua non* of successful life in this age, they are most of them in almost as helpless and barren a condition of mind as if they had never crossed the threshold of a school house.

These are stupendous charges, the more stupendous on account of the unqualified terms in which they are presented. One is nervously apprehensive while awaiting the revelation of evidence to sustain them. A careful sifting of this evidence is calculated, I am glad to say, to impart a decided sensation of relief to those anxiously concerned for the stability of free educational institutions. Its grants are,

1. A report on the schools of Norfolk County, Massachusetts, by a Mr. Walton. This report (which has attracted considerable attention) declares, seemingly with little or no qualification, that the scholars of fourteen years of age did not know how to read, write and cipher; that they could repeat pieces, parse, and spell in classes, rattle off rules in arithmetic and grammar, while they could not write correctly the shortest of letters, or go through the plainest of combinations. The word "scholar" was spelt in 230

different ways, "depot in 65, "whose" in 108, and "which" in 58. Out of 1,112 pupils, 859 spelled the adverb "too" incorrectly in their composition exercises. This was certainly not a good showing for the schools of Norfolk County, though a narrow basis on which to found a charge of failure against the educational institutions of a people of fifty millions. The argumentative force of this report is sought to be strengthened by reference to some reported statements of the Superintendent of Public Instruction of the State of New York in 1862 as to the ignorance of the teachers under his jurisdiction, and to an alleged deterioration in English scholarship on the part of candidates for the cadetship at West Point during the past twenty-five years. This is the direct proof in its entirety. It passes comprehension that a sane man, with a reputation to lose, should not only try to construct an argument out of such flimsy materials, but actually base upon that argument a wholesale sentence of condemnation. The report of a particular Superintendent, so long ago as 1862, should not count for much. The fact that the percentage of failures to pass the preliminary examination at West Point has been increasing of late, by no means warrants the conclusion that the general average of English scholarship has been lowered. A precisely opposite inference would on logical grounds be quite as warrantable. The whole matter of this charge was exhaustively considered at the annual meeting of the National Educational Association at Washington, in February, 1879, Hon. Mr. Garfield, M.C. (now President-elect), having directed attention thereto. In rebuttal of the charge of deterioration in the school work of the country as sustained by the facts of the West Point examinations, it was shown that the syllabus of requirements had been enlarged, that more rigid tests of scholarship had been applied, and that members of Congress (in whom resides the right of nominating candidates for admission at West Point) have been increasingly regardless of the intellectual qualifications of their nominees.

Mr. White's further points I will consider in another paper.

TEACHERS' INSTITUTES.*

BY A. MORTON, ESQ., PRESIDENT TEACHERS' ASSOCIATION, PEEL CO.

Ladies and Gentlemen, co-workers in Education:

I beg to tender you my hearty thanks for the kindly feelings evinced towards me, in the bestowal of the highest office in connection with your Association.

I feel that your President assumes a great responsibility. Upon him rests the duty of guarding against the danger of failure, and of directing its discussions so as to render your meetings attractive and profitable, by impressing upon all the members the necessity of a hearty, united and determined effort to make their meetings the means of imparting hints of the highest professional value, and thus gradually tending to the attainment by the members of very high professional skill.

I have chosen as the subject of my brief address "Teachers' Associations or Institutes," their object, benefits, and how they may be made a success. In Chapter III, Section I, of General Regulations, we find: "In each County or Inspectoral Division, a Teachers' Association shall be formed, the object of which shall be to read such papers and discuss matters having a practical bearing on the daily work of the school." And in Section V, we find: "The work of the Association shall be as practical as possible, and at every meeting, illustrative teaching of classes shall form a prominent part of the proceedings."

*Read before the meeting of Teachers' Association, held in Brampton, Dec. 17th, 1880, and published at their request.

The ground is sufficiently large to embrace every subject of interest to the teacher in organization, discipline and practical teaching, which is calculated to fit him for the more efficient discharge of his professional work. I can scarcely conceive of any teacher, animated by a sincere desire of acquiring that professional knowledge which can alone place him in the foremost rank, leaving these meetings without feeling strengthened and encouraged to face the difficulties of the school-room, and without possessing a greater measure of confident assurance of ability to teach with greater profit during the coming term. We all know there are numberless difficulties that perplex the teacher, and which he is constantly obliged to encounter, and, if possible overcome. And where, it may be asked, can the teacher be more likely to gain the necessary knowledge to enable him successfully to meet and overcome these difficulties than in the Teachers' Association, where, by presenting these difficulties for solution, he obtains the enlightened views of his more experienced associates, catches their spirit, and is infused with new life and modes of thinking?

The teacher who expects to become eminent in his profession, must have the capacity, nay, must have a consciousness of having the capacity to grapple with these trials and difficulties, and successfully conquer them: for I hold that self-confidence is the only sure basis of success. And to the young teacher especially, what can be better adapted to supplement his inexperience than the hints and information which the more experienced of his profession are able and willing to impart: and thus, instead of following in the old beaten track which those who instructed him employed, he is able to reason from, and base his plans on what mature deliberation and lengthened experience have in the case of others proved most successful. He will thus be furnished with expedients for subduing the stubborn, restraining the disobedient, and animating the indolent to activity.

The following, from the pen of Samuel P. Bates, A.M., Deputy Superintendent of Common Schools, Pennsylvania, on the object and benefit of an Institute, is so very appropriate that I take the liberty of quoting it:

"The teacher is brought into direct intercourse with his professional brethren, and is enabled to measure himself intellectually and professionally with others. Were he to remain isolated, knowing little of any one beyond his own neighborhood, he would naturally contract narrow and selfish views, and be filled with his own sufficiency. He has, perhaps, regarded himself as possessing superior attainments, and his own methods of teaching as infallible, while they may at the same time be very unphilosophic and injurious to the mental habits of his pupils. But, when he comes to the Institute, and is brought into contact with those of equal and of superior ability, he is enabled to make a more sober estimate of his capacities, and to expect there may be

— 'sound things in heaven and earth,
Not dreamed of in his philosophy.'

"He is brought into connection and close communion with earnest-minded, thinking teachers, who are accustomed to criticize the soundness of every view, and are only satisfied with that which bears the impress of truth.

"Nor is this intellectual acquaintance the only advantage of their coming together. They become acquainted socially. They are enabled to sympathize with each other, and to form intimate and lasting attachments. Refinement and culture exert their elevating influence upon the rough and the uncouth, the different natures are brought nearer to each other, and all are elevated in feelings, in manners and in sentiments.

"The Institute is an efficient school for young teachers to express their thoughts in public. It is the fault of many of them that they cannot think upon their legs; and hence cannot be successful in

teaching what they know well enough, because they have not the power of talking it into their pupils, and making thought appear to others as it is felt by themselves. The extemporaneous discussions which call out the opinions of the members at the end of each subject, form a good exercise for the practical business of teaching. The habit of taking notes of every important fact or opinion expressed, and of reserving for future consideration what cannot be duly pondered at the time, is one of vast importance to the young teacher, and if persevered in, will, in a few years, be fruitful of surprising results: it will serve to establish the principle of passing judgment upon anything hastily, and of noting for future reflection and use, whatever may be met with, in a course of reading or observation, that is worthy of preservation. No lesson can be learned that will more conduce to accuracy of scholarship, or more effectively to richness of thought.

"Another important object subserved by Institutes is the opportunity they furnish of readily introducing into the practice of the profession, such new improvements as are made in the science and art of teaching. Were it not for these gatherings, it would require a long time for a new method to work its way into use among the isolated members of a profession so numerous as this. But through the agency of the Institute, a happy invention of proof, an abridged solution, an illustration, or a discovery of a new application of education spreads quickly. In this respect, it is a means of improvement more thoroughly organized and more practically effective than is possessed by the members of any other profession. It also makes the members familiar with the usages of a deliberative assembly and the rules that should prevail in it."

And now we come to the very important question, "How can the meetings of the association be made a success? How can we best conduct our meetings so that the general principles upon which every branch or subject of education rests, may be thoroughly discussed and understood, and that clear and correct views may be obtained?" This, in my opinion, can be accomplished by a clear conception of our duty, and a faithful discharge of it. The 5th sub-section of section 17 in the General Regulations, relating to the duties of masters and teachers, reads thus:

"All masters and teachers shall regularly attend the teachers' meetings, or institutes, at such times and under such regulations as the Inspector shall direct, and they shall, by study, recitations, and general exercises, strive to systematize and perfect the modes of discipline and of teaching in the Public Schools."

In this our duty is clearly and explicitly laid down. It is as much our duty to attend the meetings of the convention as it is to attend our schools during the prescribed teaching days in each school term; and it is equally our duty, by study, so to prepare ourselves, that we may contribute to the interest, pleasure, and profit of the association. Let each member, in the interval between the meetings of the association, note any difficulties experienced in the conduct or management of the school, to be submitted for consideration and discussion at the next meeting, or it may be some expedient experimented upon, and found successful in the teaching of some particular subject.

Again, the teaching of a class on some stated subject, as a model lesson, followed by a friendly discussion and criticism, would furnish us with model school work of the highest character, and could not fail to profit those present.

Another means of profit might be made by the adoption of class drills, and which are intended to draw out the methods pursued by teachers in conducting classes, and in governing schools. "The method of conducting a class-drill is to have some one appointed to lead, who states the subject for consideration, as, for example, the methods of teaching spelling, and then calls on some of the members, each in turn, say a gentleman and lady alternately, to

state the methods practised, and the success attending each. In this way the experience of a large number of teachers, and the comparative success of different methods, is obtained in a little time."

This exercise is highly valued by the teachers in some of the States. They are in the habit of meeting an hour before the commencement of the daily session, and conducting them as just described.

The question box also should be largely patronized by teachers taking note of, and submitting for solution, any point upon which they may be desirous of receiving information.

There are a good many teachers in this county, but the Institute has seen too few of them. I am informed by the Secretary-Treasurer, that only twenty-four teachers of the ninety engaged in this county are enrolled as members. Why the majority do not come is a problem. It cannot be because they have not been asked. Every teacher has been invited to attend these meetings, and that so few respond is certainly not to the credit of the profession in the county.

What is wanted is that each teacher in the county of Peel should feel himself or herself in no way isolated, but come out and see what others are doing. Besides, the teacher can in no better way exhibit to his trustees that he is worthy of their confidence, than his ability is such as to command their respect, that he is really mastering the theory of teaching, and is able to discharge with skill the arduous duties of his calling.

Let me in conclusion express a hope that we are about to enter upon a new era: that the year 1881 will show a very different record to that of the present one; that inspector and teacher, thoroughly awakened to a sense of their duty towards the Institute, will work unitedly and energetically to make their meetings second to none in the Province.

HIGH SCHOOL TEACHERS, BEWARE!

LINDSAY, Ont., Dec. 28, 1880.

To the Editor of the Canada School Journal:

SIR,—I congratulate your paper on having hit on a very practical issue as to a grievance indeed felt—the mode of self-advertising adopted by certain Collegiate Institutes. But it is carried further than even you are probably aware of. Not content with advertising by the press, and running a so-called Educational Magazine, the Hamilton Collegiate Institute employs a travelling agent, who attended our Convention, and presumably attends other Conventions, for the purpose, not merely of pushing the Magazine, in which he is irrefragable, but of touting for pupils to the Collegiate Institute. Sir, it is a fact that this person had to be rebuked for so doing by the Principal at our late Convention. Such means of obtaining pupils might consort with the dignity of Mr. Squeers, or with that of the pilgrim who in this land promulgates patent medicines and lightning rods, but they ill suit the position of a Collegiate Institute, and challenge criticism of work done at the latter, which it is so easy to answer, I am, dear Sir, yours,

A TEACHER.

Mathematical Department.

Communications intended for this part of the JOURNAL should be on separate sheets, written on one side only, and properly paged to prevent mistakes. They must be received on or before the 20th of the month to secure notice in the succeeding issue, and must be accompanied by the correspondents' names and addresses.

EXAMINATION PAPERS.

The following Algebra papers, so far as they go, will be found of about the same difficulty as those given at Intermediate and First Class Examinations.

I.

1. Find quantities which will divide into the following without remainders:

- (1) $a^3 - 8a^2b + 8ab^2 - b^3 + a^2x - b^2x.$
- (2) $x^4 - (a^2 - b - c)x^2 - a(b - c)x + bc.$
- (3) $(a - b)^2 - b^2.$

2. Examine in what cases $a^n \pm b^n$ is divisible by $a \pm b$.

3. Prove the rule for finding the L. C. M. of two algebraic quantities.

Find that of

$$x^2 - 9y^2, x^3 + 8x^2y + 4xy^2 + 12y^3, x^3 - 8x^2y + 4xy^2 - 12y^3.$$

4. Simplify

$$(1) \frac{yz}{x(x^2 - y^2)(x^2 - z^2)} + \frac{zx}{y(y^2 - z^2)(y^2 - x^2)} + \frac{xy}{z(z^2 - x^2)(x^2 - y^2)}$$

$$(2) \frac{ab + bc}{ca} \left(\frac{1}{bc} - \frac{1}{ab} \right) + \frac{bc + ca}{ab} \left(\frac{1}{ca} - \frac{1}{bc} \right) + \frac{ca + ab}{bc} \left(\frac{1}{ab} - \frac{1}{ca} \right).$$

5. If $x^5 + px^4 + qx^2 + px + 1$ be divisible by $x^3 + px^2 + px + 1$, then $p + 1 = q$.

6. (1) If $y + z = ax, z + x = by, x + y = cz$, then

$$\frac{1}{1+a} + \frac{1}{1+b} + \frac{1}{1+c} = 1.$$

(2) If $x + y + z = 0$, then

$$x^2(y+z) + y^2(z+x) + z^2(x+y) + 8xyz = 0.$$

7. Show that $x^2 + y^2 > 2xy$.

Prove

(1) $a^3 + b^3 > a^2b + b^2a$, if the greater of a and b be positive.

(2) $(a+b-c)^2 + (a+c-b)^2 + (b+c-a)^2 > ab + bc + ca$.

8. Assuming that $a^m \times a^n = a^{m+n}$ for all values of m and n , shew that

$$a^{\frac{p}{q}} = \sqrt[q]{a^p} = \left(\sqrt[q]{a} \right)^p.$$

9. Shew how to extract the square root of $a + \sqrt{b}$.

$$\text{Simplify } \frac{2 + \sqrt{2}}{\sqrt{2} + \sqrt{3} - 2\sqrt{2}} + \frac{2 - \sqrt{2}}{\sqrt{2} - \sqrt{3} + 2\sqrt{2}}$$

Rationalize the denominator of

$$\frac{1}{1 + \sqrt{\frac{2}{3}} + \sqrt{\frac{3}{2}}}$$

II.

1. If $x^3 + y^3 + z^3 + 2xyz = 1$, shew that

$$(1) \left\{ (1-y^2)(1-z^2) \right\}^{\frac{1}{2}} + \left\{ (1-z^2)(1-x^2) \right\}^{\frac{1}{2}} + \left\{ (1-x^2)(1-y^2) \right\}^{\frac{1}{2}} = z(1+x) + x(1+y) + y(1+z).$$

$$(2) \left\{ \frac{1-x}{1+x} \cdot \frac{1-y}{1+y} \right\}^{\frac{1}{2}} + \left\{ \frac{1-y}{1+y} \cdot \frac{1-z}{1+z} \right\}^{\frac{1}{2}} + \left\{ \frac{1-z}{1+z} \cdot \frac{1-x}{1+x} \right\}^{\frac{1}{2}} = 1.$$

2. Solve the equations

$$(1) x + xy - yz = x^2 - a^2, xy + yz - zx = y^2 - b^2, yz + zx - xy = z^2 - c^2.$$

$$(2) (x+y)a^2 = x, (x+y)b^2 = y; \text{ explain the results.}$$

3. Sum the following series:

$$(1) 1^2 + 2^2 + 3^2 + \dots \text{ to } n \text{ terms.}$$

$$(2) \frac{2}{3} + \frac{4}{3^2} + \frac{6}{3^3} + \frac{8}{3^4} + \dots \text{ to infinity if convergent; to } n \text{ terms if not convergent.}$$

4. (1) Find the whole number of permutations of n things when each may occur once, twice, thrice..... up to r times.

(2) Find the sum of the different numbers that can be formed with m digits a , n digits b , &c., the entire series of $m + n + \dots$ digits being used in forming each number.

5. If the Binomial Theorem holds for a positive integer, shew that it holds for a positive fraction.

Shew that

$$\left\{ \frac{x}{x-1} \right\}^{\frac{1}{2}} = 1 + \frac{1}{x^2} + \frac{x+1}{1^2} \cdot \frac{1}{x^4} + \frac{(x+1)(2x+1)}{1^3} \cdot \frac{1}{x^6} + \dots$$

6. (1) As a problem in combinations, without reference to mul-

tinomial theorem formula, find the coefficient of $a^n b^r c^n$ in the expansion of $(a+b+c)^{2n}$, n being a positive integer.

(2) $C_r^n = \frac{n \cdot n-1 \cdot \dots \cdot n-r+1}{1 \cdot 2 \cdot \dots \cdot r}$, then the coeff. of the middle term of $(1+x+x^2)^n$ is

$$1 + C_1^n C_1^{n-1} + C_2^n C_2^{n-2} + \dots + C_{\frac{n}{2}}^n C_{\frac{n}{2}}^{\frac{n}{2}}, \text{ or}$$

$$1 + C_1^n C_1^{n-1} + C_2^n C_2^{n-2} + \dots + C_{\frac{n-1}{2}}^n C_{\frac{n-1}{2}}^{\frac{n-1}{2}}.$$

7. Shew that $e^x = 1 + x + \frac{x^2}{1 \cdot 2} + \dots$

If in the equation

$$a^x = x$$

x be a small quantity whose powers above the second may be neglected, shew how to find x approximately.

8. Examine in which cases the series

$$\frac{1}{1^p} + \frac{1}{2^p} + \frac{1}{3^p} + \dots$$

is convergent or divergent.

If the series be convergent it is greater than

$$\frac{1}{2} \cdot \frac{2^p - 1}{2^{p-1} - 1}, \text{ but less than } \frac{2^{p-1}}{2^{p-1} - 1}.$$

9. (1) Every convergent is nearer to the continued fraction than any of the preceding convergents.

(2) Any convergent is nearer to the continued fraction than any other fraction which has a smaller denominator than the convergent has.

(3) The ratio between the area of a regular decagon described about a circle and that of another within the circle is

$$\frac{8}{7} + \frac{1}{4} + \frac{1}{4} + \dots$$

SOLUTIONS OF ALGEBRA EXERCISE IN DECEMBER ISSUE.

1. Left side = $\frac{s}{a} - 1 + \frac{s}{b} - 1 + \dots = \dots$

2. Left side = $1 - \frac{a}{s} + 1 - \frac{b}{s} + \dots$
 $= n - \frac{a+b+\dots}{s} = n - 1.$

3. It should be $s = a + b + c$. Then
 $s(s-a)(s-b)(s-c) = 2a^2b^2 + 2b^2c^2 + 2c^2a^2 - a^4 - b^4 - c^4$
 $= 4(xy + yz + zx).$

4. (1) Evidently $a + b + c = x + y + z$,
 and $2(b+c) = 2x + y + z; \therefore b+c-a = x, \&c.$
 By preceding question $a^4 + \dots$
 $= -(a+b+c)(b+c-a)(c+a-b)(a+b-c) = -(x+y+z)xyz.$

(2) $3abc = (x+y)(y+z)(z+x) = (x+y+z)(xy+yz+zx) - xyz.$
 $\therefore a^2x + b^2y + c^2z = \frac{x^3 + y^3 + z^3 - 3xyz}{x+y+z} = \frac{x^3 + y^3 + z^3 - 3xyz}{x+y+z}$

$x^3 + y^3 + z^3 - 3xyz = (x+y+z)(x^2 + y^2 + z^2 - xy - yz - zx) = a^3 + b^3 + c^3.$

6. $xyz + x + y + z = \frac{1}{abc} \{ (b-c)(c-a)(a-b) + bc(b-c) + ca(c-a) + ab(a-b) \} = 0.$

7. $x(a+1)=x+y+z+u=y(b+1)=x(c+1)$

$$\frac{x}{x+y+z+u} = \frac{1}{a+1}, \frac{y}{x+y+z+u} = \frac{1}{b+1}, \text{ \&c.}$$

and $\frac{1}{a+1} + \dots = \frac{x+y+z+u}{x+y+z+u} = 1.$

8. $\frac{1+a}{1-a} = \frac{x}{y}$, \&c.; $\therefore \frac{1+a}{1-a} \cdot \frac{1+b}{1-b} \cdot \frac{1+c}{1-c} = \frac{x}{y} \cdot \frac{y}{z} \cdot \frac{z}{x} = 1.$

9. $(s-a)^2 + \dots = 4s^2 - 2s(a+b+c) + a^2 + b^2 + c^2$
 $= 4s^2 - 2s(2s) + a^2 + b^2 + c^2 = a^2 + b^2 + c^2.$

10. True if $6s^2 - 2s(2a+2b+2c) + 2(ab+bc+ca) = 2s^2 - a^2 - b^2 - c^2$
 if $6s^2 - 8s^2 + 2(ab+bc+ca) = 2s^2 - a^2 - b^2 - c^2$
 if $a^2 + b^2 + c^2 + 2ab + 2bc + 2ca = 4s^2$
 $= (a+b+c)^2.$

11. Second equality is obtained by multiplying the first by $\frac{xyz}{abc}$

12. True if $s(s-b)(s-c) + \dots + \dots - (s-a)(s-b)(s-c) = abc.$

Putting $a=0$ in left side, it becomes

$$s(s-b)(s-c) + s^2(2s-b-c) - s(s-b)(s-c) = 0.$$

Hence a is a factor; and thence, by symmetry, b and c also; \therefore expression $= A \cdot abc$, and putting $a=b=c=1$, we may shew that $A=1$.

The dimensions show that when the three factors a, b, c have been found there can be no other literal factors.

13. Given equality is

$$\frac{b^2+c^2-a^2}{2bc} + 1 + \dots - 1 + \dots - 1 = 0,$$

or, $\frac{(b+c+a)(b+c-a)}{2bc} - \frac{(b+c-a)(b+a-c)}{2ac} -$

$$\frac{(c+a-b)(c-a+b)}{2ab} = 0,$$

or $(b+c-a)\{a(b+c+a) - b(b+a-c) - c(c+a-b)\} = 0,$

or $(b+c-a)(a^2 - b^2 + 2bc - c^2) = 0$, etc.

14. True if $2s^3 - s^2(2a+2b+2c) + 4s(0) + 8abc = 8abc$
 if $2s^3 - s^2(2s) + 8abc = 8abc.$

15. $x^2+y^2 = (x+y)^2 - 2xy = p^2 - 2q.$

$$x^2+y^2 = (x+y)(x^2-xy+y^2) = (x+y)\{(x+y)^2 - 3xy\} = p(p^2 - 8q)$$

$$x^2+y^2 = (x+y)^2 - 4xy(x^2+y^2) - 6x^2y^2 = (x+y)^2 - 4xy\{(x+y)^2 - 2xy\} - 6x^2y^2$$

$$= p^2 - 4q(p^2 - 2q) - 6q^2 = p^2 - 4p^2q + 2q^2.$$

$$x^2+y^2 = (x+y)^2 - 5xy(x^2+y^2) - 10x^2y^2(x+y) = (x+y)^2 - 5xy(x+y)\{(x+y)^2 - 3xy\} - 10x^2y^2(x+y)$$

$$= p^2 - 6qp(p^2 - 8q) - 10q^2p = p^2 - 6p^2q + 5pq^2.$$

16. Left side of equality equals

$$2a^2b^2 + 2b^2c^2 + 2c^2a^2 - a^4 - b^4 - c^4 = 2a^2b^2 + 2(b^2+a^2)(b^2+a^2) - a^4 - b^4 - (a^2+b^2)^2 = 2a^2b^2 + (a^2+b^2)^2 - a^4 - b^4 = 4a^2b^2.$$

17. Given equality becomes

$$\frac{a^2+bc}{a^2-bc} + 1 + \frac{b^2+ca}{b^2-ca} - 1 + \frac{c^2+ab}{c^2-ab} - 1 = 0$$

or, $\frac{2a^2}{a^2-bc} + \frac{2ac}{b^2-ca} + \frac{2ab}{c^2-ab} = 0,$

or, $\frac{a^3}{a^3-abc} + \frac{abc}{b^3-abc} + \frac{abc}{c^3-abc} = 0,$

which in multiplying up becomes

$$a^2b^2c^2(3abc - a^3 - b^3 - c^3) = 0,$$

or $a^2b^2c^2(a+b+c)(a^2+b^2+c^2-ab-ac-bc) = 0.$

If abc be possible quantities and not zero, the only factor

that can be zero is $a+b+c$; for $a^2+b^2+c^2$ is greater than $ab+ac+bc$ by a well known theorem in Inequalities. Hence $a^2+b^2+2ab=c^2$, or $a^2+b^2-c^2=-2ab.$

$$\therefore \frac{c^2}{a^2+b^2-c^2} = -\frac{1}{2} \cdot \frac{c^2}{ab} = -\frac{1}{2} \cdot \frac{c^3}{abc};$$

so $\frac{a^2}{b^2+c^2-a^2} = -\frac{1}{2} \cdot \frac{a^3}{abc};$

and $\frac{b^2}{c^2+a^2-b^2} = -\frac{1}{2} \cdot \frac{b^3}{abc}.$

Hence $\frac{a^3}{b^2+c^2-a^2} + \dots + \dots = -\frac{1}{2} \cdot \frac{a^3+b^3+c^3}{abc}$
 $= -\frac{1}{2} \cdot \frac{3abc}{abc} = -\frac{3}{2}$

18. Multiplying together the factors

$$a^3b^3 + b^3c^3 + c^3a^3 = abc^4 + bca^4 + cab^4 = abc(a^3 + b^3 + c^3)$$

$$\therefore \frac{1}{a^3} + \frac{1}{b^3} + \frac{1}{c^3} = \frac{abc(a^3 + b^3 + c^3)}{a^3b^3c^3} = \text{\&c.}$$

19. True if $\frac{1}{1+x+\frac{1}{y}} + \frac{1}{1+y+\frac{1}{z}} + \frac{1}{1+z+\frac{1}{x}} = 1.$

ii $\frac{1}{1+x+zx} + \frac{zx}{xz+xyz+x} + \frac{x}{x+xz+1} = 1,$

if $\frac{1}{1+x+zx} + \frac{zx}{xz+1+x} + \frac{x}{x+xz+1} = 1.$

20. $a+ax=(a+b+c)x$

$$\therefore \frac{a}{a+b+c} = \frac{x}{1+x}; \text{ so } \frac{b}{a+b+c} = \frac{y}{1+y}; \text{ \&c.}$$

$$\therefore \frac{x}{1+x} + \frac{y}{1+y} + \frac{z}{1+z} = 1.$$

Which on multiplying up becomes $xy+yz+zx+2xyz=1.$

SOLUTIONS SENT IN.

W. H., Hamilton, sends the following solution of 1 in our December issue (Farms decreasing in value):

Let x be the number of years. Then the first farm is worth at the end of each year $\frac{1}{3}$ of what it was worth at the beginning, and hence its value in x years is $15000(\frac{1}{3})^x$. Similarly, the other farm is worth at the end of x years $12000(\frac{1}{2})^x$; and

$$15000(\frac{1}{3})^x = 12000(\frac{1}{2})^x$$

$$\text{or } \frac{5}{4} = (\frac{3}{2})^x$$

$$\text{or } \log 5 - \log 4 = x(\log 3 - \log 2).$$

$$\text{or } x = \frac{\log 5 - \log 4}{\log 3 - \log 2} = 7.92.$$

R. J. McLaughlin has sent in correct solutions of questions 1 and 3 in our November issue.

SOLUTIONS ASKED FOR.

1. A cubical box contains exactly 64 shots, each shot three inches in diameter. What amount of the box is occupied by them?
 READER, Markham.

2. A company at a tavern found, when they came to pay their reckoning, that if there had been three more persons, each would have had to pay a shilling less, but had there been two less, each

would have had to pay a shilling more. Find the number of the company, and each man's share of the reckoning. (By algebra).

8. I wish to pay a bill in Naples of 7,500 lira; the direct exchange is \$0.22=1 lira; the exchange on London is \$4.95; of London on Paris is £1=20 francs; of Paris on Naples is 1½ francs=1 lira. What is the difference between the direct and circuitous exchange? (By arith.)

4. A merchant gains every year 50 per cent. on his capital, of which he spends \$1,200 per annum in house and other expenses. At the end of 4 years he finds himself in possession of four times as much capital as he had at the beginning. What was his original capital?
D. DUNTON, Holland Landing.

5. A certain number of men and women drank to the value of 20 shillings sterling. The reckoning being called, a man said he would pay 4d. for himself and 4d. for every man in the company, and every man said he would do the same. This did not make up the reckoning; so a woman said she would pay 3d. for herself and 3d. for every woman in the company, and every woman said she would do the same. This made up the reckoning. How many men and women were there?
F. FLANAGAN, Kinkora.

6. The number of men in the side rank of a solid body of militia is to the number in the front rank as 2 to 3. If the length and breadth be increased so as to number each 4 men more, the whole body will contain 2,320: how many does it now contain? Solve by arithmetic.

7. If several consecutive terms of an equation, whose roots are real, be wanting, and if the next terms on each side of those wanting have the same sign, prove that the equation cannot have as many roots as it has dimensions.

8. Solve the following equation by factoring:

$$\frac{2c^2}{d^2} + \frac{ac}{d} - (a-b)(2c+ad)\frac{x}{d} = (a+b)\frac{cx}{d} - (a^2-b^2)x^2.$$

9. From the middle of a town two streets branched off, and crossed a river that ran in a straight course, by two bridges A and B. From their junction a sewer equally inclined to both streets led to a point in the river at the distance of 6 chains from the bridge A, and a distance from B less by 11 chains than the length of the sewer: the expense of making it amounted to as many pounds per chain as there were chains in the street leading to A. The sewer, however, being insufficient to carry off the water, an additional drain was made from a point in this street distant four chains from the bridge A, which entered the river at the same point with the sewer, and was equally inclined to the river and sewer. Now it was found that a drain down the middle of each street, at the rate of £9 per chain, would have cost only £54 more than the expense of the sewer. Required the lengths of the streets and the sewer.

10. A tract of land is bounded thus: N. 35½° E., 23.00; N. 75½° E., 30.50; S. 3½° E., 46.49; N. 66½° W., 49.64. It is to be divided into four equivalent parts by two straight lines, one of which runs parallel to the third side; required the distance of the parallel division line from the first corner, measured on the fourth side; also the bearing of the other division line, and its distance from the same corner measured on the first side.

L. B. FRAXER, Fayette, Ont.

TO CORRESPONDENTS.

READER, Markham. You will find the Allegation question solved in the December number.

Practical Department.

EDUCATION DEPARTMENT, ONTARIO.

DECEMBER EXAMINATIONS, 1880.

ADMISSION TO HIGH SCHOOLS.

ARITHMETIC.

TIME—TWO HOURS.

Values.

- 10 1. Define—Number, Numeration, Notation, Addend, Minuend.
- 10 2. Find the G. C. M. of sixty-eight million five hundred and ninety thousand one hundred and forty-two, and eighty-five million forty-four thousand and fifty-nine.
- 16 3. For a voyage of 17 weeks a ship takes provisions to the amount of 48 tons 4 cwt. 2 qrs. 20 lbs. 9 oz. Supposing that there are 78 men aboard, how much may be allowed each man per day?
- 16 4. Find the amount of the following bill:—14½ lbs. beef at 10c, 12½ lbs. pork at 9½c, 3 turkeys, weighing in all 35½ lbs., at 12½c per lb.; 12 lb. 10 oz. lard, at 15c per lb.; 6 geese, weighing in all 45 lb. 12 oz., at 10c per lb.
- 16 5. Simplify—

$$\frac{5\frac{1}{2} \text{ of } \frac{3}{4} + 8.8 \text{ of } 2 - 1\frac{1}{2} \text{ of } £19 \text{ } 16s. \text{ } 7\frac{1}{2}d.}{\frac{1}{7} \text{ of } (2.045 \text{ } .5)} \text{ of } £20 \text{ } 16s. \text{ } 8\frac{1}{2}d.$$
- 16 6. What is the weight of a block of stone 12 ft. 6 in. long, 6 ft. 6 in. broad, and 4 ft. 1½ in. thick, when a block of the same kind of stone 2 ft. 6 in. long, 3 ft. 9 in. broad, and 1 ft. 3 in. thick, weighs 1875 lbs.?
- 16 7. A man, after paying an income tax of 15½ mills on the dollar, and spending \$3.37½ a day, is able to save \$1280.87½ a year (365 days). Find his gross income.

ENGLISH GRAMMAR.

TIME—TWO HOURS.

Values.

- 39 1. Parse—"The Europeans were hardly less amazed at the scene which presented itself to their view."
- 9 2. Analyse—
 "Beneath, in the churchyard, lay the dead,
 In their night encampment on the hill."
- 12 3. Write the plural and the possessive singular of John, James, and King of England; and the third singular present indicative active of deny, crow, dye, cross, box, shock.
- 12 4. Define Comparative Degree, Relative Pronoun, Adverb, and Participle.
- 28 5. Correct what is wrong in the following sentences, giving your reason in each case:
 I find them in the garden.
 For there's many hereabout.
 Let every child bring their books to-morrow.
 All persons writing or defacing the walls will be expelled.
 Why are you sorry for him.
 Have either of you a pencil?
 He said it was to be given to either you or I.
 You or I are to go.

COMPOSITION.

TIME—ONE HOUR AND A QUARTER.

Values.

- 10 1. Vary the form of the following sentence in as many ways as you can, keeping the ideas:—"It was not so much the lateness of the hour, as the solitude and desolation of the place, that terrified me."
- 20 2. Re-write this passage, with proper spelling, punctuation, and capitals where they should be:—
 The seige and storming of delhi was the most illustrious event that occured in the course of that gigantic struggle

the leguer of lucknow during which the mear skeleton of a british regiment the 82d held out for six months against 200 thousand armed enemey has perhaps excited more intonse interest but delhi was the feat of arms of which briton has the most cause to be proud there too the british were realy the besieged though ostensably the seigers they were a mear handful of men more than 8700 bayonets asailed by 75 thousand men trained to europeau dissipline by english officers death wounds and fever failed to turn them from their purpose thirty times they were attacked by overwhelming no's and thirty times did they drive the onnemy behind their defenses.

- 10 8. Correct the composition in these sentences:
 (a) I never have and never will adopt this practice.
 (b) He had thus lost his opportunity which never again returned not even for a moment.
- 10 4. Show the different meanings that may be conveyed by each of the following:—"I cannot find one of my books."
 "Every one is unwillingly deprived of his property."
- 20 5. Write a short letter asking a friend to pay you a visit.

GEOGRAPHY.

TIME—ONE HOUR AND A HALF.

Values.

- 8 1. Define—Isthmus, Promontory, Beach, Bay, Inlet, Sound, Roadstead, Strait.
- 10 2. Name and give the boundaries of the Zones. What determines the two Tropics and the two Polar Circles?
- 9 3. Define—Latitude, Longitude, First Meridian. What is the greatest latitude a place can have? The greatest longitude? Why?
- 9 4. Give, with their boundaries, the political divisions of North America.
9. 5. Name, giving their relative positions, the Divisions of British North America. Which of these are comprised in the Dominion of Canada, and what are their Capitals?
- 9 6. Make a list of the principal rivers of Ontario, telling into what body of water each flows.
- 9 7. Give the boundaries of Asia, and the relative positions of its chief political Divisions.
- 9 8. Draw an outline map of Ireland, and mark the position of Dublin, Belfast, Cork and Limerick.

DICTATION.

TIME—TWENTY MINUTES.

VALUE, 22. (Two marks are to be deducted for every misspelled word.)

A. A group of stately figures wrapped in rich military cloaks with helms glistening in the torchlight, and plumes streaming on the wind, struggle onward beside the litter.

B. Inspired by their poets, and cheered on by a superstitious belief in the prophecies of their soothsayers, they never thought of yielding, even when they had lost the power of resistance.

C. In spite of the great disparity of the opposing armies and the formidable preparations made by the enemy, General Brock prepared to carry the fort by assault.

FOURTH BOOK AND SPELLING.

TIME—ONE HOUR AND A HALF.

Values.

- 18 1. Write an account of the deliverance of Germany by Hermann.
2. "The disasters of Napoleon's Russian campaign have been portrayed by French writers, who were eye-witnesses of this signal defeat of blind ambition and the insane lust of conquest."—*Fourth Reader*, p. 228.
- 2 (i.) Who was Napoleon?
- 2 (ii.) About how long ago did he live?
- 8 (iii.) Explain the meaning of 'disaster', 'campaign', 'signal', 'lust'.
- 2 (iv.) Which side burnt Moscow?
- 4 (v.) Tell what happened to the French in this campaign after the burning of Moscow.

8. "They implored him to pardon their ignorance, incredulity, and insolence, which had created him so much unnecessary disquiet, and had so often obstructed the prosecution of his well-concerted plan; and passing, in the warmth of their admiration, from one extreme to another, they now pronounced the man, whom they had so lately reviled and threatened, to be a person inspired by Heaven with a sagacity and fortitude more than human, in order to accomplish a design so far beyond the ideas and conception of all former ages."—*Fourth Reader*, p. 48.

- 10 (i.) Explain the meaning of 'incredulity', 'reviled', 'sagacity', 'fortitude', 'accomplish'.
- 4 (ii.) Explain the meaning of 'obstructed the prosecution of his well-concerted plan.'
- 4 (iii.) *Passing in the warmth of their admiration from one extreme to another.* Tell what the two extremes were.
- 2 (iv.) Why is 'Heaven' printed with a capital H?
- 10 4. Distinguish between
 mite and might,
 pore and pour,
 frees, frieze and freeze,
 seem and seam,
 hoer and hoar.
- 6 5. Give two meanings for each of the following words:
 Mine, pine, club.

ENGLISH HISTORY.

TIME—ONE HOUR AND A HALF.

Values.

- 22 1. Tell how William the Norman came to be king of the English, and how he made his rule very strong.
- 12 2. What is meant by the expressions—'to do homage,' 'self-taxation,' 'feudal tenant,' 'ministers of the crown,' 'prime minister'?
- 12 3. What was the cause of the troubles between King Charles I. and his Parliament, and to what did they lead?
- 12 4. Show how England and Scotland came to be one kingdom, and how the union did good to both.
- 12 5. Tell what you know about the war against the American colonies in the reign of George III., and its results.
- 12 6. What do you understand by Free Trade, Limited Monarchy, the Whig Party?

SCHOOL EXPOSITIONS.

As a closing exercise an exposition is by far the most profitable and interesting that the school could possibly offer. It is simply an exhibition of the work done by the pupils during the term. From the first day of school the work has been written out, and preserved with a view to the exposition. In the reading classes, many of the exercises have been preserved; the same in spelling. In arithmetic the problems and solutions, analyses, &c., have been written in a blank book, so that each pupil has an arithmetic with the key. In grammar the parsing exercises have all been carefully written and the sentences diagrammed and analyzed. By the way, our "Normal Teacher" Parsing Book is just the thing to secure written parsing lessons in good shape for the exposition. In geography each pupil will have his maps and outlines to exhibit. As physiology has been taught by the use of charts and drawings on the blackboard, the teacher can give a very interesting lesson by having pupils step to the charts or diagrams and point out the different parts of the body. History has been taught almost exclusively by essays and outlines, and these will be in good order for the exposition. No subject in a country school should receive more careful attention than letter writing. No school is well taught that does not include it in its course of study. This subject should include letters of all kinds, the drawing of drafts, notes, &c., and all these will come in to swell the work of the exposition. Every teacher should be able to teach music. At the exhibition he can exhibit the musical talent of his pupils by having them sing a few songs which they have learned. If rhetoric has been taught, there will be a good opportunity to have some original productions read. Every teacher can teach Botany and Geology in a country school, or he should

be able to do so at least. If he does attempt it, let the pupils collect the rocks and flowers, and the teacher can name and analyze them. Have a nice place where all the rocks and flowers can be on exhibition. The teacher who knows anything of philosophy or chemistry, can perform during the term a number of experiments and teach the pupils to do the same. At the exposition the pupils can perform these experiments themselves. And now when the end of your term is at hand there will be no need of hurrying, cramming, forcing, and neglecting regular work to make some sort of closing display. Yet you will have something interesting and improving to the whole neighborhood, which you invite to visit you on the last day. On the afternoon before, you will have the pupils bring in their stores, and with their assistance you will tack some muslin along one side or end of your school room and under your direction you will all, or such as can be of assistance, fasten in full view the outlines, drawings, the pressed flowers neatly fastened on paper, and pressed ferns and leaves which the children have gathered, and all the various written exercises of both little and big pupils, with the name of the author signed to each, arranging the whole tastefully as you know how. Have a table, likewise covered with muslin, as the clean back ground adds much to the appearance of things, on which to arrange such things as cannot be hung. Here may be placed the minerals, various kinds of wood, shells, insects, or any specimens or curiosities which the children have gathered and talked about during the term, the copy books, composition books, &c. It is with no little delight that the children see these trophies of their work arranged and spread out before them, surprised to see what a nice display they make. How emulation and ambition are kindled afresh; how it helps them to feel special interest in every exercise they prepare during the term; what a living interest it gives to the subjects, compared with what a dry, abstract examination would awaken; what growth it promotes in the space of a term through the work it calls forth, compared with any extraneous entertainment such as the 'exhibition' of our country schools usually is. The idea of the 'exposition' had its origin in the Normal school, at least we got it there, and having tried it know it to be a most capital one, and wish others to have the benefit of the plans it opens up for raising the plane of school work.—*The Normal Teacher.*

ONE BOY'S LIFE.

John Kitto was such a puny child that when he was born he was not expected to live many hours, and it was only by the greatest care that he could walk at two years of age. This weakness prevented him from joining other boys in their sports. But he enjoyed himself quite as much lying behind the hedge, or on a sunny bank. He was not sent to school until he was eight years old, and he only then stayed long enough to learn to read and write, and get some knowledge of figures. The few pence that it cost could not be spared at home, for his father was a very sickly man, and unable to work steadily, and his mother had more than she could do to take in washing, and keep her little family fed and clothed. But father and mother looked to him as the eldest to help, and before he was ten years old, they began to look about for something for him to do. The shoemaker in the village took a great fancy to John, perhaps because he was so good a listener, for he poured into his eager ears, as he sat working at the bench, those remarkable tales of Blue Beard, Cinderella, Jack-the-Giant-Killer, and Beauty and the Beast.

John admired his friend's capacity for story-telling, and was never weary of listening, but he soon learned that he was not the only repository of such learning, but that for a copper he could buy similar astonishing marvels at the village book store. Once in a while he earned a penny holding a horse at the blacksmith's, and then he was occupied for days in studying the toy book he had bought.

His grandmother possessed a treasure that was a source of unfeigned delight to young John. This was a family Bible, which was profusely illustrated. At ten years John was a good reader, and this precious book was eagerly read by his father, whose failing health kept him indoors. They owned also a Prayer Book, Pilgrim's Progress, and Gulliver's Travels. The last John devoured, and so much did he admire them, that with a feather and the indigo his mother used in washing, he decorated all the engravings. When his grandmother noticed his fondness for books, she borrowed books

from the neighbours, and he soon was familiar with every book owned on the street.

In 1817, while helping his father to mend a roof, he lost his footing, and fell thirty-five feet into the street below. John remained insensible for a week, and did not leave his bed for four months. He partially recovered his strength, but the fall deprived him of his hearing. He became as deaf as though he never had had the sense. While still ill from the accident he asked for a book he desired to read. His mother answered him by signs which he could not understand; at last a slate was brought, on which the answer to his enquiry was written. "Why do you write to me? why not speak?" he said, and to his great astonishment, the reply was written, "You are deaf."

John's circumstances were now fearful, but his spirit was undaunted. He went to the shore where cargoes were received, and wading out with other boys, collected scraps of refuse, which he sold; but this profit was soon stopped, for he stepped upon a broken bottle, which put an end to his small gatherings. His next effort was more hopeful. With his last two pence he bought paper and painted heads, houses, flowers, etc., which sold from his mother's window at two pence halfpenny apiece. Then he tried painting small signs for windows. The few coppers he earned were spent on books. But his grandmother died, and he was turned into the streets. To save him from this fate he was taken into the Plymouth workhouse.

When seventeen years of age he was apprenticed to a shoemaker, who treated him so cruelly that upon writing to the magistrates of the town, they investigated his case and set him free. A subscription was raised to pay for his board and clothes until a situation could be found. In the meantime, Kitto devoted all his time to mental improvement. His aim was to be useful to mankind, and he bent all his energies towards preparing himself for that end. His industry never relaxed, even when he obtained employment. "I cannot," he wrote, "accuse myself of having wasted or misemployed a moment of my time since I left the workhouse." He set apart a task for every part of the day, giving himself only six hours for sleep.

John Kitto died in Cannstatt, Germany, aged fifty. He was always deaf, almost infirm in health; yet he mastered Hebrew and Greek, and travelling through Russia and the East collected an immense amount of material about manners and customs to illustrate many valuable works. He was a regular contributor on the *Penny Magazine*, which was reprinted in America and translated into French, German and Dutch. He wrote "The Pictorial Bible," "Pictorial History of Palestine and the Holy Land," "History of Palestine," "Pictorial Sunday Book and Geography of the Holy Land." His name appeared in his last work as Fellow of the Royal Society of Antiquaries and Doctor of Divinity. The Queen of England granted him £500 a year on account of his literary works.

From such a life there is much to encourage every boy and girl in a desire for self-improvement. This boy, against every possible obstacle, educated himself and produced some of the best works of the kind ever written. It is a noble life that can leave such a record.

Awake up, boys, after reading this account of a workhouse boy's trials and triumphs, and resolve to imitate him in his desire for knowledge, and to leave the world better for having lived in it.—*New York School Journal.*

Notes and News.

ONTARIO.

It is always a pleasure to us to mark progress in education, whether it be in University, College, High School, or Public School; and we have lately observed that many decidedly practical steps in the way of improvement are being taken, which we shall note from time to time.

In the Ontario Commercial College, Belleville, a large number of students are preparing for commercial life. Young gentlemen from the West Indies, Bermuda, New York State, Quebec and Ontario meet together there to be qualified for the merchant's and financier's desks, and a considerable increase is expected this month. This flourishing condition of affairs not only reflects the highest credit on the Principal and Assistants, but is also a substantial testimony to the value of the instruction they impart.

We are pleased to observe that the establishment heretofore

known as the High School, Whitby, has developed into a collegiate institute, which sufficiently indicates the progressive state of education in that locality.

The rapid and successful growth of St. Thomas Collegiate Institute is unquestionably a "sign of our times." Beautifully situated in a town of growing importance, large, and well fitted with every modern improvement, it possesses most attractive architectural features, but its chief beauty consists in the superior instruction given within its walls by Principal J. Millar, B.A., and his efficient staff, Messrs. J. Leitch, J. W. Cook, A. J. Bell, B.A., and N. W. Ford. The record of work done since it changed its designation is most creditable, and it now stands second to no other collegiate institute in the Province. During the past academic year its record of examinations is as follows:—4 passed University matriculation (Toronto), 1 passed matriculation in law, 2 passed matriculation in medicine, 1 passed matriculation in Royal Military College (Kingston), 27 passed Intermediate or 2nd Class Teachers' examination, 12 passed third class Teachers' examination. While it gives every encouragement to those who have no local means of preparing for higher examination, it is observable that "students coming from other collegiate institutes or High Schools are expected to present certificates of honourable dismission." The building is arranged to accommodate about 300 pupils, and 7 or 8 teachers. We were much impressed with the admirable appliances, suited to meet every requirement, with which the building is fitted.

A highly interesting proceeding marked the close of Branpton High School for the winter holidays, which was the presentation to Mr. Cortez Fessenden, B.A., Head Master, of a valuable parting gift consisting of twelve very handsomely bound volumes of Shakspeare's works, together with two volumes of Hudson's commentaries on the same. A beautifully illuminated address, richly framed, accompanied the valuable token, which was read by Miss A. Wallace, and Mr. E. Young presented the books. The gift and address were the united testimony of masters and pupils to the high opinion they had of Mr. Fessenden as a scholar and teacher, and the great esteem in which they held him as a gentleman and a friend. The recipient of the honor expressed his thanks for such a distinguished mark of their appreciation, and spoke feelingly of the happy relations that had existed between the assistant masters, the pupils and himself. Mr. Galton, assistant master, made a few remarks, after which Mr. Fessenden bade them all a cordial and impressive farewell.

Mr. I. J. Birchard, B. A., has been appointed head master of Perth High School, at a salary of \$1,000, and Mr. Embury was previously engaged as science master at same school at a salary of \$700. On this matter an error appeared in our last issue through imperfect information.

Mr. George Stone, first-class certificate, has been appointed assistant master of the Beamsville High School, in room of Mr. H. Turnbull, who goes to complete his university course at Toronto.

During 1880, the Madoc Model School passed one second A in intermediate, 13 thirds, and 7 entrance candidates. At the professional examination, 22 of the candidates trained at it were successful at both non-professional and professional third class examinations for the County of Hastings. The students of this school were at the head of the list of successful candidates.

Mr. Joseph Boag, late head master of the Walkerton Model School, now occupies the position of Principal of the Central Schools, New Westminster, British Columbia. We are sure the district in which he is now located will be much benefited by Mr. Boag's remarkable energy and efficiency as a teacher, together with his influence as an upright and valued citizen. He has our cordial best wishes for success and prosperity in his new sphere of labor.

Bishop Alford, the well-known editor of the Greek Testament, addressed the pupils of the Holmuth Ladies' College at the closing exercises previous to the Christmas vacation.

Mr. Thos. Steele, late of the London Mutual School, is to succeed Mr. McRay in S. S. No. 20, London, the school west of Mount Pleasant Cemetery. Mr. Steele formerly taught in this section successfully and well. Salary for the ensuing year, \$412.40.

We commend the Ingersoll High-School Board for increasing the salary of the Second Assistant to \$425. A step in the right direction.

"The December number of the CANADA SCHOOL JOURNAL is one of the best numbers that have appeared."—London Advertiser, Dec. 17.

VALUABLE PRESENTATION.—At the regular examination of the

Mt. Brydges public school, held on Monday, 20th ult., Mr. H. G. Lindsay, the head teacher, in retiring from the profession, was made the recipient of a magnificent gold-headed cane by his pupils. The address, which was very complimentary to Mr. Lindsay, was read on behalf of the pupils by Master Pearson Grigg, and the presentation made by Master Fred. Arnold, to which Mr. Lindsay replied in suitable terms.

At a successful school exhibition at Revere School, Biddulph, Sect. No. 6, on the 17th ult., addresses were given by Inspector Dearness and the Warden of the County. During the evening the teacher, Mr. McMillon, was presented by the pupils with a purse containing \$20, accompanied by an address, on the occasion of his leaving the profession.

The second winter session of the (Episcopalian) Church College at Saskatchewan was opened, on Nov. 2nd, by the Lieut.-Gov. and the Bishop.

Knox College will apply to the Legislative Assembly at its next session for an act granting to it power to confer degrees in divinity.

One of the grandest dinners ever given in the Woodstock Canadian Literary Institution was that given on Dec. 21st to Professor and Mrs. Wells, who are about leaving the school.

St. MARY'S, Dec. 21.—At a meeting of the Collegiate Institute board held on Wednesday evening last, Mr. McClure, of Oshawa, was appointed first assistant teacher, the position rendered vacant by Mr. McMurchie's appointment to the head mastership of the Harriston high school. Mr. McClure is a gold medalist and is very highly recommended. His salary for the first year is to be \$900. Presentation.—The pupils of the Institute on Tuesday last presented Mr. James McMurchie, B.A., with an address and a very beautiful gold watch chain, with seal attached, valued at \$40. The address was very nicely written on parchment by Mr. Williams, town clerk, and framed. The seal bears the inscription, "To Jas. McMurchie, B.A., from his pupils of the St. Mary's Collegiate Institute." Mr. McMurchie made an appropriate reply.

LISTOWEL.—High School Prizes.—The members of the high school board opened a subscription list a few days ago, and after a canvass of two hours or so, succeeded in securing over \$80 of prizes to be distributed amongst the pupils of the high school at their approaching examination. There will likely be a public meeting held about Tuesday evening next in the Town Hall, at which the prizes will be distributed.

The School Trustees of Brooklyn, on Dec. 17, held a re-union of their schools, which are the best and most efficient in the county of Ontario. A lecture on "Kindergarten" was given by Mr. James Hughes, I.P.S. Mr. Hughes has given special attention to this subject, and in particular to that of training teachers in the art and mystery of giving drawing lessons. The lecture was a very great success, and we trust that Mr. Hughes may be induced to repeat it at many of our public schools. Addresses were delivered by the county member, by Mr. T. B. Bicknell, Reeve, and by Mr. McBrien. Mr. Henderson is the master, to whose ability the Brooklyn school has much reason to feel grateful.

Mr. Wm. O'Connor, M. A., the present Head Master of Harriston High School, has been appointed Head Master of Owen Sound High School.

The Owen Sound High School building has been completed. It furnishes accommodation for 400 pupils.

Mr. James Duncan, Principal of Essex Co. Model School, and his assistants, were presented with a highly complimentary address by the teachers in training at the close of the term.

Mr. Daniel O'Doherty, has resigned his position as teacher in the Puce School, for No. 4, Sandwich East, where he will commence duty on 3rd inst.

Mr. McGregor, who has been so successful in the management of the Almonte High School, has been appointed to Brockville, at a salary of \$1,200, with efficient support. It is expected Mr. McGregor will soon place the latter High School in a first-rate position.

Mr. Cortez Fessenden, under whose able instruction Brampton High School has done so well, has accepted the Head Mastership of the Napanee High School at a salary of \$1,200.

Mr. McMurchie, who for some years has been the efficient Mathematical Master in the St. Mary's Collegiate Institute, succeeds Mr. O'Connor in Harriston.

Mr. Henry, late Mathematical Master in Ottawa Collegiate Institute, has been appointed to the Mathematical Mastership in Brampton High School.

Mr. McCallum, of Arnprior, has accepted the Mathematical Mastership in Cornwall High School.

Rev. T. D. Phillips, M.A., after many years' service, has retired from the Mathematical Mastership of Ottawa Collegiate Institute.

Mr. J. J. Birchard, lately appointed Head Master of Perth Collegiate Institute, took a very high place some years ago in his "First A" examination. He has since completed his University course, taking very high honors, especially in Mathematics. We predict a successful career for him in Perth.

NOVA SCOTIA.

Daniel McDonald, Esq., Inspector of Schools for Pictou county from 1869 to 1879, died at his residence in New Glasgow on the 4th ult. During his early manhood Mr. McDonald efficiently served as a public school teacher in several of the villages of his native county. As an inspector of schools he brought to the discharge of his duties a well-trained mind, an upright conscience, and much valuable practical experience of school work. His retirement from the position was in no sense a dismissal, but the result of the reorganization of the Inspectoral System of the Province. We believe that no inspector stood higher in the esteem and confidence of the Educational Department. In Mr. McDonald's demise many good causes have suffered loss. He was a man who interested himself actively and multifariously in what concerns the welfare of society. Living, he was sincerely esteemed, dead, he is affectionately mourned.

John T. Mellist, Esq., A.M., Professor of Mathematics and Science in the Halifax High School, has been obliged to resign his position by reason of ill-health.

The following was the order of exercises at the Junior Exhibition of Acadia College, on the 16th ult. "The Study of History," Fred L. Shaffner; "The Formation of Character," Arthur L. Calhoun; "Napoleon 1st, as seen by Madam de Remusat," "The Function of the Orator," Ernest A. Corey, "Lord Macaulay," Arthur G. Troop; "The Political Destiny of Canada," Robt. W. Dodge; "The Rise of the Essay," Herbert W. Moore. After the delivery of the foregoing orations, the Rev. Dr. Sawyer, President of the College, gave an extremely interesting historical address. Just a quarter of a century had elapsed since his first connection with Acadia, he having, in the month of December, 1855, entered upon his duties as Professor of Ancient Languages. The college life of that period was vividly described. Interesting personal reminiscences of the students with whom he was then brought into contact were given, and reference was made to the distinguished positions to which many of them have attained. The growth of the college in numbers, equipment, efficiency, and prestige, was gratefully described, and the learned President predicted that in another quarter of a century the College will have an endowment of at least a quarter of a million of dollars, that new and larger buildings will have been erected, and more numerous friends will have arisen to cherish and perpetuate the interests of education.

During the current collegiate year, two students of Acadia College, Mr. Frank W. Morse and Mr. F. D. Martin, have been carried away by death. They were both held in high esteem by their classmates and friends.

NEW BRUNSWICK.

The number of pupils passed for the Superior Allowance during the school year ended Oct. 31 was 589, giving \$11.88 per pupil. One half of this sum goes to the trustees and one half to the teacher.

The Christmas vacation in the public schools began Dec. 20th, to continue two weeks. For the first time in many years, the teachers and students of the Provincial Normal School have had a Christmas vacation of one week. This was rendered desirable by the lengthening of the session from five to nine months.

In the schools in the city of St. John, the one-session plan has recently been adopted by the Board of Trustees. The session begins at 9:30 a.m., and ends at 1:30 p.m. for the younger pupils, and at 2:30 p.m. for the older pupils, with two short recesses.

It is understood that on the 1st of January inst. the teachers of St. John were to be placed on their former footing, as regards salaries, the reduced rates having continued just six months.

The Queen's County Teachers' Institute is to meet at the Narrows on the 27th and 28th inst.

The name of the Hon. Charles Fisher, D.C.L., Judge of the Supreme Court of N. B., who died at his residence, in Fredericton, on the 8th December, will occupy a prominent place in the educational history of the Province. In the year 1858, when he was Attorney-General and leader of the Government, he prepared and conducted through the Legislature a comprehensive "Act relating

to Parish Schools," which inaugurated a new era in school affairs in the Province and continued in operation until 1871. The late judge was an honorary member of the Educational Institute of New Brunswick, as is also the gentleman who has succeeded him upon the bench, the Hon. George E. King, to whom the Province is indebted for her admirable system of free schools.

The Provincial Board of Agriculture has addressed a memorial to the Board of Education, praying them to take such measures as they may deem best adapted to give prominence to the study of the principles of agriculture in the schools and colleges of the Province.

"Tanner's First Principles of Agriculture" has been placed on the list of prescribed text-books.

The next annual meeting of the Educational Institute will be held at St. John, N.B., July 12th, 1881.

QUEBEC.

Towards the end of October, the Seventeenth Annual Convention of the Provincial Association of Protestant teachers was held in the City of Montreal—the great educational centre of the Province of Quebec. The railroads, steamboats, and public conveyances offered, at reduced rates, every facility to all teachers in the Province to attend this Parliament of Educationists, and it speaks well for the teachers and their professional enthusiasm that so many attended this Convention, and discussed, with no little ability, the various papers read on Educational subjects, all of a practical nature, with special bearing on all the circumstances of this Province. On the first day of the Convention, the schools of the city were kept open to allow all teachers coming from the country and a distance to see for themselves the Protestant School system in Montreal, a very choice arrangement, for apart from the admitted excellence of these schools, every conscientious, earnest teacher, who likes his profession and is devoted to it, cannot fail to learn much, and get many useful hints by seeing the systems and modes of instruction, classification, &c., adopted by others. He must be a very poor teacher indeed from whom no useful hint in the art of teaching cannot be learnt. In consequence of this wise provision for inspection of the city schools by the teachers, the Convention did not hold its first meeting for business till the evening, when the chair was taken by the President, the Rev. Dr. MacVicar, in the hall of the McGill Normal School, which was tastefully decorated for the occasion, and crowded to its utmost capacity by teachers and others interested in Education, to the number of four or five hundred persons. On the platform beside the President were Dr. Dawson, Principal of McGill College; Dr. Kelley, Montreal High School; Dr. McGregor, McGill Normal School; Dr. Robins, Secretary Protestant Board of School Commissioners, Inspector McLachlin, of Bedford, and Mr. Frank Hicks, M.A., Secretary of the Association. Letters of apology for absence were read from the Hon. Mr. Ouimet, Rev. Principal Lobley, Chancellor Henecker, and Hon. Solicitor-General Lynch. Invitations to visit McGill College, and Natural History Society's Museums were extended to the members of the Convention by Dr. Dawson and the Secretary of the Natural History Society. The first paper read was by Dr. Kelley, on text-books, and was no doubt caused by an Act of the Provincial Legislature, last session, requiring that the same text-books shall be used in all schools throughout the Province, allowing only two grades, one elementary, and the other advanced. There was no little discussion, but in the end the following resolutions were passed almost unanimously:—

1. "That it is desirable to assimilate, as far as possible, the subjects required for Matriculation in Arts, for the standing of Associate in Arts, for the Academy Diploma, and for admission to the study of the Legal, Medical, and Notarial professions, and this important matter be entrusted to a special committee, consisting of Dr. Dawson, Rev. Canon Norman, Dr. Howe, and the Hon. Solicitor-General Lynch."

2nd. "That whereas, by recent legislation, the Protestant Committee of the Council of Public Instruction is requested to revise its list of text-books before May 1st, 1881, and that this list remain unaltered for four years therefrom, a committee on text-books be appointed, to consist of the mover and seconder, and ten members, five chosen by the Central Executive Committee, and five by the Convention."

At the morning session of the second day's meeting, Mr. Parsons, the Chairman of the Committee appointed last year to amend the Constitution, read his report, which was adopted. When the new Constitution was adopted, Mr. Rexford proposed several alterations in the by-laws, which were carried. The Rev. Mr. Vial, of Quebec, then read a paper on the best principle for the classification of children in a large school. This paper gave rise to some discussion,

in which Principal Hicks and Chancellor Heneker took part. Before the close of this session, the Hon. W. W. Lynch, Solicitor-General, was cordially invited to address the meeting, which he did in a few appropriate well-chosen words, stating that some years ago he had been one of their number as a teacher, that he had ever taken and would continue to take a very great interest in everything pertaining to the education of the young, and endeavoring to raise the pay and social standing of the teacher. At the afternoon session Miss Minkler read a paper on "Teaching in the Country," in which she drew particular attention to the uncomfortable state of most of the country school rooms. Dr. Robins also read a very able paper on "The Relation of the State to Higher Education." He divided the subject into the following twelve different propositions:—

1. The good of the commonwealth alone justifies the interference of the State with education.

2. It is for the good of the commonwealth that such an education as every boy and girl of twelve or fourteen years should have, be within the reach of every child within the State.

3. Two classes within the State must now be distinguished—those who toil and those who direct the toilers.

4. Those who direct the toilers are either those who possess extraordinary natural ability, or those who have inherited an assured possession.

5. It is not for the good of the commonwealth that the school life of the masses should be much prolonged, for while nature is yet plastic they must acquire the manual dexterity and the habits of patient persevering labor, which are essential to their happiness and their success.

6. It is for the good of the commonwealth that the leader of society should have a more liberal, more thorough culture, and so a much more prolonged course of education. This is what is meant by "higher education" in my lecture.

7. In such an education only the few can participate—want of talent, want of time, want of means forbid it.

8. Every child has an equal right to share in the advantages of the common education provided by the State, but it is not just that the State should make public provision to secure for a class advantages that cannot be shared by all.

9. The child of the rich has a just claim that the State shall expend on his education as much as on that of the child of the poor man, but no more.

10. Whatsoever, therefore, the education of the child of the rich man, whether from its superior character or from its longer duration, costs more than the education of the poor man, must in justice be borne by the rich man himself.

11. But when the child of the poor man gives evidence of character and intellect so superior that he will hereafter be a leader of men, it is for the good of the commonwealth to see that he shall have, at the public cost if necessary, an education that shall soften his manners and enoble his mind.

Lastly. It is the interest of the State, then, to establish and maintain in centres of population a system of superior schools, subsidized by the State funds to the same extent as the elementary schools, but mainly supported by fees, open to all who pay the cost, and at the cost of the State to such as give evidence of extraordinary talent.

The matter was further discussed by Dr. Sullivan and Dr. Dawson. The Rev. Mr. Roxford, M.A., read a paper on "The Examination of Teachers," deprecating the present system of examination by local boards as inefficient, and not giving uniform results. This important question was further taken up by Principal Dawson, Chancellor Heneker, Inspector McLachlin, and Dr. Howe, and discussed at some length.

On motion of Rev. Mr. Roxford, seconded by Dr. Robins, the following resolution was put to the Convention and carried: "That the present system of examination for teachers is unsatisfactory, and an immediate change is necessary for the well-being of our schools, and that this unsatisfactory state of things would be removed and the well-being of our schools be ameliorated by the appointment of a central examining board with a higher standard of education."

The Rev. Canon Norman read a most interesting and instructive paper on "The Higher Education of Women." Dr. Stevenson delivered a lengthy address on "The Education of the will in relation to the intellect." He was followed by the president, Rev. Principal MacVicar, LL.D., who took as his theme, "Moral Education; its Province and its Method," dwelling specially on the following points:—

1. The standard of right, its nature and basis.

2. Right and wrong as manifested qualities of actions.

3. Conscience, or the faculty which recognizes right and wrong.

4. Freedom of the will, motives, and the cultivation of virtue in relation to conscience.

5. The fundamental relations of man to God.

6. What a man owes to himself—The care of his health; personal culture, mental, moral and spiritual; the formation of right habits, physical, mental and moral; the care of his reputation; the securing of personal enjoyment or happiness consistently with the good of others; the conservation of his rights of property, contract, citizenship, &c.

7. What a man owes to his fellow-men, considering society in three forms: the family, with its privileges, rules and obligations; the state or nation, with its constitution, laws, rights and duties; and the community of nations, involving international relations and laws.

8. Casuistry, or the determination of cases of doubtful propriety in the light of law and circumstances.

Mr. E. W. Arthy, principal of the Preparatory High School, Montreal, read a paper on "How to teach Latin;" Miss Aimes gave a paper entitled "A plea for country teachers," the Rev. Mr. Black on "The Education of the Senses," Dr. Miles on Statistics, as to the measures taken by the Provincial government to supply superannuated teachers with pensions. Dr. Kemp read a paper on "Ladies' Colleges," and Prof. Gardner one on "Hygiene."

St. Johns, Quebec, was selected as the place of meeting for the next convention. The Rev. Dr. Miles was chosen President, Dr. McGregor, Mr. McIntosh of Granby, and Miss Macdonald of Quebec, Vice-Presidents. Mr. Hicks, who retired after 11 year service as Secretary, was succeeded by the Rev. E. J. Roxford, D. A.; the Treasurer is Mr. Rowell, head master of St. Ann's Street School, vice, Dr. McGregor retired; and the Central Executive Committee are: F. W. Hick, M.A., John McKecher, B.C.L., Dr. Kelley, Messrs. Kneeland and Pearson, Mrs. Fuller, Miss Smith, St. Johns, Miss Minkler, of Granby; Mr. Stevens, of St. Johns, Mr. E. R. Smith, of St. Johns; Inspector Hubbard, Sherbrooke, and the Rev. Mr. Fothergill, Inspector.

A meeting of the Protestant Committee of the Council of Public Instruction was held on the 24th November, at which much important business connected with the Protestant education of the Province was transacted, the details of which will appear in the next issue of the JOURNAL.

MANITOBA.

At the June meeting of the Council of the University of Manitoba, certain resolutions were introduced by Professor Forget Despatés which led to a lengthy and animated discussion, and which were remitted to a special committee. A copy of these resolutions will be found in the July number of the JOURNAL. At the meeting of Council which took place on 2nd Dec. the committee submitted the following report, which, on motion of the Rev. W. C. Pinkham seconded by the Hon. Mr. Justice Dubuc, was unanimously adopted:

REPORT OF THE COMMITTEE ON EXAMINATIONS.

The committee beg respectfully to submit the following recommendations as their report:—

The examiners for each subject shall prepare three sets of papers for that subject. These papers shall, as provided by previous statute, be submitted to the whole body or board of examiners, who shall elect a chairman. The papers, as approved, shall then be remitted to the examiners for the several subjects, who shall prepare the number of copies requisite for the examination. The copies of each paper shall be enclosed by themselves in a sealed envelope, having the subject marked on the outside—all the envelopes being of the same kind. At a meeting of the board of examiners, at a time appointed at their previous meeting, the envelopes shall be handed in and put together in a box. The chairman shall then, in the presence of the board, draw out successively the envelopes containing the papers. The papers for any subject shall be those in the first envelope selected containing papers on that subject. The papers not selected shall remain unopened, in the custody of the chairman, till after the examination. The selected papers shall be kept by the chairman in a locked box, and shall be delivered before each examination to a messenger who shall be appointed by the board of studies. This messenger shall hand them to the presiding examiner. The board of studies shall furnish to this second meeting of examiners the programme of the several examinations. The board of examiners shall for each ex

amination nominate two of their number, who, either personally or by substitute, shall be present at such examination.

That the students be required to fasten their papers together with fasteners provided for the purpose, and that every sheet be marked as directed by the board of studies.

(Signed) R. RUPERT'S LAND.
Chancellor.

The Board of Studies reported that the following gentlemen had been nominated as University examiners for 1881:

In Classics: The Rev. Professors Forget, O'Meara and Hart. In Mathematics: The Chancellor, the Revs. Prof. G. Cloutier and A. Campbell, B.A. In Natural Sciences: The Revs. Prof. Bryce and A. A. Cherrier and H. Archibald, B.A. In Mental Philosophy: The Revs. Dr. Lavoie, J. Robertson and A. E. Cowley. In Modern Languages: The Revs. O. Fortin, B.A., and T. J. Quevillon, and A. C. Killam, B.A., and the Council confirmed the nomination. Their report also included the following recommendations, which are given in full because it is believed that they will interest readers of the JOURNAL:

That any student taking the ordinary B. A. course may pass upon any five of the eleven papers of the final examination for that course one year after passing the previous examination, taking the six remaining papers the year following, or at any subsequent examination.

That it has been considered advisable to divide the honor examination in classics into two parts, after the manner of some of the other honor courses, and also to define more precisely the papers in Latin and Greek grammar, and in Roman and Greek history in classical honors.

It has accordingly been decided to recommend that two of the four papers on Latin and Greek authors required by Statute XVII, first part, one paper in Roman and Greek history and one paper in Latin and Greek grammar, may be passed one year after the candidate has passed the regular previous examination, the following to be the Latin and Greek authors for the two papers above mentioned:—

Cicero, "De Senectute;" Livy, "Books II and VI;" (Æneid); Horace, "Book I, (Odes);" Lucian, "Charon and the Vita;" Homer, "Iliad, Book III," "Zenophon, "The Memorabilia, Book I."

The schedule on Latin and Greek grammar for this examination has not yet been completed.

For Roman and Greek History the following works are recommended:—For English, Smith's Smaller History of Rome and Smith's Smaller History of Greece, for French, "Histoire Ancienne, par Chautenel, Romaine et Grecque."

That the following resolutions relating to the medals, etc., be recommended for adoption:—

There shall be awarded annually a silver medal to the student standing first in honors who has obtained first class in any one course at the final examination for B.A.

There shall be further awarded a bronze medal to the student standing second in any honor course at the final examination for B.A.

These shall be called university silver and bronze medals respectively.

For the equitable awarding of the Governor-General's silver medal the following regulation is recommended: that the different honor courses shall receive this medal in the following order:—

mental and moral sciences, 1881; classics, 1882; mathematics, 1883; modern languages, 1884; natural sciences, 1885.

In case of failure to reach the standard required in any honor course, the next in the preceding order shall be taken.

The Governor-General's medals shall take the places of the University medals in the honor course in which it is awarded.

The Governor-General's bronze medal shall be awarded to the first in the order of merit at the previous examination in the subject of classics, mathematics and botany completed together, provided that the successful competitor shall also have taken first class in all the subjects of the previous examination completed together.

The examination of B. A. degree in honors in mathematics shall be divided into two divisions. A candidate may appear for examination for the 1st division at the end of one year from the regular previous examination at which he first attended, and for the other division, or the two together, at the end of two years from the said previous examination, but not sooner. The 1st division shall consist of the papers of the 1st part in geometry and conic sections, arithmetic, algebra, trigonometry, statics and dynamics, hydrostatics and optics; and the papers of the 2nd part in algebra, theory of

equations and trigonometry, and the 2nd division shall consist of the remaining 7 papers.

The Rev. W. C. Pinkham gave notice that he would move, at the next regular meeting, for the appointment of a special committee to consider the question of the higher education of women, with a view to bringing it within the scope and aim of our university work. Professor Hart expressed his intention of seconding the resolution.

Readers of the JOURNAL who know Professor Bryce, Principal of Manitoba College, will learn with regret, that he is suffering from over-work. He has gone to Ontario on a short visit to take the rest which his physicians have recommended.

The Protestant Board of School Trustees for the city of Winnipeg, have decided to advertise for an inspector for their schools, for the year commencing February 1st, 1881. Application must be made before the 11th day of January. The salary offered is \$1,000. The census of Protestant children for the city of Winnipeg, from the age of five to the age of fifteen years inclusive, taken during the month of November, places the number at 1,090.

PRINCE EDWARD ISLAND.

PRINCE EDWARD ISLAND EDUCATIONAL ASSOCIATION ANNUAL CONVENTION.

The first annual convention of the P. E. Island Educational Association opened on Thursday, Oct. 21st, in the public hall of the Upper Prince Street School, D. Montgomery, Esq., Superintendent of Education, in the chair. The meeting was called to order at 3 o'clock p.m.

Mr. Joseph D. Seaman was appointed Secretary of the Convention.

A committee on organization, consisting of Neil McLeod, Thos. McKinlay, E. Dennis, Ewen Stewart, and Joseph D. Seaman, was appointed.

Messrs. Neil McLeod and N. A. Stewart briefly addressed the convention on the object of the meeting and work of Educational Associations.

Miss Maria Lawson read a paper on "Honesty." What has this to do with schools and school-teachers? Can we change these things if we would? We have an influence upon the legislators, merchants, tradesmen, wives and daughters of the future. Perhaps of none except parents can it be said so truly as of teachers that

"Our echoes roll from soul to soul,
And grow forever and forever."

The child's first experience of the world is as a scholar. Here for the first time he enters into competition with his fellows, and he must be kept from tyrannizing over those who are weaker than himself, or overreaching those who are stronger. While we impart book learning, are we careful enough to check at the very outset the slightest tendency in the direction of dishonesty, or do we try to promote principles of honesty and uprightness among the pupils? Dishonesty manifests itself amongst children in various ways, as theft, truancy, shirking of work. To remedy this last, the teacher himself should do his own work faithfully, and see that the work given to the pupil was well within his capabilities, so that he be not discouraged. A temptation to dishonesty is found in the tendency to copy. It is hard to make a child believe that it is really wrong to receive help from his neighbor, and still harder to persuade the helper that he is doing his friend not a benefit but an injury by allowing him to copy his work. Self-reliance is the sworn foe of dishonesty. Honesty may be encouraged by never allowing a child to put the blame of his own faults on his neighbor's shoulders. The merit card, unless very judiciously used, becomes a temptation to dishonesty. But the best means to prevent dishonesty is for the teacher himself to be a living example of honesty. Let us with frank, truthful earnestness endeavor to do our duty, so that our scholars looking upon us will see examples of that honesty to which the great Master gave the highest sanction when he said, "Therefore all things whatsoever ye would that men should do unto you, do ye even so unto them."

A discussion followed the reading of this paper after which the convention adjourned till the following day.

In the evening an enthusiastic and profitable public meeting was held, at which addresses were delivered by Rev. G. W. Hodgson, Hon. L. H. Davies, Prof. J. B. Calkin, Truro, N.S.; Rev. John McKinnon and E. J. Hodgson, Esq.

Second Day.—Morning Session.—The President took the chair at 10.30 o'clock, a.m. Miss Emma Ball read a paper on "Reading."

Reading, the most important of all branches, being the key to all other branches of knowledge, is generally but poorly taught, not

on account of wilful neglect on the part of the teacher, but because he has too many reading classes and is required to hear them too often in order to satisfy parents and trustees. More naming words is not reading any more than mere daubing a canvas with paint constitutes a finished and life-like picture. A good reader is one who renders a selection in a clear distinct voice, pleasant to the listener, and with such inflections and emphasis as will interpret correctly the meaning of the author read. To attain this, first lessons must be good ones. The dull repeating of the alphabet day after day, and the meaningless sentences given as lessons, have done much to give children a dislike for reading. Teach the child that letters and words are pictures of sounds uttered by him every day. The sentences first given should be those which he can understand. As the pupils progress, guard against faults such as drawing, mispronunciation, etc.; audibility, distinctness, etc., will need to be patiently taught. A good general rule for reading is that they read naturally. A thorough and just understanding of a passage is the best guide to its expressive delivery. In a reading lesson, question the pupils to see that they understand what they are about to read. Drawing is caused by pushing children forward into books for which they are not at all fit. The children must be able to pronounce every word in their reading lesson without hesitation, to avoid drawing. We cannot expect to make our pupils accomplished elocutionists; with so many under our care it is impossible for us to go into the niceties of elocutionary drill, but we may and ought to expect our pupils by our guidance to become good intelligent readers. And if we succeed in doing this, we have placed with them a source of enjoyment to themselves and those with whom they will associate which will last long after our connections with them as teachers have ceased to be.

Mr. Neil McLeod opened the discussion of the subject of "School Discipline" in an excellent paper, which if space permitted we would like to report.

Afternoon Session.—The committee on organization submitted their report, which on motion was adopted.

The officers for the ensuing year were elected with the following result:—President, D. Montgomery, Esq.; Vice-Presidents, Neil McLeod, Esq., C. H. Ives, Esq., Ewen Stewart, Esq., and Miss Annie L. Smith; Secretary-Treasurer, Joseph D. Seaman; Corresponding Secretary, Miss Emma Barr; Executive Committee—President, Secretary, Miss E. E. McKinnon, Miss Maria Lawson, Gamaliel Gillies, John McRae and Thomas McKinlay.

Mr. C. H. Ives read a well-written paper on "Eye Teaching," which was well received by the association.

The association adjourned till evening, and met at eight o'clock. Instead of a regular association meeting the doors were thrown open to the general public. The attendance was large. Interesting addresses were delivered by Prof. Calkin, Thos. Le Page Esq., H. Lawson, Esq., and Rev. Dr. Murray.

The association then adjourned to meet again in the month of October, 1881.

Teachers' Associations.

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

ELGIN.—The semi-annual convention of this Association was held in the Collegiate Institute, St. Thomas, on the 10th and 11th ult., Mr. R. C. Inglesby, President, in the chair. At opening, the attendance was small, but during the course of the day was largely increased. The minutes of previous meeting were read by Mr. N. W. Ford, secretary, and adopted. Mr. Cook, treasurer and librarian, gave a good report of the financial condition of the association, there being a sum of \$65.81 to credit. He said that although they had the best teachers' library in the Province, he regretted to say it was very little used or appreciated. Messrs. Leitch, Brodenck and Birk were appointed auditors. Mr. A. F. Butler, I.P.S., deplored the apathy of the teachers in not availing themselves of such an excellent library. He thought the next best thing to that was a good periodical, and bore testimony to the real scholarly ability with which the CANADA SCHOOL JOURNAL was conducted, and hoped the teachers would all subscribe for it. On the motion of Mr. Ford, seconded by Mr. Cook, the actual expenses of the executive officers in attending committee meetings were allowed.

A letter from Prof. Payne, Ann Arbor University, was read, apologising for his absence through illness.

Mr. N. W. Ford, in commencing an attractive programme, took up "Infinite participles and gerunds," and entered into some of the most difficult forms in which they occur in a manner which displayed his

thorough knowledge of the subject. Several questions were put by the president and some of the members, which were answered promptly and intelligently.

A reading, "The Schoolmistress," given by Miss Hiccox with much taste and considerable ability, was greatly appreciated, and on the proposition of Inspector Butler, seconded by Mr. J. Miller, M.A., she was accorded a warm vote of thanks.

In the afternoon, Mr. McAlpine demonstrated his method of teaching "Elementary Arithmetic." He went on the practical system of illustrating results in each rule, and recommended self-reliance with development of thought as the most successful plan for securing a useful knowledge of the science. He said he would give simple ideas of fractions before teaching reduction.

Mr. J. L. Robertson, business manager of the CANADA SCHOOL JOURNAL, was permitted to address the meeting relative to the circulation among the teachers in the county of the periodical he represented.

Mr. J. Millar, B.A., Head Master of St. Thomas Collegiate Institute, said a good educational periodical is a thing that teachers cannot do without, but it was their duty to see that they were not deceived in the article they got. Mr. Sutherland had offered the *Hamilton School Magazine* for 50 cents a year, but if he could not get that he would take less. It was no use to try to disguise the fact that this magazine is an advertisement for the Hamilton Collegiate Institute, and he looked upon it as a "cheeky thing" (applause) for anyone in connection with that school to come there and advocate their special organ. He did think the agent was a gentleman but if he linked himself with those who desired to push through the country the high-sounding merits of the Hamilton Collegiate Institute he did what was very unwise. The ruse was unmasked in St. Catharines, and it would be dealt similarly with in Elgin County. What would be the result if St. Thomas Collegiate Institute or any other acted in the same way to attract students from other counties where they could be equally well taught? He denounced the practice as highly detrimental to the cause of local education, and one that ought not to be countenanced. He knew the CANADA SCHOOL JOURNAL from the commencement of its publication, and it has always occupied an independent position, and is, strictly speaking, the only national paper for teachers in the Dominion (applause). He concluded by proposing the following resolution: "That a committee, consisting of Messrs. Butler, I.P.S., Leitch, McKay, the President, and the mover, be appointed to procure on as favorable terms as the funds will permit, a copy of the CANADA SCHOOL JOURNAL for each member of this Association." Mr. Dudley seconded the motion. Mr. E. McKay, B.A., Head Master, Aylmer High School, endorsed the opinions expressed by Mr. Millar, and strongly condemned the system of puffing which the Hamilton Collegiate Institute had adopted, in the shape of a magazine having for its plausible object the teacher's practical help, but the essence of the publication is to advertise the Collegiate Institute at the expense of the teachers. The motion was put and carried without a dissentient.

In the absence of Mr. Burdick, of Aylmer, Mr. Butler, I.P.S., gave an eminently practical address on "How to conduct a class in 4th Reader." It abounded in original thought, and conveyed so much excellent advice and instruction that it was greatly appreciated.

A meeting was held in the Knox church in the evening, which was well attended. Mr. E. McKay ably occupied the chair. Addresses were delivered by Messrs. Butler and J. Millar on "The Relation of Poetry to Education," and on "Higher Education" respectively, both of which elicited the highest commendations. Music was supplied by the Misses Hammill and Raymour, and Mr. J. L. Robertson.

Second Day.—The exercises were commenced at 9 a. m. with an essay on "Making pupils think," read by Mr. S. Wear, Fingal Public School. He pointed out how study could be developed and promoted in every branch of school instruction, which would not only be of benefit to the pupils but also to their parents, and do away with much of the irksomeness of home lessons.

Mr. G. W. Littlejohn, Yarmouth, read a very interesting paper on "Grammar to a 4th Class," illustrating his subject by some ingenious devices designed to fix the pupils' thought and attention.

Mr. H. Clay, Wallacetown, in addressing the meeting on "Reading in our Public Schools," dealt with the matter with an ability hardly to be expected in one so young.

By request, a reading was given by Miss Inglesby which was greatly admired, after which the Convention adjourned, to meet again at the call of the Executive.

The committee on CANADA SCHOOL JOURNAL met and decided to give a copy of the JOURNAL to every member of the Association who had paid up the membership fee.

PERL.—The semi-annual meeting of this Association was held in Brampton High School on the 17th and 18th ult. The President, Mr. A. Norton, called the meeting to order at 9 a. m., at which time there were very few members present. During the course of that session, and in the afternoon, the numbers were, however, considerably augmented. Mr. D. McKay, secretary, read minutes of previous meeting, which were adopted, after which some routine business was transacted. The President then read a very practical paper, bearing on Teachers' Conventions. On the motio-

of Mr. McKay, seconded by Mr. Murch, it was unanimously carried that "the publishers of the CANADA SCHOOL JOURNAL be requested to publish the address in their Journal."

Mr. McDonald presented the report of the Committee on Text-books. It recommended Kirkland and Scott's Elementary Arithmetic as the best of its kind, and also Lovell's Advanced Geography, if not too expensive.

There was a great deal of discussion with respect to introducing the latter book into the schools of the county, but the whole report was postponed for a fuller attendance in the afternoon.

Mr. Wismer, first Vice-President, tendered his resignation of that office in consequence of his appointment to Parkdale Public School. After some remarks complimentary to Mr. Wismer, the resignation was accepted, and on the proposition of Mr. Ludlow, seconded by Mr. McDonald, Mr. Murch was unanimously elected Vice-President. A committee, consisting of Messrs. Murch, Ludlow, McKinnon, I. P. S., Wismer, and the President, was appointed to consider place of next meeting, and to report whether it would be advisable to have township meetings, as a difficulty existed in getting members to attend a central Convention.

In the afternoon, Miss Grey read a very sensible paper on "The benefit derived from Calisthenic Exercises." On the motion of Mr. McDonald, it was agreed to ask the publishers of the CANADA SCHOOL JOURNAL to give it also a place in its columns.

Mr. Donnelly then gave a few remarks on the plan of the Teachers' Superannuation Fund, which he said would be as difficult to arrange as trying to have weather to suit everybody.

In order to illustrate the system of Drill and Calisthenics pursued in the Queen Street School, Brampton, a third class from that school was marched in by Miss Brown, their teacher, and "put through their paces" in admirable style. The healthful appearance and good physique of the girls showed that their exercise agreed with them, and they seemed to take delight in being up for inspection. Miss Brown's decisive tones of command are well adapted to ensure precision. A noticeable feature in the drill was "chest and lung development," and the utterance of words strongly aspirated. After the children retired, a discussion on the merits of the system was carried on for some time, chiefly by Messrs. McKinnon, Murch, Wismer, McDonald, and the President.

The subject of an educational periodical for the Association was then considered, and after a short debate a motion of previous meeting, allowing half the price of a journal to each member, was rescinded. Mr. Noble proposed "that the whole of the price of the CANADA SCHOOL JOURNAL be taken out of the funds, and that each member of the Association be furnished with a copy." Motion seconded by Mr. Wismer, and carried.

Miss A. Wallace read "The Painter of Seville," in a manner that elicited the highest encomiums, and on the motion of Mr. Hastings, seconded by Mr. Robinson, she received the thanks of the meeting, which were given by acclamation.

Mr. Murch explained his method of distinguishing between the true infinite, the gerund, the imperfect participle and the verbal noun. His plans were considered very satisfactory and conclusive.

Second Day.—Inspector McKinnon showed, with a third class from the public school, how he would introduce "History" to beginners. A discussion on the use of text-books on History followed.

Messrs. Allen, White, and Robinson were appointed a committee on the next place of meeting, and they reported: (1) That there be four conventions of one day each, held in different parts of the county; (2) That the places of meeting be as follows.—Alton, Bolton, Brampton and Streetsville; (3) That the meetings be held one day in each town, namely, on a Friday and Saturday, to be determined by the Executive, in the two former places, and on the following Friday and Saturday in the two latter. The report of the committee was adopted. In reply to a member, Mr. McKinnon stated that these four meetings would count as one of the Association. The President invited those who may attend at Brampton, to a dinner that will be provided.

The report of committee on text-books was taken up. Kirkland and Scott's Elementary Arithmetic adopted; no change to be made in the Geography at present. Several clauses relating to the Superannuation Fund were passed.

Mr. D. McKay showed his method of teaching factors in "Algebra," and their application. Discussion on the teaching of "Grammar" followed.

Mr. Galton, Classical Master, Brampton High School, thought it would be an advantage to pupils if composition were practised more, and less time taken with analysis. In this idea Inspector McKinnon coincided. Adjourned.

EAST BRUCE.—The Teachers' Association of this county met on the 3rd and 4th ult. in the Public School, Paisley. As the President and Vice-President were both absent, and the attendance of teachers very meagre, no business was done in the forenoon of the first day. In the afternoon, about fifty members were present, but the presiding officers were unavoidably prevented from attending. In their absence, Mr. W. R. Ducker, Principal of Burgoyne School, was moved to the chair, which he ably filled during the Convention. The minutes of previous sessions were read by Mr. C. F. Ming, Secretary, and confirmed. He also read letters of apology from Mr. G. W. Ross M.P. and Mr. J. L. Hughes, who were invited, but could not attend. Mr. Ducker read a paper on "Order, and how to

secure it," in which he showed that the teacher's own manner was a guide to the school. The teacher should not be noisy; he should vary the exercises; small pupils should have an extra time for recreation in fine weather; the pupils should be interested in their business, discipline should not be overdone, especially in graded schools; too many rules should not be made, but those framed must be strictly obeyed. The paper was considered well worthy of the attention of the teachers.

Mr. McCannell very practically illustrated his method of teaching "Reduction" to young children. In reply to Mr. Ritchie, he said he would explain the principles of the rule and its simple workings previous to teaching fractions. Mr. Ming and the chairman criticised the exercise. On the motion of Mr. Ming, seconded by Mr. McCannell, it was unanimously decided to apportion a part of the funds of the Association towards obtaining the CANADA SCHOOL JOURNAL at club rate for the members.

Mr. J. L. Robertson demonstrated the Tonic Sol-fa Method of teaching "Singing at Sight," which greatly interested those present, and for which he received the thanks of the meeting.

In the evening, matters connected with inspection reports were brought forward and discussed, but they possessed no public interest.

The forenoon of the second day was occupied with the "Question Drawer," which, though pretty full, was disposed of with wisdom and skill by Messrs. Ducker and Ming. The subject of the previous evening was also resumed. Some general business was transacted, after which the Convention closed.

EAST VICTORIA.—The Convention of this Association was held in the Cambridge Street School, Lindsay, on the 26th and 27th November. In the absence of Mr. John Shaw, M.A., president, Mr. V. E. Tilley, Vice-president, called the meeting to order at 9 a.m. on the 26th. Minutes of previous sessions, read by Mr. J. H. McFaul, secretary, were adopted.

Mr. Grigg read a very interesting paper on "Literature," which was afterwards discussed with much ability by Messrs. Knight, I.P.S., Junkin and Sherwood. Mr. H. Reazin, I.P.S., West Victoria, gave a very practical lecture on "Teaching Reading to Beginners," which gave rise to sharp questioning by the members, and important information was elicited. In the afternoon, "Difficulties in Grammar" were well handled by Mr. J. H. Knight, I.P.S., and equally well debated by Messrs. McFaul, Junkin, Irwin, the Vice-president and others.

Mr. J. H. McFaul illustrated, with a class, how he would teach the simple rules of Arithmetic, and his method appeared to give great satisfaction. The Convention met in the evening in the Town Hall, Dr. G. A. Norris, of Omamee, Warden of Victoria, in the chair. Mr. J. H. Knight read a paper bearing on "The relation of Music and Reading with respect to Teaching." Messrs. Seymour and Andrews contributed some selections of instrumental music, which added considerably to the attractions. Votes of thanks were accorded to the Town Council for use of hall, to the Chairman and to those who took part in the evening's entertainment.

Second Day. Mr. G. Suttee read a well-written paper on "Entrance Examinations," or rather "Compulsory Promotion Tests." He thought the Inspector was the best judge of the children's proficiency, and could without impartiality advance them, whereas if it were left to the teacher he might be influenced by a desire to get a good name, or by parents to push them forward, making the state of the school very awkward for his successor. He would be in favor of the adoption of the system of uniform promotions at simultaneous examinations. The subject led to a general discussion, which was maintained with spirit and skill by Messrs. Junkin, Grigg, Sherwood, Irwin, Reazin, and McFaul, some taking the view of the essayist, and others that the conscientious teacher should know best whom to promote. The chairman did not consider written examinations the best test of a child's knowledge, but as regards promotions, some decided step should be taken to secure uniformity.

Mr. Reazin then gave a brief history of Grammar, and showed that there was need of uniformity on that subject also. He recommended practical teaching, and that the teacher should note errors overheard from the children and correct them. He knew teachers who were well acquainted with Grammar that spoke bad English, and he humorously illustrated his remarks. He would begin teaching the subject before using a text-book. In the debate which followed, several good suggestions were thrown out.

Mr. W. E. Tilley took up "Algebra," and worked out in a masterly manner several difficult operations. Votes of thanks to Mr. Reazin for his instructive addresses, and to Mr. Knight for his lecture the previous evening brought the proceedings to a close.

BRANT.—The semi-annual meeting of this Association was held in the Collegiate Institute, Brantford, on the 19th and 20th November. The attendance was not so great as was expected, but a sufficient number of teachers, including those in training at the Central Model School, were present to make the proceedings interesting. The discussions on the several subjects were well sustained, and were successful in eliciting much information of real practical value to the members. The President, Dr. M. J. Kelly, L.L.B., called the meeting to order at 10 a.m. on the 19th. The minutes of previous convention were read by Mr. W. Rothwell, Secretary, and approved; also a statement of accounts, which was handed over to the Auditors, Messrs. Williamson and Mackintosh, to report on. The