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The Canada School Journal

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CANADA SCHOOL JOURNAL HAS RECEIVED

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

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

TO OUR READERS.

In accordance with the custom now almost universally adopted by the publishers of educational journals in England and the United States, we propose to dispense altogether this year with the usual August number of the SCHOOL JOURNAL. With this arrangement, we feel sure, our readers will find no fault, more especially as we give them a double number for July. Teachers are naturally disposed to pay as little attention as possible to professional matters during the summer vacation, and we propose this year to assist them in their endeavour to forget for a little while that there are such things as schools, conventions, and text-books.

REMUNERATION OF COLLEGE PROFESSORS.

One of the difficulties in connection with collegiate management, and especially in connection with endowed institutions, is the difficulty of keeping the teaching abreast of the age. It is very apt to fall behind either in the subject matter of the prelections or in the methods of the lecturer. While some members of a college staff may be doing their utmost and doing good work, other members of it may be indolent, or incompetent, or both. There is no supervision over their work and in the nature of things there cannot be any. Each is a law unto himself and if he fails he must be left to be dealt with by the slow operation of public opinion which is never well informed of what goes on within academic walls.

One way of bringing pressure to bear on inefficient teachers and of applying the spur to indolent ones would be the general adoption of the practice of paying each professor in a college a certain fixed sum and supplementing this with all the fees paid by those who take his classes. The students are

excellent judges of the merits of a lecturer and if a member of the staff were to fail in securing a favourable opinion his income would suffer accordingly. In every college there are certain options allowed and the student can therefore shape his course a good deal according to his inclinations.

We are not in a position to say how the professors generally are paid in Dalhousie College but we notice that in the case of Dr. Schurman, recently appointed to a chair in that institution, he is allowed a fixed salary of \$2,000 a year, with class fees additional. If this is the system adopted in Dalhousie generally the management have set an example which ought to be generally followed.

PRIVATE AND PUBLIC SCHOOLS.

The Minister of Education has this year taken the important step of giving to Pickering College, a purely private school, the right to hold within its walls the ordinary high school entrance and intermediate examinations. It was only to be expected that a new departure of this kind would evoke some hostile criticism, but we feel confident that in the long run public opinion will abundantly endorse the action taken by Mr. Crooks. We would go further and express our earnest hope that other private schools and colleges will follow the example set them by the management of Pickering College and apply for the same privilege.

The apprehensions felt by those connected with the provincial high schools lest this recognition by the Department of the work done by private schools should affect public institutions injuriously, found expression at the teachers' convention held recently at Uxbridge, where a resolution was unanimously adopted disapproving of the Minister's action. That resolution states (1) that what has been done "is a departure from the spirit of our educational system and the manner in which it has hitherto been interpreted," and (2) that it is likely to lead to great abuses, to injure the reputation and finances of the national schools, and "to introduce into our school system other questions than education." It is difficult to gather from this resolution the precise nature of the evils apprehended. That the departure is a new one is not a sufficient ground on which to condemn it, for all progress is the result of new departures. Abuses in connection with these examinations come to light from time to time when they are held in high school buildings, and the Minister will of course have precisely the same kind of control over them in private schools as he has in public schools. Whether the examination will be kept free from abuses or not depends almost entirely on the presiding examiner, and as the building in which the examination is held is a mere incident of the situation, the fear of abuses must be considered as without sufficient grounds to justify it.

It is easy to understand why an enterprising principal of a private school should want to have the departmental papers

sent to his institution. They will be a means of enabling him to satisfy both his pupils and his employers as to the character of the work he is doing, and they will tend to broaden the educational horizon of all who are engaged in it. If the principal of Pickering College will only apply to the universities which have local examinations for a similar privilege he will set an excellent example. On the other hand it is only fair that if the Education Department takes cognizance of such schools by sending them papers and appointing presiding examiners, it should also ask them to submit to departmental inspection. Well conducted schools should welcome such a change for other reasons, and more especially because it would be a means of enabling the public to distinguish between good institutions and shams.

DEPARTMENTAL EXAMINATIONS.

At the recent teachers' convention for North Simcoe the subject of departmental examinations came up for discussion in connection with an able address by Mr. Spotton, headmaster of the Barrie high school. A committee was appointed to consider the question and after deliberation it reported strongly in favour of the proposal to separate the intermediate from the public school teachers' examination and to restore the intermediate to its original position as a promotion examination.

Those who have followed the course of educational changes during the past few years will remember that the combination of the two examinations above referred to was an experiment and that it has never since been regarded as other than a doubtful one. The opinion of practical men everywhere is now against the arrangement being continued, and, as usual, the Minister of Education is found quite abreast of public opinion in the matter. In the course of his address at the closing of the Ottawa model school a few days ago he announced that the two examinations would hereafter be separate, an announcement which will be universally satisfactory to teachers.

The educational authorities of Manitoba have placed the new provincial normal school under the immediate supervision of Mr. J. B. Somerset, the inspector of schools for the city of Winnipeg. This is a judicious arrangement especially where, as in this case, the inspector is known to be thoroughly experienced and efficient. It brings the normal school into direct contact with the public school system and keeps up between them an intimate relation which cannot fail to have an excellent effect on both. We would in this connection, call attention to the advertisement in this number of the JOURNAL for a headmaster for the new normal school in Winnipeg. What is wanted is a teacher with the highest professional attainments rather than one with a high reputation for classical scholarship. If both qualifications can be secured in one person so much the better; but as the primary function of the school is to train teachers, not to produce scholars, professional efficiency should be made an indispensable condition and should never be subordinated to mere literary or scientific attainments.

HIGH SCHOOL INSPECTION.

The article on this topic, in another part of this issue, should be read by all who are interested in keeping up the status of secondary schools. Hasty inspection must needs be cursory, and cursory inspection is of very little value. It is unnecessary to dwell on an aspect of the case which has been so well discussed by the writer, and which will appeal strongly to every teacher. On another point "Head Master" might have said even more than he has done and yet kept studiously moderate. The normal schools of Ontario stand in need of departmental supervision as well as the high schools, and the task of inspecting them falls naturally and properly to the high school inspectors. As a matter of fact one of these officers has during the past few weeks spent a good deal of his time at this very work and this has been done at the expense of high school supervision. The work of high school inspection proper would, if thoroughly done, occupy more than the time of two inspectors, and when to this work is added their *ex-officio* duties as members of the Central Committee of the Department and the work of normal school supervision it is clear that the question of appointing a third inspector cannot be very long postponed without injury to the cause of education.

The announcement has recently been made that Dr. Schurman, who has for some time held a chair in Acadia College, Nova Scotia, has accepted a new chair endowed by Mr. George Munro in Dalhousie College, Halifax. His subjects will be English literature and metaphysics, two fields of inquiry in which he is especially proficient, and which are understood to be congenial to his taste. To all appearance Dr. Schurman has a brilliant career before him. He is a native of Prince Edward Island and is only some 28 years of age. While a student of Acadia College he took the Gilchrist scholarship in the University of London, and spent the next few years in Britain and Germany, graduating with distinction in both countries. Since his return to his native country, he has been engaged in teaching in Acadia and now transfers his services to a somewhat wider field. It is alike gratifying to record the liberality of Mr. Munro, a Canadian who has made a fortune by publishing in New York, and the appointment of Dr. Schurman, a Canadian who has superadded to his home training the best culture of London and Berlin.

A movement has been set on foot in the United States to provide by subscription a memorial for the poet Longfellow. The original idea was a one-dollar list, but wealthy men are contributing larger sums and it is therefore quite likely that a considerable amount will be realized. It is to be hoped that, as he has already reared for himself a "monument more enduring than brass," the bulk of the money raised will be devoted to the foundation of some chair or institution for the instruction of the people—a project in which he would himself, if alive, take a deep interest. A statue, whether in bronze or marble, is evanescent, but the name of Longfellow attached to, say, a chair of literature in Harvard would be enduring.

In the list of contributors to the *American Journal of Mathematics*, edited by Prof. Sylvester of John Hopkins University, appear the names of Prof. Loudon of University College and J. E. Glashan, inspector of public schools for the city of Ottawa. Any Canadian may well feel honoured by being recognized in this way.

The many friends of Mr. J. B. Somerset in Ontario will learn with pleasure that he is winning golden opinions from all parties in Winnipeg. Most satisfactory proof of the good-will of the school board has been afforded in the shape of a considerable increase of salary, and at a recent meeting of the city teachers a resolution was unanimously carried approving of Mr. Somerset's efforts to put the schools in as thorough a state of efficiency as possible, expressing their high appreciation of him as a public officer and a gentleman, and congratulating the school authorities on having secured his services.

In the forty-fifth annual report of the Massachusetts Board of Education there appears a letter from Dr. McLellan, high school inspector for Ontario, giving a brief description of the system of public school supervision in vogue in this province. The letter was written at the request of the secretary of the Board, who describes it as an "interesting and clear statement," and adds:—

"I gladly publish this paper in connection with the annual report of the Board of Education, hoping that at no distant day there will be established an equally complete and efficient system of school supervision in this Commonwealth."

Geographical Notes.

THE SUB-DIVISIONS OF ONTARIO.

The province of Ontario is subdivided by law in different ways for different purposes, and as this state of affairs tends to create a certain amount of confusion we propose to collect in one place from the various Acts of Parliament such information as will be most likely to give teachers a tolerably clear idea of the internal political geography of this province. There is the more need for so doing from the fact that in some of the maps published for use in schools more electoral divisions are represented as counties while real county municipalities are not clearly indicated.

The division of each province into districts for the election of members of the House of Commons is under the control of the Dominion Parliament. The division into districts for the election of members of a Provincial Assembly is under the control of the Provincial Legislature. As there is of necessity a revision of the electoral districts after each decennial census for Dominion purposes, and as the Legislature of Ontario has not adopted the electoral districts as arranged by the Dominion Parliament, it is not surprising that the existence of two sets of districts within the same area should lead to confusion, especially as there are districts for municipal and judicial purposes which coincide with neither of the others. It is not proposed to give here any account of electoral districts as they are liable to frequent changes; it is of more importance to know how the province is divided into municipal and judicial districts.

The following is a complete list of the county municipalities with their county towns:—

Brant—Brantford	Lennox and Addington	} Napanee
Bruce—Walkerton	Lincoln—St Catherines	
Carleton—Ottawa	Middlesex—London	
Dufferin—Orangeville		

Dundas, Stormont and Glengarry	} Cornwall	Norfolk—Simcoe
Durham and Northumberland		} Cobourg
Elgin—St. Thomas		Oxford—Woodstock
Essex—Sandwich		Peel—Brampton
Frontenac—Kingston		Perth—Stratford
Grey—Owen Sound		Peterborough—Peterborough
Haldimand—Cayuga		Prescott and Russell
Halton—Milton		Prince Edward—Picton
Hastings—Bellefleur		Renfrew—Pembroke
Huron—Goderich		Simcoe—Barrie
Kent—Chatham		Victoria—Lindsay
Lambton—Sarnia		Waterloo—Berlin
Leamington—Perth		Welland—Welland
Leeds and Grenville	} Brockville	Wellington—Guelph
		York—Toronto

The following county towns are cities, each city being for judicial purposes part of the county in which it is situated, though for municipal purposes it is separate:—

Toronto	Kingston
Hamilton	Ottawa
London	Brantford
Guelph	St. Catherines
St. Thomas	Bellefleur.

Several towns, besides these cities are separated for municipal purposes from the counties in which they are geographically located.

There is one provisional county, Haliburton, which is set apart for municipal and school, as well as judicial purposes. It embraces 23 townships immediately in rear of, and almost coterminous with the northern limit of the county of Peterborough. The municipal capital is Minden.

Haliburton differs from the so-called "districts" in having a county organization, though only a provisional one. The highest municipal unit throughout the whole of the districts of Muskoka, Parry Sound, Nipissing, Algoma, and Thunder Bay is the township or village. The township councils in these districts are clothed with special powers and discharge some of the functions that in other parts of the province are performed by county councils.

The territorial district of Muskoka extends from the Severn on the south to the middle of Lakes Joseph and Rosseau on the north, and from the Georgian Bay on the west to Haliburton on the east. Its capital is Bracebridge.

The district of Parry Sound has for its eastern limit a continuation of the eastern limit of Muskoka to the east end of Lake Nipissing, and it extends northward to that lake and French River. Parry Sound is its capital.

The district of Nipissing extends eastward from Parry Sound till it abuts on the county of Renfrew and the upper Ottawa, and includes all the territory north of Lake Nipissing and French River and east of the meridian of the mouth of that river.

The Thunder Bay district includes the townships lying immediately around Thunder Bay and the capital is Prince Arthur's Landing.

The district of Algoma embraces for all except certain specified purposes the smaller district of Thunder Bay, and besides it, all that part of the province lying west of the meridian of the mouth of French River, including the Manitoulin, St. Joseph, and other islands not attached to counties previously organized. The capital of this district is Sault Ste. Marie, where the judge of the whole district resides.

Besides the judge of the district of Algoma there are Government stipendiary magistrates with extensive civil and criminal jurisdiction at the following points:—

Disputed Territory west of Lake Superior	Rat Portage
Hudson Bay District	Moose Factory
Thunder " "	P. A. Landing
Parry Sound " "	Parry Sound
Muskoka " "	Bracebridge
Haliburton " "	Minden

Stipendiary magistrates in these districts are empowered to hold division courts and exercise some other functions that in older parts of the province devolve on county judges. Matters beyond their jurisdiction are settled by the judge of Algoma, by the county court judge of Victoria to which Haliburton is for judicial purposes attached, and by the judge of Simcoe to which the districts of Muskoka and Parry Sound are attached in the same way.

JISCELLANEOUS.

A NEW GEOGRAPHICAL TERM. — BY A. H. O.

Many of the readers of the JOURNAL have no doubt felt the want of a name for one of the four classes into which lakes have been divided. We have names for (1) lakes which have an inlet but no outlet, viz., "Lakes of reception"; for (2) those which have an outlet but no inlet, viz., "Lakes of omission"; and for (3) those which have both influents and effluents, viz., "Lakes of transmission." But, for lakes which have neither an inlet nor an outlet, we have, so far as I know, no name. I suggest to my fellow-teachers to call this class, "Lakes of inclusion." The names of the first three classes denote the offices which they perform. The name proposed for the fourth class does the same for it. Lakes of the first class receive water conveyed to them; those of the second emit water from their own supplies; those of the third receive and emit, i.e., transmit water, which has been conveyed to them; those of the fourth class simply inclose the water within their borders.

Mathematical Department.

ELEMENTARY ARITHMETIC.

During the past months we have devoted a good deal of space to intermediate and university work. The struggle is over for another year with the numerous readers of this department who have been actively engaged in preparing for the various examinations. The die is cast; and before our next number reaches them we trust that most of them will be rejoicing in their success.

In the present number we propose to hold a quiet chat with that large circle of our friends who are for many months of the year teaching elementary arithmetic. It is almost impossible now to advance anything strikingly original on this topic; and were it possible it would not probably be so useful as the repetition of important matters already well established. Leaving all prejudices aside, and looking at the matter from a practical point of view, can any one imagine why the multiplication table should be taught to 12 times 12 and there stop "forever and forever"? Children in the second reader learn it thus far. Is it not alien to the whole spirit of our system to stop there, is it not absurd to think of a merchant fumbling for his pencil before he can find the price of 19 lbs. of butter at 17 cents a pound? Experience generally teaches business men the necessity of knowing the table up to 16 or 20 times at the very least. The pupils of the third class could very easily learn the table up to the end of 16 times by spending five minutes only, say twice a week during a single term, especially if they were required to apply the table as soon as learned to their ordinary work, and thus do away with the clumsiness of multiplying by 13 and higher numbers with two lines of figures instead of one line. It is equally easy to push the table on to 25 times 25 in the fourth class. As a preparation for the duties of after life, for the every-day work of the bank, the farm, the shop, the school, we ask deliberately what other piece of information acquired in the same time can be so convenient and so serviceable to the possessor? The first requisite of success in rapid calculation is, we believe, efficient drill in mental problems. Now the extended addition table and its counterpart the extended multiplication table furnish matter for this drill at once the most elementary, the most natural, and by far

the most practically useful to the pupil. Understanding division to be the reverse of multiplication, all our preceding remarks apply to division. It saves vast amounts of time and of drudgery to the more advanced pupil to be able to multiply, divide, or cancel with factors as high as 23 or 25.

In this connection we very naturally insist on the pupil's learning at the earliest moment to test his multiplication and division by "casting out nines." It requires but a lesson or two to make pupils so familiar with this method that long lines either of multiplication or division can be satisfactorily tested in a few seconds, and the certainty thus gained is a powerful stimulus to further progress. Pupils in the second book learn to apply the test in one short lesson. Why should they not learn it as soon as they have fairly understood the four simple rules? Are we so extremely sensitive on that bugbear, CRAM, that we are afraid to communicate the most useful information simply because the pupil cannot yet understand the reasons of the process? If so, let us never more teach subtraction until our beloved little protegés can wholly comprehend the reason for "carrying." Is it not patent that in very many cases we must first teach the HOW and then the WHY, and that this is not only the simplest but also in such cases the shortest plan. In our humble opinion it is injudicious to attempt to carry out the method of discovery in every particular case even in mathematics. The method of instruction has its appropriate sphere.

Speaking of "carrying" in subtraction, reminds us that we have seen the most satisfactory results obtained by teaching subtraction as a certain kind of addition, so that the pupil is not brought into contact with any new principle of "carrying" different from what he has already learned in addition. Thus, instead of saying 5 from 7 leaves 2, it is possible to state the question, 5 and how much makes 7? In the case of long lines of subtraction this way of putting it avoids the learning of a new rule; subtraction can be done as soon as addition is learned.

Example: 6325464
 895493
 5429971

3 and ? one are 4. 9 and ? seven are 16; 5 and ? nine are 14; 6 and ? nine are 15; 10 and ? two are 12; 9 and ? four are 13; 1 and ? five are 6. The ? indicates the mental problem to be solved. Let the pupil prove the operation by addition, 3 and 1 are 4, 9 and 7 are 16, 5 and 9 are 14, 6 and 9 are 15, &c., and no mystery hangs over the operation, which is perhaps more than can be asserted of the common plan of "borrowing and paying back again." This method also enables the pupil to do long division very rapidly and with one half the usual figures, by combining multiplication and division.

Example: $4064)54438971(13887$
 15798
 36069
 35577
 30651
 2203

We say once 4 and ? nine are 13 (one to carry, 9 set down) once 6 are 7 and ? seven are 14; once 0 is 1 and ? five are 6; once 4 and ? one are 5. Bring down 8. Three times 4 are 12 and ? six are 18; three times 6 are 18 and zero are 19; three times 0 is 1 and ? six are 7; three times 4 are 12 and three are 15. Bring down 9, &c. Pupils learn this plan in one lesson, and it conduces to accuracy and rapidity as experience abundantly proves. It will be observed that the operation admits of being tested by "casting out nines" just as well as when the subtrahends are written down.

We now offer a few hints on the tables of weights and measures. The most obvious remark of any business man on opening a common school arithmetic would be, that a large part of what is usually given under this head is of no practical use in the every-day business of life, and ought at least to be deferred to the later stages. We are apt to forget that less than one half of our Canadian boys and girls ever get beyond the third book. Let us teach to this vast multitude who are destined to receive no further school advantages, all the most useful things we can, that is as few useless things as possible. With such a book as Kirkland and Scott's elementary arithmetic in their hands junior teachers are sure to succeed if they earnestly realize what they should aim at, viz. to teach well the most simple and useful parts of arithmetic to this majority of our children before their school days are finished forever, say at the end of the third class. In long measure, what is the utility of barley corns, furlongs, leagues, &c. ? 12 inches = 1 foot; 3 feet = 1 yard; 1760 yards = 1 mile, is about all that is required in practical life. Again, in square measure it is practically most useful to know that 4840 square yards

=1 square acre, and 1210=a rood, and 160 square rods=1 acre. In most of our text-books we find in the tables a collection of old fossil remains that have drifted down to us from the age of kilderkins, chaldrons, futhers, angols, etc. They seem to us wholly out of place in our junior classes, having no bearing on actual business as now conducted, and serving to load the "mighty ton years" with old rubbish instead of precious seed.

The use of factoring in helping to shorten the mechanical work of arithmetic can scarcely be exaggerated, and the sooner young pupils can be taught to apply it the better. Thus, in the following question a little factoring actually abolishes the whole of the mechanical work:—A speculator borrowed \$5000, and immediately invested it in land. Six months afterwards he sold the land for \$7500 on 12 months credit with interest. Find the speculator's profit, supposing he pays back the \$5000 in 18 months after borrowing it, and taking all moneys worth 6%.

$$\begin{aligned} \text{Sum received for land} &= \$7500 (1.06) \\ \text{" paid back} &= \$5000 (1.09) \\ \text{i. e. profit} &= \$7500 (1.06) - 5000 (1.09) \\ &= 7500 (1.06) - 5000 (1.06) - 5000 (.03) \\ &= 2500 (1.06) - 2500 (.06) = \$2500 \end{aligned}$$

The following illustrates a similar useful application of factoring. Find the area of a triangle whose sides are 760, 950, and 570. Applying the ordinary rule.

$$\begin{aligned} \text{area} &= \sqrt{(1140 \times 380 \times 190 \times 570)} \\ &= 100 \sqrt{(114 \times 38 \times 19 \times 57)} \\ &= 19 \times 1900 \sqrt{(6 \times 2 \times 1 \times 3)} \\ &= 19 \times 1900 \times 6 = \&c. \end{aligned}$$

Closely connected with the preceding are the contracted methods of multiplication and division of decimals, and the method of dividing by successive factors and writing down the correct remainder.

We have often heard complaints against the ordinary rule for contracted multiplication, inasmuch as a little uncertainty occasionally arises as to where the decimal point should be placed. The following obviates that difficulty and can be applied by young pupils. First make the multiplier a whole number by removing the decimal point to the right. Remove the decimal point of the multiplicand as many places to the left, putting in cyphers if necessary. Count off towards the right from the decimal point of this multiplicand as many figures as are required to be correct in the product. Under the last of these figures place the first figure of the multiplier reversed. Now multiply each figure into the one immediately over it, in the ordinary way, carrying as usual. Lastly point off as many figures as there are from the decimal point of the multiplicand to the first figure of the multiplier. This is only a modification of the common rule.

Example: simplify $\frac{399.075 \times 5.4166}{105.416}$

Using both contracted multiplication and division the operation stands

$$\begin{array}{r} 03990750 \\ 66145 \\ \hline 19953750 \\ 1596300 \\ 39907 \\ 23945 \\ 2394 \\ \hline 105416 \overline{) 2161629.6} (20.505 \\ 533096 \\ \hline 6016 \end{array}$$

After multiplication the decimal point stands between the 61 and 62, but in the division we make the divisor a whole number, and hence change the point in the dividend over to the right three places. In the division multiply and subtract at once. When the quotient is 0 bring down the 6 as well as the 9.

It should be borne in mind that circulating decimals can be conveniently managed either in division or multiplication without the trouble of reducing them to common fractions and then back again, if we carry out the circle for say five or seven figures and then apply the contracted methods. If we do not get the precise result we can generally see what the true circle is in the product or in the quotient as the case may be. Will some of our friends experiment on a few decimals and confirm what we have said?

Before we close we wish to refer to the most important point we intend to notice namely, the use of the simple arithmetical equation. From the day boys and girls begin to learn written arithmetic it is absolutely necessary to compel them to set down the theory of their

operations before they begin the mechanical work required to find the answer. Perhaps no single omission does so much harm to the learner as the lack of proper training in the art of indicating the work to be done before attempting to execute it. Full and systematic solutions dispel a great part of the mystery which hangs about the subject. In this connection the application of the axioms to the arithmetical equation are of prime importance. Very often a little skill in factoring and in using the equation shorten the work by more than one half. The two examples given here will illustrate the preceding remarks. A commission merchant sold a consignment of goods on 3% commission, and was instructed to invest the proceeds in other goods on 2% commission, both commissions being deducted in advance and amounting to \$265. Find the proceeds of the consignment and the value of the goods.

$$\begin{aligned} \text{proceeds} &= \text{commission} + \text{goods} \\ \text{Now 1st com.} &= 3\% \text{ of proceeds} = 3\% \text{ com.} + 3\% \text{ goods} \\ \text{2nd com.} &= \qquad \qquad \qquad = \qquad \qquad \qquad = \qquad \qquad \qquad 2\% \text{ goods} \\ \text{i. e. whole commission} &= 3\% \text{ com.} + 5\% \text{ goods} \\ \text{add 2\% com. to each of these equals, and we have} & \\ 102\% \text{ com.} &= 5\% \text{ com.} + 5\% \text{ goods} = 5\% \text{ proceeds,} \end{aligned}$$

$$\begin{aligned} \text{i. e. } \frac{102}{100} \text{ of } \$265 &= \frac{5}{100} \text{ of proceeds. Multiply both sides by 20} \\ \text{and } \frac{102 \times 265}{100} \times 20 &= \text{proceeds} = \$5406 \end{aligned}$$

∴ goods = 5406 - 265 = \$5141. By selling out £4500 in the India 5% stock @ 112½, and investing the proceeds in Egyptian 7% stock, a person finds his income increased by £168 15s. What is the price of the latter stock?

$$\begin{aligned} \text{First income} &= 45 \times 5 \\ \text{2nd " } &= \frac{45 \times 112\frac{1}{2}}{\text{price}} \times 7 \end{aligned}$$

$$\begin{aligned} \text{Hence } \frac{45 \times 112\frac{1}{2} \times 7}{\text{price}} - 45 \times 5 &= 168\frac{3}{4} \\ \text{add } 45 \times 5 \text{ to both the equals, and} & \\ \frac{45 \times 112\frac{1}{2} \times 7}{\text{price}} - 168\frac{3}{4} + 225 &= \frac{1575}{4} \end{aligned}$$

$$\begin{aligned} \text{Divide both numerators by } 45 \times 7, \text{ and we get} & \\ \frac{112\frac{1}{2} - 5}{\text{price}} = \frac{5}{4}. \text{ Multiply both sides by 4 price} & \\ 450 = 5 \text{ price} & \\ \therefore \text{ price} &= 90. \end{aligned}$$

We feel sure from careful observation that it pays handsomely in the end to accustom learners to put down the whole process, and to use all the symbols with a precise meaning. Here is the proper place to introduce a few words of caution on the abuse of the equation, to show the absurdity, or, at least, the bad taste of writing such expressions as

$$\begin{aligned} \frac{5}{16} &= \$80 \therefore 1 = 256 \&c. \\ \text{instead of} & \\ \frac{5}{16} \text{ amt.} &= \$80 \therefore \text{amt.} = \$265, \&c. \end{aligned}$$

However we must cease for the present. We wish all our readers much enjoyment of the long holidays, and if we have opened a small chink by our previous rambling remarks, reflection and experience will no doubt reveal the extensive landscape that lies beyond.

Several answers to correspondents are held over till next issue.

Special Articles.

PHYSICAL DEVELOPMENT AND SCHOOL WORK.

(From a paper read by C. D. Curry, M.A., M.D., before the East Victoria Association.)

The former part of Dr. Curry's paper was devoted to showing the relation between the physical development of children on the one hand and good food, suitable clothing, pure air and exercise on the other. The latter part which is given below deals more particularly with school-work.—Ed.]

We now enter upon the second and more important portion of our subject, viz: the influence of school work upon development. Heretofore we have taken no notice of the influence of the brain and of intellectual exertion on the growth of the body. The brain as

you are aware is the seat of the nervous system. To it is entrusted the guardianship and direction of all the processes of life whether the involuntary ones such as those of breathing, the action of the heart, or the voluntary ones, that is those controlled by the will. It may be considered as a central telegraph office over whose wires the nervous messages are sent to and received from all parts of the body. More important than this, it is also the organ of thought and the seat of our intellectual life. It grows and is developed with the body and partakes of all its changes, and as in childhood the body is soft and tender, so the brain of the child is a crude soft pulp, undecided in type, pliant and impressible. As the years roll on, and when subjected to proper and not undue exercise it increases in strength and becomes able to stand the pressure of adult life. But if in early youth it is subjected to severe or long continued strain not only is it itself likely to be permanently injured in power and capacity but the body as well will suffer in sympathy. The connection between the brain and the body is so intimate, and the condition of the one so dependent on that of the other that "a healthy mind in a healthy body" is a truism which has been observed and quoted for ages. In fact healthy and properly developed minds cannot exist in unhealthy and imperfectly developed bodies, and the converse that a diseased body accompanies a diseased brain holds equally good.

Accordingly, as the brain plays so important a part in the human economy, it becomes us then to consider carefully, not what it will stand in the way of pressure, but what means are best adapted to ensure its due cultivation and, at the same time, to ensure good, strong, and healthy bodies. The body is, after all, the source of power to the mind, and if its vital force is weakened in any manner the mind must suffer too.

The question now presents itself. Does our educational system in any way interfere with proper physical development? And in reply I would say that unless in judicious hands it is very apt to do so. Year by year, with all its paraphernalia of promotion, entrance, intermediate, primary, and final examinations, it is becoming more and more of the hot-house or forcing order. Cram is, in many instances, the order of the day, and this forcing process is attended in many instances with positive injury both to the body and mind. Every student can recall instances which have come to his own knowledge in which either body and brain has given way, and if in the case of advanced youth such consequences result from excessive mental application, in earlier youth how much greater the danger of it. This is seen in a marked degree in the case of precocious children in whose case the desire for advancement has been encouraged rather than repressed, and who, when a certain degree of mental development is reached, seem to stick there. These are generally found to possess little vitality and are usually the ones who sink under the assaults of disease, their powers of resistance being weakened by their excessive mental application.

Injudicious teachers aided and abetted and often forced by still more injudicious parents also do harm in prescribing excessive homework. In many instances it is positively painful to meet boys and girls coming from school at the hour for dismissal carrying a slate, exercise book, and a small library of text-books; while it may be allowable in the case of the elder pupils to give a little homework, yet leading educationalists and physiologists are almost unanimously of opinion that the 5½ hour limit of brain work should in no case be exceeded in the case of the senior pupils, while for the juniors it is considered to be too much. The close confinement in a more or less impure atmosphere, the enforced quiet, and the necessary restraint are both unnatural and injurious to the child's health, and mind and body both suffer.

Allow me to finish with the following quotation from Herbert Spencer, whose work on "Education," to which I must confess myself largely indebted, should be in the hands of every teacher:—

"Considering the regime as a whole its tendency is too exacting, it asks too much and gives too little. In the extent to which it taxes the vital energies it makes the juvenile life much more like the adult than it should be. It overlooks the truth that, as in the infant, the expenditure of vitality in growth is so great as to leave extremely little for either physical or mental action, so throughout childhood and youth growth is the dominant requirement to which all others must be subordinated.

"Perhaps nothing will so much hasten the time when body and mind will both be adequately cared for as a diffusion of the belief that the preservation of health is a duty. Few seem conscious that there is such a thing as physical morality. * * * The fact is that all breaches of the laws of health are physical sins. When this is generally seen, then, and perhaps not till then, will the physical training of the young receive all the attention it deserves."

SKEAT'S ETYMOLOGICAL DICTIONARY.*

Nothing but a careful study of, and a lengthened acquaintance with this admirable work will afford the English scholar an adequate idea of its true value to the student. Professor Skeat takes very high rank in the rapidly growing school which has done within the past few years so much for scientific study of the English language. It is matter for amazement that the work of studying English as the ancient languages have for generations been studied, has been so long postponed and that it should have been begun in Germany instead of in England. The works of Maetzner, Koch, and Edward Mueller have done more than show Englishmen the way; they are still the great magazines of information on early English, and even Professor Skeat is constrained to say that "if the writers of some of the current 'Etymological' dictionaries had taken Mueller for their guide, they might have doubled their accuracy and halved their labour." Those who cannot possibly have access to the works of these German philologists in the original, and those who are deterred from using them by the number of errors in the translations, will hail with delight such a work as this by Prof. Skeat, which, compared with the voluminous "Woerterbuch" of Maetzner is a perfect *multum in parvo*.

It would be absurd to attempt to give here any detailed sketch of the plan of this dictionary which in part form is already to some extent familiar to many students and teachers of English. A few extracts from the preface will suffice to give an idea of the general character of the work:—

Each article begins with a word the Etymology of which is to be sought * * * After the word comes a brief definition merely as a mark to identify the word. Next follows an exact statement of the actual (or probable) language whence the word is taken, with an account of the channel or channels through which it reached us. Thus the word 'Canopy' is marked '(F.,—Ital.,—L.,—Gk.) to be read as, French, from Italian, from Latin, from Greek; that is to say, the word is ultimately Greek, whence it was borrowed, first by Latin, secondly by Italian (from the Latin), thirdly by French (from the Italian), and lastly by English (from French).

* * * After the exact statement of the source follow a few quotations. These are intended to indicate the period at which the word was borrowed, or else the usual middle English forms. * * *

A chief feature of the present work, and one which has entailed enormous labour, is that whenever I cite old or foreign words from which any given English word is derived or with which it is connected I have actually verified the spellings and significations of these words. * * * In the case of verbs and substantives (or other mutually related words) considerable pains have been taken to ascertain and to point out whether the verb has been formed from the substantive, or whether, conversely the substantive is derived from the verb. This often makes a good deal of difference to the Etymology. * * * It is also proper to state that with many articles I am not satisfied. Those that presented no difficulty and took up but little time, are probably the best and most certain. In very difficult cases, my usual rule has been not to spend more than three hours over one word. During that time I made the best I could of it and then let it go. I hope it may be understood that my object in making this and other similar statements regarding my difficulties is merely to enable the reader to consult the book with greater safety, and to enable him to form his own opinion as to how far it is to be trusted.

One remark in Prof. Skeat's preface is worthy of being quoted entire for the hint it contains to those who feel disposed to write for publication:—

It is common for writers to throw the blame of errors upon the printers, and there is in this a certain amount of truth in some instances. But illegibility should also receive its fair portion of blame; and it is only just to place the fact on record, that I have frequently

* An Etymological Dictionary of the English Language. By the Rev. Walter W. Skeat, M.A., Erlington and Bosworth Professor of Anglo-Saxon in the University of Cambridge. New York, Macmillan & Co.; Toronto, Willing & Willanson Toronto.

received from the press a first rough proof of a sheet of this work abounding in words taken from a great many languages, in which not a single printer's error occurred of any kind whatever; and many others in which the errors were very trivial and unimportant, and seldom extended to the actual spelling.

A single glance at any page of the Dictionary will suffice to show that this is a very high tribute both to Prof. Skeat's calligraphy and to the skill of the printers into whose hands his copy fell. But there is a lesson in his remark which contributes to journals and writers of books have much need to learn. Illegible writing is always inexcusable but it is never more so than when it is intended for the printer. It is hardly necessary to add in the case of a book printed at the Oxford Clarendon Press that it is a marvel of typography.

One cannot help regretting after perusing such a work as this that so little attention is paid in Canadian colleges to the study of the English language. Not even the best works on the subject are specified in the curriculums, and the amount of time and attention bestowed upon the language and its literature are a mere fraction of those bestowed on Latin and Greek. It is to be hoped that the time is near at hand when, at least in University College and Toronto University, English will take its proper position as one of the most important languages in the world whether for educational or for philological purposes. The more generally such books as Skeat's Dictionary come into use the more widespread will be the dissatisfaction with the modes of studying English at present in vogue in Canada.

DR. CRAMP.

Early in June interesting services were held at Acadia College, Nova Scotia, in memory of the late head of the college, Rev. Dr. Cramp. Among the addresses delivered on that occasion the only one published in *extenso*, is that of Dr. Rand, Superintendent of Education for New Brunswick. From that address the following passages are quoted, partly because they convey a vivid impression of the deceased teacher, and partly because of the valuable principles which Dr. Rand himself lay down:—

When Dr. Cramp came to Acadia, there were few students at the College. With the aid of Professor Chipman, he carried on the arts department and the department of theology. His was a courageous undertaking; but the following summer Professor Chipman and four students of promise were suddenly removed by the appalling disaster in yonder Basin. That was an overwhelming event to Dr. Cramp, but his brave heart rose above it, and his trust in God inspired him to do great things for the salvation of the college. During this period of intensified trial his labours were prodigious, disclosing a depth of resource, a breadth of attainment and a range of acquisition which were fortunate indeed for the future of this institution. At one time or another, he here taught Latin, Greek, history, mental philosophy, moral philosophy, evidences of Christianity, rhetoric, logic, political economy and geology, besides the various branches of the theological department, including Hebrew and Greek exegesis; and he was almost equally successful as a teacher in each of these subjects.

As I call up before me the every-day contact of students with him in college work, I feel afresh the inspiration of his intense personality. Dignified in mien and bearing, with an eye to command, his presence in the lecture room was stimulating in a high degree. Every student instantly recognized in him a man of original force, and skilled equipment. In his teaching, all truth rested on facts, and reputed facts must be verified before serving as a ground of induction. He taught that lesson with as much persistency as the leaders in modern physics, but unlike many of them, he set his face steadfastly against every phase of mere speculative knowledge. Clearness and realness were essentials with him. The over-wise student found himself put suddenly and severely on the defensive, and felt the thrust of a Damascus blade. He had a rare gift, which he used in a rare way, of humbling self-conceit and giving pride a fall. He made his students feel the immense superiority of intellectual honesty to intellectual power. Accuracy was demanded as a quality of prime importance. He believed, with Arthur Helps, that the man who is to succeed must have an almost ignominious love of details. His own knowledge was wonderfully minute and exact, and once acquired seemed to be always at the command of his will. His extraordinary memory was his right arm in the presence of his class. His criticisms and comments were keen and incisive, clearing error to the bone with the inevitableness of fate. His students were made alive to the truth that correspondence be-

tween the thing thought, the thing done and the thing said, is a test of a consistent and noble type of life. Every recitation was a discipline in veracity, in careful statement, in thinking before speaking. Desultory reading was seen to be of little avail, and wide reading—that it tended to confusion unless care was had to read first the latest standard works in any department of knowledge. There was always a breezy and stimulating freshness in the atmosphere of his lecture room. It was no cloister dim. The shouting from the fields of victory in the outside world, whether of peace or war, resounded within its doors, and were turned to swift account in animating the facts of history, in which he was so deeply and accurately versed, or in giving vividness or reality to some practical truth of science or philosophy. It was his practice to use the latest discoveries of science for the purpose of emphasizing the limitations of existing knowledge, and the vastness of the domains awaiting exploration. He kept the windows of his lecture room wide open to the world of action, and trained his students to share in thought and feeling, the struggles of the men of his age the world over in establishing or defending the principles of political or religious liberty. As an extreme illustration of the freedom with which he handled before his classes subjects which were not set down in the printed course, but which he knew were really there, I may instance his exhibition of righteous indignation when the facts in connection with the so called Jamaica Rebellion were laid before the world. Rising in the lecture-room (to the stature of a giant, as it seemed), the lightning flashing from his eyes, he denounced the hanging of men, the flogging of women, and the burning of houses, as the acts of a weak and cowardly tyrant who was a shocking disgrace to the English name and worthy of death. It was nothing to him that Kingsley, Tennyson, Ruskin and Carlyle lent the weight of their great names in defence of Governor Eyre. The inviolable rights of citizens of the empire, and the rights of humanity itself, had been outraged. It was therefore, he said, of concern to the students of Acadia, and demanded their execration. Intelligent, but downright hatred of oppression and tyranny, in every form and in every clime, and glowing yet intelligent sympathy with freedom and constitutional liberty, were aims most surely accomplished by him in all his students. A loyal Englishman himself, his students learned from him the force and power of a discriminating and ardent Christian patriotism. They not only gathered new love for their native land, but felt the noble reverence of his spirit for the institutions of England—reverence not so much for any special forms which they had assumed, as that their existence testified historically to the courage, endurance and moral stamina of the race, and thus gave assurance of stability and progress in personal liberty and free government. By means such as these, he sought to lift his students out of the isolation and poverty of mere provincial life and enrich and ennoble them by a consciousness of vital relations as wide as humanity. Within the range of my experience, his educative force in this direction was unique, and altogether remarkable and immeasurable.

Associated with the earnestness of which I have spoken, and penetrating it through and through, was the not less striking characteristic of his cheerfulness. He was habitually cheerful, and his spirit, like that of all earnest souls, was contagious. The discontented, gloomy student was lifted out of himself by the buoyancy and stimulating quality of Dr. Cramp's animal spirits. There was perpetual sunshine in him, whose warmth revealed the singular youthfulness of his sympathies. Students divined at a glance, and proved through long years the correctness of their first impression, that he had never lost the boy's heart. His freshness and spontaneity; his interest in comparative trifles when these were of interest or profit to his students; his swift transition from mirthfulness to gravity; his purity of heart; his gentleness and tenderness—these and such as these, so obvious to all, and so perennial in their manifestation, attested the childlike nature which dwelt at the very centre of his being. Everyone who knew him as a teacher will say that he was, of all men, a stranger to

The hardening of the heart, that brings
Irreverence for the dreams of youth.

In college discipline Dr. Cramp was considerate, but firm and decided. He knew well the virtue of Arnold's maxim, "A teacher must not see everything." He expected, and secured in a very high degree, the conduct of Christian gentlemen on the part of all. He largely relied on healthy activity, manliness, the sense of honour, and the sense of moral obligation. He desired to train every student not merely to obey when the pressure of authority was upon him, but also to use freedom aright when he became a law unto himself.

HIGH SCHOOL INSPECTION.

By a Head Master:

The changes which have lately taken place in this department of our educational work are turning special attention to the general question of inspection; and, if one may judge from prevalent opinion, it would seem that further change will be considered necessary before the question is settled.

The general principle involved in the appointment of high school inspectors appears to commend itself to all who give the subject any attention. It is generally admitted, moreover, that our schools have been greatly improved through this agency. As long as high schools continue to receive legislative aid, it follows, as a matter of course, that the government should have some guarantee that the grant is being worthily bestowed. But no sufficient guarantee has yet been found which excludes direct personal inspection. It would be unreasonable to ask for high schools an exemption which is not claimed for any other institution thus aided from public funds. Inspection, therefore, we shall have. The question is, how can we derive the greatest amount of good from these officers?

When we compare the present state of high schools with their condition prior to the appointment of regular inspectors, we cannot fail to be impressed with the improvement everywhere apparent. That much of this is directly attributable to the agency referred to, can hardly be questioned. The changes introduced, from the entrance examination to the completion of the course—while not without some objectionable features—are, on the whole, in the direction of progress and improvement. Our schools are working in a course more uniform and advanced, while a marked impetus has been given to the entire system. For much of this, I think, we are indebted to our high school inspectors.

The opinion is heard in some quarters, not that we could dispense with these inspectors, but that we must receive from them a greater share of attention, if any real benefit is to result from their visits. It is an indisputable fact that, from various causes, the inspection is sometimes a rather formal one—a flying visit of two hours in some cases doing duty for a year. With some schools this might possibly suffice; as a rule it is by no means satisfactory. We as teachers need a kind of assistance which can be obtained in no other way than by personal intercourse with the inspectors. If they are teachers of experience, their visits should not only give them an acquaintance with the school, but it should afford opportunity for some exemplification on their part of what may be regarded as the best methods of conducting classes. Until this is secured, the benefits of inspection will be comparatively limited.

Again, it is felt that in the department of physical science the work of the high schools is anything but satisfactory as a rule. To quote from the last report of Dr. McLellan—"A necessary condition (in case of collegiate institutes) should be that the sciences—chemistry, botany and physics—be taught experimentally. The teaching of chemistry now is, for the most part, exceedingly imperfect. The Department should be satisfied, not only that the necessary appliances exist, but that the subjects are thoroughly and practically taught." Mr. Marling says:—"Science-teaching could be made of real educational value as to both knowledge and discipline. The so-called 'science group,' as now constituted, is a sham, and injurious, in my opinion, except in a few cases, rather than beneficial, to those who pursue it with the idea that they are learning 'science.'"

If practical effect is to be given to these recommendations, it certainly follows that the practical work, thus very properly demanded of institutes at least, must be tested by a H. S. inspector; it cannot be dealt with at the intermediate. All this will require more time than our inspectors can now devote to it. If our present institutes continue, we shall have in each of the fourteen a science master qualified to conduct a class in practical work. We shall have, therefore, fourteen classes to be examined (at least once a year) in the actual work of the laboratory.

We must all admit the desirability of the course proposed; but it of necessity involves the appointment of a third inspector. If, with two, the ordinary work of inspection can barely be overtaken in the year, it would be impossible for them to take the additional work referred to.

It is no secret that general dissatisfaction prevails in reference to certain features and departments of our normal school. A greater degree of efficiency is imperatively demanded. I venture the opinion that much good would be accomplished if the limited time now given by the inspectors to these schools was somewhat extended.

The experiment of dispensing with a third inspector was made to gratify the advocates of retrenchment in the Legislature, rather than from a conviction that two inspectors could properly do the work.

Let the third inspector, therefore, be restored, and we may then hope for an inspection that will be more satisfactory to the Department and certainly more helpful to the schools. Time could be afforded, in that case, for a thorough revision and close inspection of our normal schools. Should the additional expense be thought an obstacle, let the normal school grant (in 1880 amounting to \$36,694) contribute a share in proportion to the attention they would require from the high school inspectors.

OUR SEWING CLASS.

BY MISS ALICE FREEMAN, TORONTO.

Buttons have a tiresome way of coming off just when you are in a hurry, have they not, boys? you often wonder why mother does not fasten them more securely.—Well, perhaps she forgets how strong her boy's fingers are, and how much jerking and pulling each button must endure in the course of a day.

Now would you not like to know how to sew them on for yourselves—it is not a difficult undertaking, and while the girls are busy with their hemming, you might spend a pleasant half hour learning something that will be always useful to you; for some day you may travel many miles away from home and not having mother or sister near, will find it very convenient to be able to sew on all your own buttons. You would like to try? then come with very clean hands to-morrow afternoon, and we will see what we can do.

In the meantime we purchased two yards of the strongest factory cotton, a spool of coarse white thread—needles to correspond, and two cards of common white bone buttons—then tearing the factory into two-inch strips, considered ourselves fully equipped.

The following afternoon there was an air of expectation about the little fellows, and an unusual degree of industry over other lessons, that none might be deprived of their promised amusement;—much comparing of hands and vigorous rubs of grimy knuckles; many audible whispers concerning the merits and demerits of thimbles.

In due time sewing hour arrived, and having supplied the girls with their hemming together with all the instructions required for some fifteen minutes, the boys were given first a needle and length of thread each, these they were required to thread and knot, before going further. Though much astonishment was expressed at the persistency with which the thread would wander around the eye of the needle instead of into it, this was accomplished satisfactorily—if the colour of the thread be not taken into account. Next they were supplied with a strip of cotton each, and shown how to turn down and tack, to prevent fraying: with some patience and infinite pains on the part of the boys—who would tack the material to their fingers, only discovering their mistake as they advanced;—this was also completed. Then came the real work of sewing on buttons. Certain it is that never were buttons so securely fastened before. Through and through the thread was passed, until the much-tried buttons refused to bear any more, and deliberately split in two. Earnestly the boys worked—placing their thumbs over the drillings of each button, to hold it in position, and hunting vigorously with the needle on the under side to find an aperture—sometimes it was found too suddenly; the effect was a quick removal of the thumb to the mouth, and a whispered but heartfelt exclamation. One boy used his slate frame as a stretcher, and fastening his strip of cotton firmly across it, triumphantly pronounced it "the boss way,"—and again, when the hands grew warm, the thread black, and the needle sticky, the top of the desk was used as a forcing machine, to press refractory needles into the already well-filled drillings, and great surprise expressed when the needle snapped in two.

But despite these drawbacks the work was accomplished,—if not with skill, at least with right good will; and no lady, versed in all the mysteries of dainty fancy stitches, could be as proud of her finest production, as we were of the results of our first experience in sewing on buttons.

THE KINDERGARTEN.

[The following statement of the chief objects of the kindergarten is taken from the report of Mr. James L. Hughes and Mr. E. P. Roden to the Toronto public school board on their return from an inspection of the St. Louis public kindergartens. —Ed.]

THE OBJECTS OF THE KINDERGARTEN.

The objects of the kindergarten may best be briefly stated in the words of its illustrious founder Froebel:—"To take the oversight of children before they are ready for school life; to exert an influence over their whole being in correspondence with its nature; to strengthen their bodily powers; to exercise their senses; to employ the awakening mind; to make them thoroughly acquainted with the world of nature and of man; to guide their heart and soul in a right direction, and to lead them to the origin of all life, and to union with Him."

We have become so accustomed to regard the function of the school as limited to the cultivation of the intellect alone, that it is difficult to form a just estimate of the real value of a system which trains and develops the entire being, morally, mentally, physically, and socially. It will be quite impossible to give an explanation in detail of the methods employed in the kindergarten to accomplish the work outlined by Froebel. It took him thirty years of constant study to complete the system, and it requires at least a two years' course to become a proficient kindergartener. It may be of service to state, also, that the kindergarten is not a school in the ordinary acceptance of that word. It is not a place to teach reading, writing, &c., but consists chiefly of practice with 'gifts,' balls of different colours, cubes, spheres, cylinders, squares, triangles, &c.; 'occupations,' weaving paper mats, cutting and pasting paper patterns, paper folding, interlacing, stick work, slat work, peas work, moulding with clay, perforating paper, worsted work, drawing, &c.; games, plays, and exercise songs. By means of these elements Froebel arranged a system which reaches effectively every part of the nature of the child, and promotes its vigorous and healthful growth.

MORAL TRAINING.

If Froebel had designed to accomplish nothing more by the kindergarten than the development of the moral and religious instincts of childhood, his work would ultimately have become an essential part of all national systems of education. There is no other part of his system that so thoughtfully and so clearly reveals the comprehensiveness and philosophic basis of his methods, and their wonderful adaptation to the nature of the child, and the laws of its growth. Every one of his remarkable songs, every one of his stories, every one of his games, and every one of his occupations, gives incidentally a practical direction to the moral natures of the children. There is in the kindergarten no sermonizing to children who are not listening, no theorizing about abstractions which they cannot understand, no weak sentimentality, but a genuine acting out of the best tendencies of human nature. The child is made to occupy, in a way that is real to him, every relationship to nature, the family, society, his country, and his Creator. He practices in his games and plays those virtues which form the only sure foundation for the family and the State. He acts submissively to his parents, lovingly towards his brothers and sisters, honourably with his neighbours, kindly to the poor, and tenderly to the aged. He learns to be grateful for benefits, to respect honest work, to know that work is an advantage to the individual and the community, to acknowledge that labour should be justly rewarded, to destroy nothing, to waste nothing, to submit to constituted municipal and national authorities, to give hearty approval to good actions, and to look with just indignation on mean and ungenerous conduct, to re-

strain his evil tendencies, to be unselfish, to control his tastes even when they are pure and good, as he cannot get everything he desires, and to recognize God, through His works, as the Creator, and as the central power of the universe, the source of knowledge, of love, and of blessing. It is quite impossible to realize, without a close and extended examination of a genuine kindergarten, how a child can be placed in such a variety of circumstances as to make it necessary for him to develop incidentally, without a consciousness of the process, all the better portions of his nature, and to practise the correct moral code for the home, society, and the State. That Froebel was able, after even thirty years' incessant study, to found a system which accomplishes this, conclusively entitles him to an honoured place among educational reformers.

PHYSICAL CULTURE.

The physical benefits conferred by the kindergarten are second in importance only to those resulting from its moral and religious training. The good effects of this department of kindergarten work are so quickly apparent and so easily recognized that there is in some places a popular delusion that the kindergarten consists only of a series of games and plays. This is a grave error; but although the games, plays, and songs do not constitute the entire work of a kindergarten, they form a most important part of it, inasmuch as, while accomplishing many other excellent results, they also produce most desirable effects on the physical systems of the children. The chief of these effects are:—

1. By a large amount of marching in time with music they learn to walk properly, a most important accomplishment.
2. As the plays are so judiciously arranged as to call into natural action every part of the muscular system, the result could only be what it uniformly is, harmonious development, and consequently perfect freedom and gracefulness of action. There is no probability that a child in the kindergarten will grow up with good arms and legs and weak loins and contracted chest.
3. The dramatic gesture practised as a visible interpretation of the thought and sentiment of the songs while they are being sung, leads to a surprising degree of expressiveness and appropriateness in the movements of the hands, the head, the eyes, and indeed, the entire body, while speaking. This is of more importance than at first sight it may appear to be. The skilled elocutionist may thrill his hearers by his tones alone. Vast audiences are frequently moved to tears by the touching gestures of a deaf-mute in reciting the Lord's Prayer. Most people are more deeply affected in a kindergarten by the gestures than by the singing. Dramatic interpretation is to many more touching than vocal interpretation. Either voice or action alone possesses wondrous power of expression, but it is only when they are appropriately united that thought is presented in all its clearness, and feeling communicated with resistless power. It is no light matter, then, for girls and boys to have their bodies trained to act in harmony with their vocal organs in expressing their thoughts and sentiments.
4. The general health of the children is improved, and the vigorous growth of their systems promoted. One of the chief defects of the public school system is that both positively and negatively it interferes with the proper natural growth of the child's body. If adequate attention were paid to the development of the body in school, there would be no complaints about over-study. Body and brain should grow together, do grow together until the child gets to school. The kindergarten is unquestionably the best means of remedying this grave defect in the school. The distinctive feature of kindergarten exercise, as well as of every other part of the system, is that the benefit comes incidentally. The children are not conscious that they are performing calisthenic exercises for the benefit of their health; they are playing for pleasure. Exercise

taken merely to improve the health does not bring such advantages as exercises taken for amusement, or in working under healthful circumstances, so in the kindergarten there are no calisthenics as mere exercises, but the children have to perform the best exercises of the Grecian, Swedish, and German systems of calisthenics in playing their games, and when singing their songs. While taking his exercises the boy is not a boy moving his arms and legs to develop his muscles, but a hopping bird, a jumping frog, a flying butterfly, a carpenter or other tradesman at work, a farmer mowing or threshing with a flail or sowing grain, a windmill in motion, a ticking clock, etc., etc., always practising the best exercises but never being drilled.

Even the extension motions and balance steps of the British army are practised in their essential parts in the kindergarten, not in the formal and unattractive way in which they are presented to the shuffling recruits whom they transform as if by magic into erect and graceful men, but as necessary motions in performing certain plays.

MENTAL TRAINING.

Those who can only gauge a child's mental growth by his advancement in reading, will have difficulty in appreciating the mental advantages which a child enjoys in kindergarten. Thoughtful people are rapidly learning however, that reading as a school study has very little to do with mental growth: in fact, as usually taught, its tendency is to produce mental confusion and dullness. Reading is not taught in the kindergarten. There are some who put on their investigating spectacles, and scrutinize the kindergarten system to find its mental results, as though they expected them all to be immediately apparent, and then, because they cannot find mind nuggets in the only form which they are capable of appreciating, they say they do not exist, and that the kindergarten does not promote mental development. They forget that real growth in nature is slow, and that the preliminary processes of growth may go on for long periods without producing marked visible effects. If the mental training of the kindergarten produced only immediate results, and if its benefits were discernible to every observer, it would not contain sufficient philosophical truth to make it live.

The object of the kindergarten is to expand the mind, rather than to make it a storehouse of facts. It aims to set the mind in action in the exercise of every function of which is capable. The school only attempts to train the mind to remember and reason, often only to remember. The kindergarten calls into play all the powers of the mind, and teaches the child to observe critically, to note results, to compare, to conclude for itself. It develops the imagination, and gradually exercises the will, not accidentally, but incidentally, as an essential part of Froebel's comprehensive scheme. Memory is developed by exercise, not by word repetition; the child learns and remembers what a cube is in the same way as it learned and remembers what a spoon is—by using it. But, while the primary objects of the kindergarten mental training is not to give information, the child really acquires a vast deal of useful knowledge, especially such as will be of value to him in prosecuting the studies of arithmetic, mensuration, geometry, and architectural and industrial drawing. Nor does he need to wait until he begins the systematic study of these subjects before making a practical use of the knowledge he gains. Two of the fundamental rules in acquiring knowledge by Froebel's system are:—1, Children learn by doing; 2, knowledge should be applied as soon as learned. So the extensive knowledge of form which the child receives by using his gifts is applied at once in the various occupations, and through them extended to an examination of all the objects of nature and art with which he daily comes in contact.

The child also receives a practical insight into the relationships of parts to wholes, and is taught the harmony of form and colour that must be found in corresponding parts of symmetrical objects and designs. This leads to the display of originality by the individual children, which cannot fail to produce great and lasting benefit both mentally and morally. It is a grand step in the growth of a human mind when it is convinced that it possesses original power, and need not be a mere imitator.

INDUSTRIAL TRAINING.

There is another kind of physical training in addition to that which trains the physique. It is not alone important to a man's well being that he should be strong, active, and graceful; his hands, the parts of his physical system which he chiefly uses in earning his livelihood, should be trained while he is very young, before his muscles have become fixed and his fingers stiff. There is scarcely any limit to the development of finger flexibility and manual dexterity if it is begun in time and continued systematically. It is a common saying that "a boy's fingers are all thumbs." There is no reason why this should be the case. A girl's fingers are expert in proportion to the amount of appropriate exercise they get. The boy does not usually play on the piano, or do the various kinds of needlework done by his sister, consequently his fingers become thumbs through lack of practice. The boys have thus been allowed to grow up and enter on the work of life without having any attention paid to the development of hand-skill, except what they receive when writing and drawing. This necessarily prevents their ever reaching their highest possibilities in skilled labour of any kind whatever. The individual and national loss thus sustained are too vast to be estimated. The early recognition of this lack in Germany, Switzerland, and France led to the establishment in these countries of technical schools for the special training of the hand in connection with various industrial pursuits. The result of this was that in a few years England found her manufacturing supremacy passing away, and was compelled to follow the example of her Continental rivals. Thoughtful men have for years been studying this problem, and endeavouring to find a remedy for this acknowledged defect in our public schools. This study has led to a proposal to have workshop schools founded as a part of the public school system. There has as yet, however, been no satisfactory plan proposed for the accomplishment of this subject. A more simple and practicable proposition is to have the boys in the junior classes do the same needlework as the girls in school. This has been tried in Boston, and the new educational code recently passed by the British Parliament makes it compulsory in the primary departments of the public schools. So far as I can learn, Toronto was two years ahead of any other place in this matter. Froebel made ample provision for the training of the hand in his system. One of the specific objects in his "finger songs," and in every one of the 'gifts' and 'occupations,' is the development of dexterous finger power.

SOCIAL TRAINING.

Closely allied with moral training is the attention constantly paid to the practice of the courtesies of good society. The home in most cases cannot afford the child the opportunity of associating with a sufficient number of children of his own age to permit the expansion of his social nature. The child needs suitable society, and unless he gets it, important elements of his character make but a feeble growth. The child is to be pitied, however rich may be his parents, whose only associates are adults. It is possible for a child to obtain society on the street, but the risk is too great there. Even at school the social intercourse among the pupils is necessarily confined chiefly to the recesses, and then in most cases is allowed to go on without the presence of the teacher. Froebel saw the evil effects of this, and made ample provision for the drawing out of the social instincts of childhood, as well as for practising the recognized rules of politeness, at the table, in the drawing-room, on the street, wherever man meets his fellow-man.

Respectfully submitted.

JAMES L. HUGHES,
E. P. RODEN.

Examination Questions.

COUNTY OF PERTH PROMOTION EXAMINATIONS.

FRIDAY, MARCH 31ST, 1882.

TIME TABLE.

8:45 A.M.—Open sealed parcel and read instructions.
8:50 " —Seat pupils and read to them their numbers.

	ENTRANCE TO SEN. 3RD CLASS.	ENTRANCE TO 4TH CLASS.	ENTRANCE TO 5TH CLASS.	ENTRANCE TO 6TH CLASS & SEN. 6TH.
9 A.M. to 11	Arithmetic.....	Arithmetic.....	Arithmetic.....	Arithmetic.....
11 " 11½	Dictation.....	Geog. & History	Geog. & History	Geog. & History
11½ " 12	Reading.....	" " " "	" " " "	" " " "
1 P.M. to 1½	Geography.....	Dictation.....	Grammar.....	Grammar.....
1½ " 2	" " " "	Reading.....	" " " "	" " " "
2 " 2½	Grammar.....	Grammar.....	Dictation.....	Dictation.....
2½ " 3	" " " "	" " " "	Reading.....	Algebra.....
3 " 3½	" " " "	" " " "	" " " "	" " " "
3½ " 5	" " " "	" " " "	" " " "	" " " "

Entrance to Senior Third Class.

WRITING.

Value 40. Writing will be judged from the Dictation paper. Slates not to be used.

DICTATION.

(To be read slowly and distinctly.)

- Mary gathered for him branches of willow and hazel twigs and his first production was a pretty little convenient basket which he offered to the farmer's wife as a token of gratitude. He had exactly guessed her taste.
- Two mattresses and an earthen pitcher of water.
- A night's lodging.
- The weights hung speechless.
- The discontented pendulum.
- The princess and half the realm.
- The opportunity of pursuing a liberal course of study.
- The machinery of the steam-engine was defective.
- The ingenious youth trained young partridges.
- An unreasonable apprehension of hydrophobia.
- The captain seized a knife and cut the animal's tail off.
- Exhibiting, pursuer, appreciate, manoeuvre, asylum, occasionally.

Value—80. Four marks to be deducted for each mistake.

READING.

Third Book, page 44—"I passed some time——forced upon them."

Value—50. Expression, 15. Fluency, 35. Two marks off for each error in pronunciation, and one mark off for every other error in fluency, such as hesitation, omission, substitution, miscalling, &c., &c. Examiner will please fill in the reading marks on the list.

ARITHMETIC.

- Product, 2796702483; multiplicand, 3456987. Find the multiplier.
- | | | |
|---------------------|---|-------------------|
| Dividend, 968959650 | } | Find the divisor. |
| Quotient, 1957494 | | |
| Remainder, 120 | | |
- What number must be added to 7869456 to make it exactly divisible by 8975?
- If 0 lbs. of sugar cost 48 cents what will 19 lbs. cost?
- At 2 cents a pound how many dollars is a ton of wheat worth?
- If a man earns \$9 a week and pays 75 cents a day for board, in how many weeks will he save \$75?

7. Add together the sum, difference, product, and quotient of the two numbers 4125 and 40591875.

8. If I have as many cents as there are inches in 9486 chains, how many dollars have I?

9. A boy who is thirteen-years old now will be 57 years old in what year?

10. Wellington died thirty years ago at the age of 83; in what year was he born?

Value—100. Twelve marks each for questions answered.

GRAMMAR.

- Select the nouns, adjectives, and verbs from the following:—
"Sweet is the hour of rest,
Pleasant the wood's low sigh,
And the gleaming of the west,
And the turf wheron we lie;
When the burden and the heat
Of labour's task is o'er,
And kindly voices greet
The tired one at his door."
- Divide into subject and predicate:—
A vast number of lighted candles hung among the branches.
Two of us in the churchyard lie.
My stockings there I often knit.
On this night, a poor little girl walked along the street.
- Fill up the blanks with suitable verbs:—
The breeze.....our brows.
Colder and harder.....the wind.
Buckets of water.....upon the flames.
- Supply subjects for the following predicates:—
.....is made of paper.
.....is the flesh of the ox.
.....lay a foot deep on the ground.
.....makes our clothes.
.....is a man who makes bread.
- Write not less than ten lines on "Grace Darling" or "The Poor Match Girl."

Values—1, 11; 2, 8; 3, 6; 4, 5; 5, 10. Total—40.

GEOGRAPHY.

- How do you know where the North is?
- What direction from Stratford is each of the following places: Guelph, Toronto, Mitchell, Brantford, Owen Sound?
- Name the townships in the County of Perth that border on the County of Huron.
- Name the ten cities of Ontario and tell the county in which each is situated.
- A block of wood is thrown into the river Avon; name, in order, the waters through which it floats before reaching the Atlantic.
- On what line of railway is each of the following places located: Chatham, Collingwood, Lindsay, Brampton, Cayuga?

Values—1, 5; 2, 10; 3, 5; 4, 10; 5, 10; 6, 10. Total—50.

Entrance to Fourth Class.

WRITING.

Writing will be judged from the Dictation paper. Slates not to be used.

Value—50.

DICTATION.

(To be read slowly and distinctly.)

- The principal Saxon chiefs readily agreed to Alfred's proposal but he had many difficulties to encounter, especially in procuring sailors to man the ships. * * * Alfred, during his eventful reign, compiled a code of laws, organized the administration of justice, encouraged the useful arts, and was the friend and correspondent of the most eminent scholars. He spent much of his scanty leisure in literary work, translating into Anglo-Saxon some valuable authors.
- The flowers were extremely odoriferous.

3. The temperature of the air was delicious.
 4. An ingenious strategem was devised.
 5. Vigilance, unintelligible, apparel, repetition, unpalatable, nauseous.
 6. The Indian allies maintained a sharp skirmish.
 7. He speedily despatched messengers to his principal friends in three adjacent counties.
 8. A sortie by the besieged was easily repelled.
 9. After many vicissitudes of fortune, he left the scene of his many trials and misfortunes.
 10. A pair of scales, such as are used for weighing, by wholesale merchants.
- Value—80. Four marks to be deducted for each mistake.

READING.

Third Book, page 246—"Almost magical——tomahawk in the other."

Value—50. Expression 15. Fluency 35. Two marks off for each error in pronunciation, and one mark off for every error in fluency, such as hesitation, omission, substitution, miscalling, &c., &c. Examiner will please fill in the reading marks on the list.

ARITHMETIC.

1. Find the G.C.M. of 13792381 and 32080621.
 2. Find the least number that will contain 1235192 and 411355 exactly.
 3. How many minutes from 8 o'clock on Monday morning till half-past three in the afternoon of the following Saturday?
 4. A load of wheat weighs 2 tons; what is it worth at \$1.25 per bushel?
 5. The divisor and quotient are equal; their sum is 8476 and the remainder is the greatest whole number possible; find the dividend.
 6. Which is the heavier, and how much, 1 ounce Troy or 1 ounce Avoirdupois?
 7. Resolve 132288 into its prime factors.
 8. Find the price of 1580 lbs. of hay at the rate of \$16 per ton.
 9. Find the sum of the greatest and least of the fractions $\frac{3}{4}$, $\frac{5}{8}$, $\frac{7}{16}$, and $\frac{1}{2}$.
 10. Find the sum and difference of $347\frac{1}{2}$ and $298\frac{1}{4}$.
 11. If the continued product of 275, 376, 484, and 196 be divided by $77 \times 28 \times 47 \times 55$, what will the quotient be?
 12. How many acres, roods, etc., in 1234567 square inches?
- Value—100. Ten marks each for questions answered.

GRAMMAR.

1. Analyze the following sentence and parse each word:—
The scattered gleanings of a feast my frugal meals supply.
 2. Give the superlative degree of each of the following adjectives:—Good, little, near, happy, beautiful.
 3. Write the plurals of the following nouns:—Story, leaf, joy, woman, society, gas.
 4. Make sentences containing the following words:—Pare, deer, pane, maid.
 5. Write three sentences each containing a noun in the possessive plural.
 6. Write a short story of "Daniel in the Lions' Den." Not less than twelve lines.
- Values—1, 5+10; 2, 5; 3, 6; 4, 8; 5, 6; 6, 10. Total—50.

GEOGRAPHY.

1. Define Political Geography, Promontory, Peninsula, Volcano, River-basin.
 2. Mention the countries of South America, with their capitals, that are partly bounded by the Pacific.
 3. Name the principal tributaries of the Amazon and Mississippi.
 4. Name the inland Counties of Ontario, with their county towns.
 5. What railways connect Goderich and Amherstburg?
 6. Locate Portland, Port Stanley, Bracebridge, Pembina, Sidney, Philadelphia, Detroit, Sarnia, St. John, Caraccas.
 7. Name the islands and capes on the East Coast of North America.
- Values—1, 10; 2, 6; 3, 10; 4, 5; 5, 5; 6, 10; 7, 4. Total—50.

HISTORY.

1. Give some account of the explorations of Marquette and La Salle.
 2. How often, when, and by whom has Quebec been taken?
 3. What is meant by U. E. Loyalists, Clergy Reserves, "Family Compact?"
 4. Who is the Governor-General of Canada? Who the Premier? Who is the Lieutenant-Governor of Ontario? Who the Premier?
 5. What caused the Rebellion of 1837?
- Values—1, 10; 2, 6; 3, 4, 4, 4; 5, 6. Total—30.

Entrance to Fifth Class.

WRITING.

Writing will be judged from the Dictation paper. Slates not to be used.

Value—50.

DICTATION.

(To be read slowly and distinctly.)

1. At first we imagined that it only proceeded from some magazines, to which the Russians as usual set fire in their retreat. Eager to know the cause of this conflagration, we sought in vain for some one who could tranquillize our restless curiosity; but the impossibility of satisfying it redoubled our impatience and increased our alarm. In conformity with the desolating plan of the campaign, the ruin of the ancient capital of the Czars had been determined.
 2. An immense quantity of valuable commodities.
 3. The cellars were filled with sugar, oils, and resin.
 4. In this apartment guests were received with imposing ceremony.
 5. A symbol of barbarism.
 6. Past rows of houses, villas, crescents, and terraces.
 7. A band of foreign auxiliaries.
 8. Human skeletons and pieces of wreck were disinterred.
 9. Unparalleled, assassinated, aggravating, imperceptible, ascendancy, vengeance, infallible, harassing, imitation, despair.
 10. The Norwegian Colonies of Greenland, Jacques Cartier at Hochelaga, Cortez in Mexico, The Earthquake of Caraccas, Hermann, the deliverer of Germany, The Battle of Thermopylac, The destruction of Pompeii.
- Value—80. Four marks to be deducted for each mistake.

READING.

Fourth Book, page 89.—"Gentlemen, I commend to to British troops."

Value—50. Expression, 15. Fluency, 35. Two marks off for each error in pronunciation, and one mark off for every other error in fluency, such as hesitation, omission, substitution, miscalling, &c., &c. Examiner will please fill in the reading marks on the list.

ARITHMETIC.

1. Find the least number that will contain 68590142 and 85044059.
2. What part of a mile represents the same distance as three-quarters of an inch?
3. How much money can be made on 500 tons of coal, bought for \$5 per ton of 2240 lbs., and sold at the same price per ton of 2000 lbs.?
4. What is a gentleman's income, who, after paying sixpence out of every pound of it, has £962 16s. 6d. left?
5. Simplify $\frac{3}{4}$ of $6\frac{1}{2}$ of $24\frac{1}{2}$ — $4\frac{1}{2} \times 3\frac{1}{2} \div 3\frac{1}{2}$
 $8\frac{1}{2}$ of $5\frac{1}{2} \div 4\frac{1}{2} - 7\frac{1}{2} \times 5\frac{1}{2} \div 14\frac{1}{2} \times 4\frac{1}{2}$.
6. Find the value of $3.754 + 4.63 + 2.4 + 5.21$.
7. Add together $\frac{1}{4}$ of a yard, $\frac{1}{2}$ of a foot, and $\frac{1}{4}$ of an inch.
8. A can do $\frac{1}{3}$ of a work in 8 days, and B can do $\frac{1}{4}$ of the same work in 12 days. In how many days can both do it by working together?
9. Reduce $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$ to equivalent fractions having the same numerator.

10. Reduce $\frac{3}{4}$ of an ounce Troy to the decimal of a pound Avoirdupois.

11. *A* and *B* have 136 acres of land; $\frac{3}{4}$ of *A*'s share is equal to $\frac{1}{2}$ of *B*'s share. Find value of *A*'s land at \$75 an acre.

12. A courtyard is 20 feet 6 inches square. What will it take to pave it at 5s. 6d. per square yard? Give answer in dollars and cents, a shilling being equal to 24 $\frac{1}{2}$ cents.

Value—100. Ten marks each for questions answered.

GRAMMAR.

1. Analyze, writing out each proposition separately and stating its kind and relation:—

"They possess a long and extremely slender bill, with which they extract the nectar, and the small insects which lurk in the recesses of the flowers."

The boy stood on the burning deck
Whence all but he had fled;
The flames that lit the battle's wreck,
Shone round him o'er the dead.

2. Parse the words in italics.

3. Make a noun and a verb from each of the following adjectives: Golden, glorious, wondrous, different.

4. Tell the difference in use between *piece* and *peace*; *ate* and *eight*; *cruise* and *crews*; *plain* and *plane*; *fair* and *fare*.

5. Correct the following, giving reasons:—

A good end does not warrant using bad means
They that honour me, I will honour.
Let him be whom he may, I cannot wait for him.
Has either of your three friends arrived?

6. Construct sentences, exemplifying the different uses of the nominative case.

Values—1, 14; 2, 14; 3, 8; 4, 10; 5, 8; 6, 6. Total—60.

GEOGRAPHY.

1. Define water-shed, mathematical geography, steppe, horizon, cardinal points.

2. Bound France, Arabia, Egypt, Ecuador.

3. Name the British possessions in Africa, with their chief cities.

4. What are the boundaries of the North Temperate Zone, and what is its width in degrees?

5. Locate Liverpool, Glasgow, Londonderry, Richmond, Madras, Alexandria, Jerusalem, Venice, Brandon, Cayenne.

6. Over what railways would you travel, and through what important cities would you pass in a journey from Montreal to Winnipeg?

7. Where do the people of Ontario get the following articles in a raw state:—Cotton, silks, raisins, coal, coffee, sugar, currants, rice, tobacco, tea?

8. Name in order any ten Canadian ports and give their situations.

Values—1, 8; 2, 4; 3, 10; 4, 6; 5, 10; 6, 12; 7, 10; 8, 10. Total—70.

HISTORY.

1. Name the sovereigns of England who were reigning at the close of each century, from the ninth to the eighteenth inclusive.

2. How was Queen Anne related to her successor?

3. What do you understand by "The Cabinet," "The Invincible Armada," "The Jacobites," "The Repeal of the Corn Laws," "The Confederation Act."

4. Mention some important differences between the Government of Canada and that of the United States.

Values—1, 10; 2, 5; 3, 15; 4, 10. Total—40.

Entrance to Sixth and Senior Sixth Class.

WRITING.

Writing will be judged from the Dictation paper. Slates not to be used.

Value—50.

DICTIONATION.

1. The ancient languages are, as pieces of mechanism, incomparably more beautiful than any of the modern languages of Europe.

2. These same causes produced analogous effects upon the Saxons.

3. The forced approximation of the two races produced many reasons for fraternizing.

4. A strong sympathy for intellectual excellence was the leading characteristic of Charlemagne, and this undoubtedly blessed him in encouraging the power and pretensions of the hierarchy.

5. Magna Charta embraces sixty articles expressed in a clear, terse, and authoritative manner. The franchises of the towns were secured, the hardships of villeinage were alleviated, but the essential prerogatives of the sovereign were untouched.

6. Auxiliary, etymologically, indefatigable, parliamentary, ignominy, eulogiums, homogeneous, manoeuvring, irresistible, idolizing, obsequies, photographic, laboratory, atmospherical, summary, edifices, illiterate, poignant, tyrannical, bazaar, vicissitudes, colossal, inexorable, telegraph.

Value—80. Four marks to be deducted for each mistake.

READING.

Fifth Book, page 77.—From "The sun is reflected" ——— to "is awakened anew."

Value—50. Expression, 15. Fluency, 35. Two marks off for each error in pronunciation, and one mark off for every other error in fluency, such as hesitation, omission, substitution, miscalling, &c., &c. Examiner will please fill in the reading marks on the list.

ARITHMETIC.

1. Find the least sum of money in dollars and cents which can be paid either in pence, shillings, sovereigns, or guineas; £1 sterling being = \$4.86.

2. *A* spent $\frac{1}{4}$ of his money and gave away \$20; he then spent $\frac{1}{3}$ of the remainder and gave away \$10 less than $\frac{1}{4}$ of what then remained. He had \$48 left. How much had he at first?

3. A man agreed to work for \$1.50 per day and his board; for each day lost he was to forfeit 40c. In 77 days he earned \$77.50. How many days did he lose?

4. A watchmaker buys a watch for \$12. What price must he ask for it so that after throwing off 25% of the price asked he may sell it for 25% more than the cost price?

5. Simplify $\$35\frac{1}{4} \div \left\{ \frac{714285 - 428571}{857142 - 285714} + \frac{1}{13} \text{ of } \frac{8}{9} \div \frac{5}{11} \times (3 \cdot 9 \times 15 \frac{2}{3}) \right\}$

6. A man lends \$1000, part at 8%, part at 6%, and receives \$72 interest; how much is lent at each rate?

7. What kind of vulgar fractions give finite decimals, and why?

8. Sixty thousand bricks are required for a wall 15 feet high and 1 foot 10 $\frac{1}{2}$ inches thick, each brick is 9 inches long by 4 $\frac{1}{2}$ inches wide and 3 inches thick, including mortar; find the length of the wall.

9. I wish to exchange £800 in 3% consols at 93 $\frac{1}{2}$ for Canadian Bank of Commerce, shares at 154. How much will I receive? £1 being \$4.84.

10. A train 88 yards in length overtakes *B* walking at the rate of 4 miles an hour and passes him in 10 seconds, but 10 minutes afterwards it meets *C* and passes him in 7 $\frac{1}{2}$ seconds. How long before *B* and *C* meet?

11. For the carriage of 50 bushels of wheat to market I give 1 bushel wheat and 16 cents, but for the carriage of 40 bushels I would give 1 bushel and receive back 10 cents. At what is a bushel of wheat valued?

12. A man walked from his own residence to Stratford in 4 days and home again in 5 days, walking each day one mile less than he did the preceding. How far does he live from Stratford?

Value—100. Ten marks for each question answered.

GRAMMAR.

1. The honourable member who has just spoken has made what in one respect may appear a paradoxical, but what, I think, as human nature is constituted, was a very conciliatory speech towards the United States.

I do not mean freedom from aggression from without, of which, as I have said, I have but little fear, but I do mean freedom from internal strife.

(a) Analyze fully.

(b) Parse the words in italics.

2. Construct sentences to exemplify the different kinds of subordinate clauses.

3. Point out and give the meaning of the roots, prefixes, and affixes of chronological, consanguinity, approximate, accomplice, inexorable, allegiance.

4. In how many relations may a substantive clause stand in a sentence? Give an example of each relation.

5. Distinguish between verbs of complete and incomplete predication.

6. Define *strong conjugation*, *transitive verb*, *auxiliary verb*, *do-factive verb*.

7. Criticise the following sentences, making corrections where necessary:—

He is a better philosopher than a statesman.

Every one to their own taste.

The winter has not been as severe as we expected it to have been.

Two is better than one.

Wheat is being sold for a dollar a bushel.

Enjoying health and to live in peace are great blessings.

Values—1 (a) 20, (b) 20; 2, 6; 3, 12; 4, 12; 5, 8; 6, 8; 7, 14. Total—100.

GEOGRAPHY.

1. Explain the phenomena of the tides.

2. What is the position of the earth's axis with reference to the plane of its orbit, and what are the chief consequences of that position?

3. Name the thirteen original states of the American Union with their capitals.

4. Trace the course of the Danube, naming its tributaries and the countries drained by it.

5. Name and locate the possessions of France in the different parts of the world.

6. Locate the following islands and tell the Government to which each belongs:—Cyprus, Cronstadt, Corfu, Elba, Sark, Nippon, Singapore, San Juan, Trinidad, Miquelon.

7. Draw a map of the Mediterranean Sea, marking the countries on its shores and the courses of the principal rivers that flow into it. Show by a double dotted line the boundaries of the Roman Empire at the time of its greatest extent.

Values—1, 5; 2, 10; 3, 20; 4, 5; 5, 5; 6, 20; 7, 5. Total—70.

HISTORY.

1. Where and when and between what armies was each of the following battles fought:—Marathon, Zama, Actium, Chrlons, Naseby, Trafalgar, Jena, Austerlitz, Waterloo, Balaclava?

2. Attach an important historical event to 1096, 1215, 1453, 1513, 1535, 1587, 1665, 1759, 1821, 1867.

3. What led to the establishment of representative government in England?

4. When did the following eminent personages live, and for what are they respectively famous:—Miltiades, Lysander, Hannibal, Cleopatra, Caractacus, Boadicea, Charlemagne, Warren Hastings, Amherst, Bonaparte?

5. Enumerate the evils which the Confederation of the British North American Provinces was designed to remedy.

6. What do you understand by "Home Rule" for Ireland?

Values—Ten each.

ALGEBRA AND GEOMETRY.

1. What is the dimension of a term? When is an algebraical expression said to be homogeneous?

2. Resolve $a^{20} - x^{20}$ into six elementary factors.

3. Solve the following equations:—

$$\frac{x-7}{x+7} = \frac{2x-15}{2x-6} - \frac{1}{2(x+7)}$$

$$\frac{(2x+3)x}{2x+1} + \frac{1}{3x} = x+1,$$

4. There is a number of two digits, whose difference is 2, and, if it be diminished by half as much again as the sum of the digits, the digits will be inverted. Find it.

5. Triangles upon the same base and between the same parallels, are equal to one another. Prove.

6. The greater side of every triangle is opposite to the greater angle. Prove.

7. Define semicircle, polygon, scalene triangle, trapezium, hypothesis.

Values—1, 8; 2, 8; 3, 10+10; 4, 14; 5, 10; 6, 10; 7, 5.

Practical Department.

LESSONS IN CHEMISTRY.

(Continued from last month.)

CHAPTER II.

EXERCISE II.

33. What is meant by an *acid*, an *alkali*, a *salt*? give the tests.

34. Estimate the weight of the oxygen in a barrel of water, 63 gallons, given 1 gallon = 10lbs.

35. Draw the line separating simple from compound bodies.

36. Write out from memory a table of the non-metals.

(1) in alphabetical order (2) in the order of their atomic weights.

37. How many grams of potassic chlorate will yield 192 grams of oxygen? 490

38. How many pounds of zinc will be required to generate 20 lbs of hydrogen from sulphuric acid? given the formula $H_2SO_4 + Zn = ZnSO_4 + H_2$. 652

39. Find the percentage of oxygen in hydric sulphate.

65.714

40. What is the formula for a compound having the percentage composition O=72.73, C=27.27? CO_2 . N.B. $(72.73 \div 16) : (27.27 \div 12) : O : C$. The slight discrepancy from 1:2 is owing to error in the experimental determination of the 27.27.

41. Give the formula for a substance containing K=31.837, Cl=29 and O=39.183 $KClO_3$

42. Give the percentage composition of ammoniac chloride NH_4Cl . N=26.17, H=7.476, Cl=66.355.

43. Nitric acid is made by distilling saltpetre (KNO_3) with hydric sulphate, H_2SO_4 , given the formula $KNO_3 + H_2SO_4 = HNO_3 + HKSO_4$ (hydric potassic sulphate) find how much acid 300 grams of nitre or saltpetre will produce. 187.1

44. Name the substances represented by the formulas MnO_2 , NH_4Cl , Fe_3O_4 , P_2O_5 , $ZnSO_4$, $CaCO_3$ and mention any experiments in which they occur. (2nd Class 1876).

45. Find the weight of carbonic acid produced by burning 5 grs. of carbon in oxygen 18.3. (do 1877)

46. How much phosphorus is contained in 120 lbs of bone-ash consisting of 88.4 per cent of tricalcic phosphate and 11.5 per cent of calcic carbonate? (do. 1879). Ans 21.216.

47. How many lbs of charcoal (carbon) in a barrel of pure sugar, 300 lbs? 126.3.

48. How many pounds of zinc in 350 lbs of zinc sulphate? Ans. 141.3 (2nd Class 1877)

49. Name all the substances represented in the equation $HNO_3 + HKO = KNO_3 + H_2O$.

50. If 200 grams of the first substance be used how much of the last named substance will be produced? 57.14

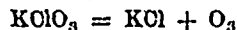
51. Name the substances in the formula $2NH_4Cl + CaH_2O_2 = 2NH_3 + CaCl_2 + 2H_2O$. What weight of the first will produce 1 kilogram (=1000 grams) of the third? Ans. 53.5 yield 17 hence 3147 yield 1000.

52. Name the substances in the equation $Na_2CO_3 + 2HCl = 2NaCl + H_2O + CO_2$.

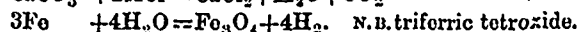
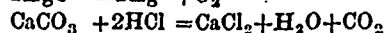
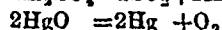
53. Bleaching powder and sulphuric acid produce calcic sulphate, water, and chlorine. Represent the reaction by an equation.

54. One part of manganic dioxide and two parts each of sulphuric acid and common salt yield sodic sulphate, manganous sulphate ($MnSO_4$), two parts of water and two of chlorine. Express this symbolically.

55. Write out in words the meaning of the following equations;—



$3\text{MnO}_2 = \text{Mn}_3\text{O}_4 + \text{O}_2$. N.B. compare Fe_3O_4 ; trimanganic tetroxide



56. In the formula $\text{N}_2\text{CO}_3 + 10\text{H}_2\text{O}$, what is the $10\text{H}_2\text{O}$ called?

57. In H_2SO_4 that is $\text{H}_2\text{O}, \text{SO}_3$ what is the H_2O called?

58. What is the province of organic chemistry?

59. What sort of substances have names ending in —yl as methyl, formyl, hydroxyl, sodoxyl, onproxyl?

60. Define oxyacid, hydracid, and sulphacid.

61. What is an anhydride? Name some and give their formulas.

62. What determines the basicity of an acid?

63. What determines whether a salt is normal or acid?

20. There are three principal varieties of chemical changes or reactions, namely.

1. **Synthesis, or Composition**, the direct union of two elements, atoms uniting to form molecules. Example:—chlorine and hydrogen under the influence of light or of electricity combine directly, $\text{H} + \text{Cl} = \text{HCl}$.

Cases of pure synthesis seldom if ever happen in the strict sense. Almost every chemical process is attended both with the breaking up of molecules into atoms and the re-grouping of these atoms to form new molecules. This is true even of elementary substances like hydrogen and chlorine. We have used the *atomic formula* but the *molecular formula* $\text{H}_2 + \text{Cl}_2 = 2\text{HCl}$ probably expresses the real operation. Similarly free oxygen and free hydrogen combine to form water $2\text{H}_2 + \text{O}_2 = 2\text{H}_2\text{O}$. There may be cases in which the molecule consists of a single atom but they are rare. In general the term synthesis is employed to designate the change which takes place when the old molecules attach to themselves more material, and new molecules of greater weight result as when iron is burnt in oxygen, $\text{Fe}_3 + \text{O}_4 = \text{Fe}_3\text{O}_4$.

2. **Analysis, or Decomposition**, the separation of a compound into simpler compounds, or into its elements, the breaking up of molecules into atoms. Examples:—mercuric oxide by the application of heat is split up into its elements $2\text{HgO} = \text{Hg}_2 + \text{O}_2$. Similarly by a galvanic current $2\text{H}_2\text{O} = 2\text{H}_2 + \text{O}_2$, by heat potassic chlorate is decomposed $2\text{KClO}_3 = 2\text{KCl} + 3\text{O}_2$.

3. **Metathesis, Replacement, or Substitution**, in which one ingredient of a compound substance is withdrawn and its place supplied by some other material, the atoms of one molecule changing places with the atoms of another molecule. It might be regarded as a combination of analysis and synthesis, and and is therefore frequently called *Double Decomposition*.

Examples:—metallic sodium immersed in water decomposes the water by replacing the hydrogen $2\text{H}_2\text{O} + \text{Na}_2 = 2\text{NaHO} + \text{H}_2$. Each atom of sodium displaces one atom of hydrogen from a molecule of water and forms caustic soda or sodic hydrate with the remaining atoms of the water molecule. The displaced hydrogen is liberated in the free state. Add a little hydrochloric acid to this caustic soda and water and common salt are produced, thus $\text{NaHO} + \text{HCl} = \text{H}_2\text{O} + \text{NaCl}$. The hydrogen of the acid and the metal of the alkali have replaced each other. Numerous examples will occur as we proceed.

21. There are two peculiar conditions under which chemical action will sometimes take place even when ordinary means fail to develop the chemical force. They are called *Catalysis* and the *Nascent State*.

It is sometimes found that the mere presence of another body which itself remains quite unchanged, is sufficient greatly to facilitate, or even to determine the combination of elements, or the separation of a compound. This influence is termed *catalysis*. Thus free oxygen gas and double its volume of free hydrogen gas diffused together in the same vessel form a mechanical mixture known as oxyhydrogen gas. Under ordinary conditions this gas may be kept for a long time without undergoing any chemical change. But when a piece of porous spongy platinum is introduced the gases combine to form water and the platinum becomes quite hot. Charcoal produces a similar effect on a mixture of oxygen and sulphuretted hydrogen, (H_2S). The gases combine with explosion, but the charcoal undergoes no change, nor does the platinum in the preceding example. In preparing oxygen from potassic chlorate (KClO_3), it has been found that the gas is given up at a much lower temperature if some black oxide of manganese, (manganic dioxide, MnO_2) be mixed with the chlorate. [N.B. See that the manganic oxide has not been adulterated with coal dust or the mixture will be explosive.] But the oxide itself remains unchanged. Even powdered glass or sand will have a similar effect in causing the chlorate to decompose at a lower temperature. This catalytic influence is not well understood, but it is conjectured that in some instances at least the neutral substance acts as a carrier. Thus the MnO_2 may seize part of the oxygen of the KClO_3 and form MnO_3 , this MnO_3 then decompose into $\text{MnO}_2 + \text{O}$ and the MnO_2 be ready to repeat the process. In other cases, as those of charcoal and platinum, the third substance acts by condensing the gases in its pores.

22. It is also observed that at the moment any substance is liberated from a chemical combination its affinity or power of entering into combination with other elements is greatly exalted. The substance is then said to be in the *Nascent State*. The increased energy of combination observed is probably owing to the separation of individual atoms which at first have not as yet united with each other to form molecules. Thus, nascent hydrogen would be represented by H while ordinary free hydrogen would be HH or H_2 , for as previously stated the molecule of the element is believed to consist of at least two atoms.

A high temperature, the gaseous form, catalytic influence, the nascent state and a strong current of electricity are powerful means of promoting chemical action, more especially when two or more of them are brought to bear simultaneously. Numerous cases occur which must be carefully noticed. Thus free oxygen and free hydrogen do not ordinarily combine, but if oxygen and hydrogen be brought together at the moment of their separation from some compounds they immediately unite to form water. The bleaching power of chlorine also depends on nascent oxygen.

23. After innumerable experiments and careful observation chemists have been able to sum up the essential points discovered with regard to chemical action under the five following statements commonly known as the *Laws of Chemical Combination*.

I. **The Law of Constant Constitution.** The same chemical substance contains the same elements.

II. **The Law of Fixed or Constant Proportion.** The elements of any substance are always combined in the same proportion by weight. These combining weights, chemical equivalents, or atomic weights are given in section 14.

III. **The Law of Multiple Proportions.** When one body combines with another in several proportions, the higher proportions are multiples of the lower.

IV. **The Law of Compound Proportion.** The combining proportion of any compound is the sum of the combining proportions of all its constituents.

V. **The Law of Reciprocal Proportions, or Equivalent Proportions.** If any number of substances, say A. B. C. D. etc. each unite with another substance, say X, then the proportions by weight of A. B. C. D. etc. which severally combine with X will represent multiples or measures of the proportions in which A. B. C. D. &c. combine among themselves provided any such unions take place, for example AB, AD, BC, &c.

24. **Explanations and examples of the Laws.** The first law merely states that water is found, the world over, to consist of oxygen and hydrogen and nothing else; salt of sodium and chlorine and nothing else; sugar always of the same three things viz., carbon, hydrogen, oxygen.

The second law asserts that any given substance not only contains always the same elements and no others, but also that these same elements are united in precisely the same proportions. It states that the chemical formula and the percentage composition of any given substance are unchangeably the same, that sugar, water, ammonia, chlorate of potash etc. always yield the same percentage of the same ingredients.

The third law is well illustrated by the compounds of nitrogen and oxygen, $N_2O, N_2O_2, N_2O_3, N_2O_4, N_2O_5$, called nitrogen, mon-oxide, di-oxide, tri-oxide, tetroxide, and pentoxide, in which we have two parts by weight of nitrogen united with one, two, three, four or five of oxygen. It is found impossible to prepare a compound containing any intermediate quantity of oxygen, as nitrogen two parts and oxygen three and a quarter parts. Similarly we have CO_2 and CO ; SO_2 and SO_3 ; Cl_2O, Cl_2O_3 and Cl_2O_4 , but no intermediate proportions.

The fifth law may be exemplified as follows:—

32 parts of sulphur unite with 56 parts by weight of iron, FeS .	
71 " " chlorine " " 56 " " " " " $FeCl_2$.	
Hence 32 " sulphur " " 71 " " " " " chlorine, SCl_2 .	
Again 14 " nitrogen " " 381 " " " " " iodine, NI_3 .	
3 " hydrogen " " 381 " " " " " , 3H.	
Hence 14 " nitrogen " " 3 " " " " " hydrogen, NH_3 .	

Similarly.

16 parts of O unite with 2 parts by weight of H, H_2O .	
32 " " S " " 2 " " " " " H, H_2S .	

Hence O and S combine in measures or multiples of these proportions.

32 parts of S unite with 2×16 parts of O, SO_2	
also " " " " " 3×16 " " O, SO_3 .	

The fourth law follows from the second by simple addition. Thus $H_2SO_4 = 2 + 22 + 64 = 98$ the combining weight of sulphuric acid.

25. **Remarks on the Laws of Combination.** With respect to the law of constant constitution, we must remember that a number of substances exist in two or more distinct forms which in outward appearance, and physical properties have little in common, whilst their chemical relations are identical. These differences are brought about by physical and sometimes by chemical agency. The substances undergo a change of state and become modified in many physical and some chemical properties, but nevertheless still consist of nothing but the same kind of matter, the very same chemical substance, because they produce the same chemical products, and can sometimes be very easily converted back into their original or normal form. Thus carbon exists as charcoal, as diamond, and as black-lead. Such change of appearance and properties is called an **Allotropic Modification**, *Allotropy* or *Allotropism* (allos = another, tropos = form).

Phosphorus presents a remarkable instance of this metamorphosis. Common yellow phosphorus is a waxy-looking solid, takes fire a little above blood heat, is luminous in the dark, soluble in

carbonic disulphide, transparent, glassy, quite soft and flexible, and very poisonous. Red phosphorus, used for making matches, is an allotropic form of the yellow variety. It is hard, brittle, red colored, does not take fire at a temperature considerably above that of boiling water, does not dissolve in carbonic disulphide at all, is not poisonous, not glassy in appearance, and does not shine when rubbed in the dark. Yet at a high temperature, say 500° Fah., it is changed back to the common variety. Oxygen, carbon, sulphur, boron, and silicon exist in two or more states in which their properties are widely different. Nor is allotropism confined to simple substances. Some compounds such as silica, and the peroxides of iron and tin present allotropic modifications. These changes are generally ascribed to changes in the arrangement of the atoms within the molecules, or of the molecules themselves.

26. With respect to the law of constant proportions, let us notice that the converse is not true. The same elements united even in the same proportion do not always produce the same compound.

For example many organic compounds are composed of a like number of atoms, but have wholly different properties. Thus oil of turpentine, oil of lemons, of bergamot, lavender, pepper, camomile, caraway, cloves, thyme, and oil of oranges all possess the same chemical constitution, namely $C_{10}H_{16}$. It is a common thing for oil of lemons exposed to sunshine to convert into oil of turpentine, and thus cause the cook to spoil her cake. **Isomerism** is the term used to denote these differences of physical and chemical properties among bodies having the same chemical composition. **Polymerism** is used to denote that the bodies have the same percentage composition, but have different combining numbers, as hydric cyanate and hydric cyanate, $H_3C_3N_3O_3$ and $3HCNO$ whose combining numbers are 132 and 44; common aldehyde and acetic ether, C_2H_4O and $C_4H_8O_2$ whose percentage is the same but their atomic weights 44 and 88 respectively.

CORRECTION.—At page 110, section 17, second sentence, should read "Those which appear at the positive pole are called *chlorous* or *electro-negative*, those at the negative pole *basyous* or *electro-positive*." The words chlorous and basyous were accidentally misplaced, which made the following sentences unintelligible.

RULES FOR DESCRIBING THE PRINCIPAL NATURAL DIVISIONS OF LAND AND WATER.

BY A. H. O.

LAND DIVISIONS.

1. **A CONTINENT.**—State where it is in the eastern or western hemisphere, its position with respect to the equator, and what bodies of water are adjacent to it.

Example.—North America is situated in the northern part of the western hemisphere, north of the equator, and has the Arctic ocean on the north, the Atlantic on the east, and the Pacific on the west.

Exercise.—Describe the following continents:—South America, Europe, Asia, Africa, and Australia.

2. **AN ISLAND.**—State its direction from the nearest mainland or larger island, and in what body of water it is situated.

Examples.—Newfoundland lies south-east of Labrador, in the north Atlantic ocean. Jamaica lies south of Cuba, in the Caribbean sea.

Exercise.—Describe the following islands:—Greenland, Cuba, Vancouver, Ireland, Sicily, Hayti, Ceylon, New Guinea, Tasmania, Borneo, Madagascar, Sumatra, Great Britain.

3. **AN ARCHIPELAGO.**—State in what body of water it is situated, the direction in which it extends, and its position.

Example—The West India Islands, in the north Atlantic ocean, extend in a south-eastern direction, from the peninsula of Florida to the Gulf of Venezuela in South America.

Exercise—Describe the following archipelagoes:—Japan Isles, Philippine Isles, Kurile Isles, Ionian Isles, Cape Verde Islands, Sunda Isles, Moluccas, Canaries, Mascarenes, Comoro Islands.

4. A PENINSULA.—State in what direction from the mainland it projects, and what bodies of water nearly surround it.

Example—Nova Scotia projects south-east from New Brunswick, and is nearly surrounded by the Bay of Fundy, the Atlantic ocean, and Northumberland Strait.

Exercise—Describe the following peninsulas:—Florida, Labrador, Yucatan, California, Aliaska, Alaska, Arabia, Hindostan, Further India, Kola, Brittany, Crimea, Malay, Anatolia, Katiwar, Corea, Kamtschatka; also the Danish, Iberian, Italian, Hellenic, and Scandinavian peninsulas.

5. AN ISTHMUS.—State what bodies of water it lies between, and what bodies of land it connects.

Example—The Isthmus of Panama, lying between the Caribbean sea and the Pacific ocean, connects Central and South America.

Exercise—Describe the following isthmuses:—Tehuantepec, Finland, Corinth, Perseus, Suez, Kraw.

6. A CAPE.—State from what coast of what country it projects, and into what body of water.

Example—Cape Farewell projects from the south coast of Greenland, into the Atlantic ocean.

Exercise—Describe the following capes:—Brewster, Barrow, Sablo, San Lucas, Mendocino, Chudleigh, Orange, St. Rogue, Corrientes, Aguja, Gallinas, Nordkyn, Naze, Roca, Tarifa, Leeuwin, Byron, Van Diemen, Comorin, Cambodia, Ras-al-Had, Aniwa, Spatel, Blanco, Guardafui, Amber, Matala, Agulhas, Verde, Ceuta, Bon, Negro, Palmas, Negrais, Baba, Lopatka, Prince of Wales, Charles, Race, Ray.

7. A PLAIN.—State between what it extends (length), and between what it lies (breadth).

Example—The Atlantic Plain extends from the Gulf of St. Lawrence to the Gulf of Mexico, between the Alleghanies and the Atlantic ocean.

Exercise—Describe the Llanos, the Silvas, the Pampas, the Great Plain, the Plain of Hungary, the Siberian Plain, the Plain of Turkistan, the Plain of Hindostan, and the Plain of China.

8. A MOUNTAIN.—State to what range it belongs (if any), and in what part of what country it is situated.

Example—Mt. Fairweather in the Sea Alps, is situated in the north-west part of British Columbia.

Exercise—Describe the following mountains:—Konia, Sinai, Kilimandjaro, Ararat, Blanc, Peshau and Hoshan, Etna, Hecla, Vesuvius, Cotopaxi, Everest, Chimborazo.

9. A MOUNTAIN RANGE.—State the country or countries in, or between which it is situated, its direction, and the points between which it extends.

Example—The Sierra Nevada Range, in the United States and Mexico, extends in a south-easterly direction from Cape Blanco to Cape San Lucas.

Exercise—Describe the following ranges:—Pyrenees, Apennines, Carpathians, Alleghanies, Elburz, Gawler.

10. A MOUNTAIN SYSTEM.—State the countries through which it extends, its general direction, and the number of divisions, or ranges it comprises.

Example—The Scandinavian system extends southward through Norway and Sweden from North Cape to the Naze, and comprises

three principal divisions, the Kiulen Range, the Dofrines, and the Langfield.

Exercise—Describe the following systems:—The Iberian, Alpine, Altai, Himalaya, Kuen-Lun, Alleghany, Andean.

WATER DIVISIONS.

1. AN OCEAN.—State its direction from the continents whose coasts it washes.

Example—The Atlantic ocean is east of North and South America, and west of Europe and Africa.

Exercise—Describe the following oceans:—Pacific, Indian, Arctic.

2. A SEA.—State of what ocean it is a branch, and its position with respect to the country or countries whose coasts it washes.

Example—The Red sea, a branch of the Indian ocean, lies between Arabia on the east, and Africa on the west.

Exercise—Describe the following seas:—Adriatic, Mediterranean, Baltic, Behring, Yellow, Irish, Arabian, Levant, Aegean, Okhotsk, Japan, Wang-Hai, Tung-Hai, Chinese.

3. A GULF.—State of what body of water it is a branch, and its direction from the country or countries, whose coasts it washes.

Example—The Gulf of Mexico, a branch of the Atlantic ocean, lies south of the United States, and east of Mexico.

Exercise—Describe the Gulfs of California, St. Lawrence, Venezuela, St. George, Arica, Onega, Suez, Archangel, Obi, Tonquin, Siam, Aden, Carpentaria, Guinea.

4. A BAY.—Follow the rule for a Gulf.

Example—Bay of Biscay, a branch of the Atlantic ocean, lies west of France and north of Spain.

Exercise—Describe the following bays:—Fundy, Hudson, Chesapeake, Delaware, Bengal, Arnheim, Panama, All Saints.

5. A STRAIT.—State between what countries or islands it lies, and what bodies of water it connects.

Example—The Strait of Florida, between Cuba and Florida, connects the Gulf of Mexico with the Atlantic ocean.

Exercise—Describe the following straits:—Davis, Hudson, Belle Isle, Behring, Magellan, Le Maire, Skager-rack, Dover, Gibraltar, Otranto, Dardanelles, Constantinople, Bal-el-Mandeb, Malacca, Palk, Torres, Bass, Macassar, Sunda, Balabac, Juan-de-Fuca, La Perouse.

6. A CHANNEL.—Follow the rule for a strait, or gulf, according to the office which the channel performs.

Exercise—Describe the following channels:—Yucatan, Mozambique, St. George's, Bristol, Corea, Fo Kien.

7. A LAKE.—State to what river-basin it belongs, its situation, and its outlet, if it has one.

Example—Lako Ontario, in the basin of the St. Lawrence, lies between Ontario and New York state, and has the St. Lawrence for its outlet.

Exercise—Describe the following lakes:—Winnipeg, Great Slave, Great Bear, Superior, Itasca, Leon, Okanagan, Onega, Ladoga, Constance, Geneva, Baikal, Koko-nor, Tale-Sab, Caspian, Aral, Albert, Victoria, Tanganyika, Nyassa, Bangweola, Eyre, Taupo.

8. A RIVER.—State the watershed to which it belongs, its source, its direction, and the body of water into which it flows.

Example—The Mississippi river, in the watershed of the Gulf of Mexico, rises in Lake Itasca, in the state of Minnesota, and flows southward into the Gulf of Mexico.

Exercise—Describe the following rivers:—Mackenzie, North Saskatchewan, St. Lawrence, Columbia, Fraser, Yukon, Orinoco, Amazon, Parana, Rhine, Rhone, Volga, Danube, Obi, Yenesei, Lena, Amoor, Hoang-Ho, Mekong, Yang-tse-Kiang, Brahmaputra, Ganges, Indus, Euphrates, Nile, Zambezi, Orange, Congo, Niger, Gambia, Senegal, Murray.

MONTHLY REPORTS.

The following form of monthly report which is in use in the Lindsay Public Schools, under the head mastership of Mr. W. F. Seymour, is given as a model which may be useful to teachers elsewhere :—

Teacher	Month.	Monthly Reports of..... for the six months ending.....188. No..... in the.....Class.
	Perfect Recitations.	
	Marks from Written Examination.	
	Total Credits.	
	Half-days absent.	
	Times Late.	
	Misdo-meanors.	
	Total Discredits.	
	Figure of Merit.	
	Standing in a class of.	
W. F. SEYMOUR, Head Master.	Name of Pupil who stands first this month.	
	Parent's Signature.	

LINDSAY PUBLIC SCHOOLS.

thoroughly competent to undertake the task. The nature of mind is not understood and methods of culture, contrary to nature, are adopted haphazard, in the hope that somehow child mind will surmount all obstacles, and develop into a grand structure. Many do surmount these obstacles and attain excellency but by far the greater number are dwarfed. Of all existing workmen the teacher should thoroughly understand his work—other workmen build for time, but he builds for eternity. All parts of his work should have a definite purpose and should be so related to each other that there will be no misapplied labor. Probably there is more failure in conducting RECITATIONS than in any other part of the teacher's work. Owing to the short apprenticeship for, and the insecurity of, the teachers position there are many who have no definite ideas of the aims of recitations, or at best there are acquainted with not more than two or three leading methods. Knowledge on the objects, conditions, principles and application of recitations should be very definite.

OBJECTS.

Among the objects to be kept before the mind, while conducting a recitation we may name the following:—(1) To ascertain the extent of the pupil's preparation.—If a teacher attempt to instruct a pupil without knowing how much he understands of the subject, he is likely to begin with that portion familiar to the pupil, and by not demanding thought tempt him to idleness, or else with that portion which is too difficult for him and thereby engender distaste for that particular subject and study in general. If pupils would be aroused to interest in study every additional fact given should be so related to what they already know that they can clearly comprehend it.

2. To aid in a more thorough understanding of the subject matter of the lesson. There are many who, considering this the only object of recitation lecture and explain away the lesson leaving the pupil nothing to do. If a pupil is to receive the greatest benefit from acquired knowledge there must be set up in his mind the same process of thought as was in the mind conceiving the idea. The pupil's advancement is measured more by what he does than by what he hears, therefore he should be told nothing directly that he can find out for himself. It is the teacher's duty to direct him in acquiring knowledge but the luxury of thinking and the glory of the conquest belong to the pupil.

3. To aid in cultivating memory. Since so much of the success in learning depends on memory, great consideration should be given to its cultivation. How many persons complain that they forget so easily. This is certain evidence of bad treatment unless there is some natural defect. If a subject has been properly learned there is no more necessity for forgetting it than for failing to understand it. The fact is that teachers are in too much hurry to get over a certain amount of work, and neglect to require their pupils to repeat what has been told them &c., hence facts and principles are disposed of so carelessly that responsibility does not rest anywhere. "It should, therefore, be the especial object of every recitation, to fix securely and permanently in the mind, every fact and principle of the lesson."

4. To cultivate the powers of expression to enable the pupil to tell intelligently what he knows. A pupil must possess language both to think and to express his thoughts. It is a notorious fact that pupils in general fail to express themselves accurately and clearly. It is not assuming too much to say that a pupil does not understand a subject properly unless he can express his thoughts clearly and accurately. "Teachers are too prone to take for granted that a child knows a thing, either because he pretends to, or thinks he does, or makes some halfway, blundering answer that may be tortured into a remote referencé to the point in hand."

RECITATIONS.

BY D. A. M.

He who would succeed in any occupation must have correct ideas of what he wishes to accomplish. Aimless working produces useless results. It is not necessary that an observer should at once comprehend the purpose in each portion of the work but the workman should have in his mind a clear conception of what he wishes to produce, that all parts of his work may be properly adapted to each other. The more delicate the structure the more accurate should be the workman's understanding.

The moulding of the human mind is the most delicate work in which any person can engage, and yet how few workmen are

The manner is scarcely of less importance than the matter itself. Language is an instrument to be used all through life and should be well understood. It is the teacher's duty to afford time and opportunity for the cultivation of the expressive powers: in no place can this be done better than in the recitation, where we should call out the knowledge the pupil possesses in the best possible form of expression.

5. To measure the pupil's ability, acquired and natural, that the timid may be encouraged and the presumptuous checked. These two classes of pupils are found in every school and by bringing them together in the recitation they can measure each others ability and only those who really deserve special honors will receive them. If what the timid bring to the market be accepted at its full value they will be encouraged to try again—their success strengthens them. With some tact and consideration for his pupil's feelings a teacher can in a recitation do much to check pride and cultivate courage.

6. To afford opportunities for cultivating independence of thought on the part of the pupil. There are two evils to be guarded against—the one, blind adherence to books and customs, the other sitting aside all books and definitions. The one is rank conservatism the other rabid gritism. Both are destructive to healthy growth of mind. The one reduces pupils to the condition of mere machines the other inculcates rebellion against all established authority. If the teacher presents one, and that a sufficiently limited, point of thought to the pupil at a time, have these points follow each other in natural progression, go over the same ground again and again till a sufficient impression is made, bring together many examples of the same fact, apply the results of the instruction to the subject under consideration, pupils will arrive at conclusions and form definitions couched in clear and terse language. They will be encouraged in thinking independently, and as they may themselves express thoughts differently they will be led to respect each others' opinions and will be saved from being pedantic, self-conceited, and opinionated, or obsequious, stupid and parasitical. A pupil should never be prompted or assisted by a leading question, if he cannot answer the question given, go back to what he knows and socratically lead him to comprehend the fact sought to be elicited from him.

7. To enable the teacher to explain and illustrate the lesson and add new matter to it. Pupils attend school not merely to recite but to be instructed and aided by the living teacher. Never stop short with *hearing* a lesson, add something to it, talk about it. Professor J. H. Allen says "The moment you drop the thick veil which the text-book interposes between your pupil's mind and yours and deal with him face to face, you are in the right line and are doing the work of the great teachers of the world."

If left to himself a pupil may form very erroneous opinions, which by proper explanation and illustration the teacher can remove and by adding new matter to that already acquired he may arouse an intense interest in work.

8. To enable the teacher to keep proper incentives to study, before the pupils' minds. How pupils have been inspired with zeal in the acquisition of knowledge, by the mortification of one failure, every experienced teacher knows. Care should be exercised not to raise an artificial excitement which may perhaps secure better recitations but which will do nothing toward putting the mind into such a state that it will press on in the pursuit of knowledge after the living teacher has closed his labors.

9. To economize time. The method of individual recitation has been "weighed in the balance and found wanting"; but there are times and circumstances in the majority of schools requiring less or more of this practice. Not a moment should be lost. Although all the exercises should be conducted quietly yet energy and de-

spatch should characterize every movement. Pupils should be taught to economize time for life is short, earnest and competitive. "The early bird gets the worm." So he who can economize time will succeed.

10. To enable the Teacher to present to his pupils correct ideas of the purposes of life. It rests with the teacher to imbue his pupils with noble thoughts, to inspire them with zeal in every good cause, to secure a fair and symmetrical development of their entire nature, and to avoid a one-sided and pernicious education. From history, biography; &c., he may teach them that the great purpose of life is to gain a pure character if they would gain happiness. A good reputation may give a transient joy, but in times of adversity pure character alone affords settled peace.

QUALITIES.

1. Recitation should be complete. There is a very common failure among teachers of all grades in this respect. Fragmentary and insufficient answers are very common. Which has the greater effect, a whole charge of powder or the tenth part of a charge? which contains the greater force a whole sentence or a half sentence; which will cultivate the mind the most, a part of a truth or the whole truth? The clearness, distinctness and completeness of utterance add to the clearness and comprehensiveness of the understanding. Every answer should be complete and should have some immediate connection with the question. Not a decimal point, or the most apparently insignificant sign or mark should be misunderstood. It would not do to say that \$600 stood for six dollars. The most scrupulous care should be exercised to secure completeness, for "Whatever is worth doing is worth doing well."

2. Recitation should be definite and exact in the use of language. There is not sufficient care exercised in securing plain and precise answers; and pupils after a time think any answer will do. They may depend on manufacturing one, or of guessing one, by which they can slide along somehow. Indefiniteness in recitation squanders time and leaves the pupil possessed of a heterogeneous mass of facts which are of little service.

3. Recitation should be comprehensive both in understanding the matter and in making it as plain as possible. It is not uncommon to find pupils (not to say teachers) who have ciphered through the arithmetic or said all the grammar in the book, unable accurately to solve practical problems or to write or to speak correctly. Pupils should be taught to transfer the ideas from the book to the practical concerns of life.

4. A recitation should be logically arranged, what the pupil already knows being made the basis of what it is proposed to teach him. Isolated facts cannot be remembered or incorporated into the intellectual existence as well as if they are associated with ideas already fixed in the mind.

WHERE TO SPEND THE VACATION.

To the many readers of the JOURNAL who may be in doubt as to where to spend the vacation, we can confidently recommend Nova Scotia, and especially Yarmouth and vicinity, as a pleasant summer resort. The climate of Yarmouth is delightfully cool, such a thing as a sweltering day or sultry night being almost wholly unknown. There are beautiful drives, abundant facilities for fowling, boating, sea-bathing, and in fact everything that can contribute to the health and pleasure of the visitor. At Maitland Village, nine miles north of Yarmouth, there is an extensive sand beach, which many think quite equal to "Old Orchard Beach," where as fine sea-bathing can be had as the Atlantic coast supplies. Comfortable board and lodging can be had at Maitland for *four dollars* a week. By the new "Nova Scotia Steamship Company's" Line the tourist has a choice of two routes to Yarmouth (and thence to St. John, Halifax, etc.), one *via* Portland, which is 170 miles from Yarmouth, the other *via* Boston, 240 miles from Yarmouth. The steamer from Portland leaves every Friday at 1 p.m. on arrival of the Grand Trunk train from Toronto; and the Boston steamer leaves every Tuesday at 8 a.m. Mr. Oliver, Dr. McLellan, and others, spent last summer's vacation at Maitland, and we understand that quite a number of them are going to spend the coming vacation at the same place.

Notes and News.

ONTARIO.

T. O'Hagan, B.A., principal of the Chatham R. C. separate school, spends his summer vacation this year in the Philadelphia school of Elocution.

Mr. A. W. Burt, of the Perth collegiate institute, passed his second year examination at Toronto university, with first-class honors, coming out first in History, French, and third in German. Mr. J. Balderson also passed his second year examination. Mr. I. J. Birchard gained the degree of M.A.

From the new calendar of Victoria university we learn that the number of graduates in arts is 321; in law, 72; in divinity, 38. The number of students now in the arts faculty is 129; in law, 21; in science, 14; theology, 61; in medicine, 144.

The visiting committee of the Sarina board of education report being well pleased with the management and efficiency of the schools under the jurisdiction of the board.

A matter was brought before the London school board lately which presented a somewhat novel feature. A note brought by a boy from his mother asking that he be excused from attendance was marked "not satisfactory." When the boy returned to school he was not taught for three weeks, though in the room. Mr. J. B. Boyle, I.P.S., sustained the teacher's action as the boy was virtually under suspension. Mr. J. M. Wilson, a trustee, thought that every teacher had a different system as regards excuses for non-attendance, and, "that complete humbug of a thing, the city teachers' association," ought to devise some general rule on the matter. It was referred to the committee of management.

W. W. Tamblyn, M.A., principal of Oshawa high school, has accepted his appointment by the board of education to a similar position in the high school, Bowmanville. We congratulate the people of that town and vicinity on having secured the services of one who is, by sound scholarship and long experience in teaching as well as by his genial disposition and his popularity with all who are interested in educational matters, so well qualified to maintain the present high reputation of the school. Mr. Tamblyn entered Toronto university at the age of sixteen, in 1862, and after winning many distinctions in the way of honors and scholarships, he graduated in 1866, a medalist in modern languages. After graduating he was, for six years, head master of Newcastle high school, and for the last ten years of Oshawa high school. He has raised Oshawa high school to a very high position, and by his labors there has proved himself to be one of the most successful teachers in Ontario.

At the recent meeting of the Perth county council, Mr. J. M. Moran, who has become editor and proprietor of the *Stratford Herald*, submitted his resignation as public school inspector for the south riding, adding his willingness to retain the office with the council's approval. Mr. Moran's resignation was accepted and applications were read for the position and referred to the education committee, who recommended that the county be re-united for school inspection purposes, thereby saving a large amount and not prejudicing the interests of education, and that \$200 extra be allowed the inspector for travelling expenses, in addition to the statutory allowance of \$10 per school. The report was adopted. Mr. Alexander, inspector of the North Riding, signified his willingness to assume the duties for the whole county at the additional remuneration proposed, and a by-law was passed appointing him.

Public school inspector Kelly, M.D., LL.B., county of Brant, has been the recipient of a very valuable present from the teachers under his charge. It consisted of the *Encyclopedia Britannica*, most handsomely bound in several volumes, and a magnificent writing-desk and bookcase combined. The address which accompanied the gift is said to have been the most beautiful that has ever been presented to anyone in Brantford. It is richly and profusely ornamented, and is a triumph of the printer's and illuminator's art. The Mayor of the city presided at the presentation.

Mr. D. Jennings, who for the past ten years has been principal of the Uxbridge public school, has accepted the charge of a mission school in British Columbia, where his work will be chiefly among the Indian population. He undertakes this position through a high sense of Christian duty, and from his practical experience, well-known ability and unimpeachable character we are sure he will be the means of doing much good by promoting civilization through education and Christian teaching. He bears with him to his new sphere the best wishes of a numerous circle of friends; and, at a late meeting of the Ontario county teachers' association, a resolution expressive of the feelings of the members was unanimously adopted.

An east Middlesex (Ont) teacher, Mr. J. D. Hunt, has taken with him to Winnipeg, where he has recently accepted a position as teacher in one of the city schools, some refining influences that are much appreciated. School music and school room decoration were successfully practised by him in his Ontario school, and we find that in Winnipeg, through his precept and example, the Tonic sol-fa system of singing, and pictures, mottoes, flowers and illustrated magazines are prominent features in the schools of the Prairie city. As a rule the teachers of Ontario who go to other provinces or countries to occupy similar positions, soon make such improvements in their social surroundings that the neighborhood cannot help expressing gratitude. We receive in this way flattering accounts from the United States, British Columbia, Quebec and other places which bear testimony to the superior training and high culture of the teachers of Ontario.

H. B. McGregor, B.A., H.M., Brockville high school has, by unanimous vote of the board of education, been offered the head mastership of the Almonte high school. Previous to removing to Brockville, Mr. McGregor was for seven years principal of Almonte high school, and it is most flattering to him that, without application, the position was offered him under more favorable circumstances than heretofore, as they wish to get back again the teacher in whom they had so much confidence. He will return to Almonte on Sept. 1st. Clare Worrell, B.A., H. M. Gananoque high school takes Mr. McGregor's place in Brockville high school.

Hon. Adam Crooks, Minister of Education, when on a brief visit to Ottawa recently, stated that it is his intention to modify the intermediate examinations so as to discourage cramming and make them simple examinations for promotion. The list of optional subjects will be largely extended.

The degree of M.A. has been conferred by Mount Allison university New Brunswick, on Mr. H. E. Kennedy, head master of the Cayuga high school.

For some time past there has been a local controversy going on in the Hamilton papers about the condition of the collegiate institute in that city. The matter has at length been taken up by the school board and at this writing an inquisition is in progress.

MANITOBA.

A special meeting of the Protestant section of the board of education was held recently, when in addition to its decision regarding applicants for the position of teacher in the normal school department to be opened shortly in connection with the Winnipeg Protestant public schools, (see advertisement), the board decided that teachers for the collegiate department to be established in connection with the public schools in cities and towns must be graduates of some university in Her Majesty's dominions who furnish satisfactory evidence of their knowledge of the science of education and art of teaching and of the management and discipline of public schools together with a certificate of high moral character.

The books in French, Latin, and Greek required under standards xi & xii of the programme of studies for use in cities and towns were added to the list of authorized text books.

Mr. J. B. Somerset has been appointed a member of the board of examiners for the examination of teachers.

Mrs. Alfred Cowley has resigned the position of Lady principal of the St. John's college ladies' school, which she has filled with so much ability, and at some personal sacrifice during the last two terms. The vacancy has been filled by the appointment of Miss Sinclair.

The Ladies' college and the branch school connected with it are in a very satisfactory condition.

At a recent meeting of the council of the university of Manitoba the chancellor, on behalf of the committee appointed at the last meeting, presented the following minute relating to the late Rev. John Black, D.D., which was on motion of His Grace the Archbishop of St. Boniface, seconded by Rev. Canon O'Meara, unanimously adopted, viz:—The council of the university desires to put on record its affectionate regard for the late Dr. Black, of Kildonan. The Rev. Dr. Black was resident for many years in the country, and took a kind and active part in every public effort for education or charity. He was highly esteemed for his practical ability, sound sense, and sterling qualities, while he was beloved for his kindness of heart and courteous manner. He was a member of the council from the beginning, was constant in his attendance, and was known to take a warm interest in the welfare and progress of the university. His loss is therefore deeply regretted.

The tonic sol-fa music notation is being introduced in the Winnipeg public and high schools, and after vacation will be taught in all the rooms. Mr. J. D. Hunt, principal of the high school, adopted the method in his room, with favorable results, some time ago.

NOVA SCOTIA.

A new chair has been established in Dalhousie college through the munificence of Mr. George Munro, of New York. The chair is to be known as the George Munro chair of English literature and metaphysics. At a meeting of the Governors held since the generous founder announced his intention to establish the chair, J. G. Schurman, A.M., D.Sc., was chosen professor on the new foundation. The salary attached to the professorship is \$2000 per annum, with class fees additional.

Mr. Walter Smith, State director of art education in Massachusetts, and art master, South Kensington, England, has been invited to attend the ensuing Provincial education association at Truro. Prof. Smith has accepted the invitation and will deliver three lectures before that body. It is expected that he will lecture in Halifax also.

Mr. R. I. Eaton, second master in the Morris street school, Halifax, has been obliged to resign through ill-health. Johnson Davidson, B.A. (Dalhousie College), has been elected to the position thus vacated.

The third annual session of the teachers' association for inspectorial district, No. 10 (Cumberland and North Colchester), was held at Parrsboro on the 15th and 16th ult. W. D. Mackenzie, inspector of schools, presided at the various sessions, supported by Mr. W. D. Ward as vice-president, and Mr. Gordon Hill as secretary-treasurer. Seventy-five teachers were present and enrolled as members. As this was the first meeting of the kind ever held in Parrsboro, much public interest was taken in the proceedings of the association by the people of the town. The association reciprocated by placing on record an expression of its appreciation of the kindness shown to its members by the residents of Parrsboro. In addition to papers and exercises by members of the association, the teachers present were favored with a most instructive address by Principal Calkin of the provincial normal school on the subject of "Method." The public meeting held on the evening of the 15th, attracted to the immense town-hall, what is said to have been the largest audience gathered in Parrsboro for many years. The chief address of the occasion was delivered by Dr. Allison, superintendent of education. This was an earnest plea to sustain by all means and at all costs an education in sympathy with the spirit of the times, and adapted to place the youth of Nova Scotia on a par with the youth of the most favored and progressive lands. The leading men of the town occupied places on the platform. A most cordial vote of thanks to the lecturer was moved by Rev. Mr. Alcorn, and seconded by Rev. Father Malone, P. P. The programme of the association was a fresh and varied one, and was capably carried out. It included papers as follows: "Miscellaneous schools and their special difficulties," by Mr. E. J. Lay, Amherst; "School government," by Mr. Gordon Hill, Central Economy; "Subtraction," specially illustrated by Miss Bent, Amherst; "Physical geography," by Mr. Wm. Rockwell, Joggins Mines; "Teaching the elementary principles of geology," by inspector Mackenzie. Mr. Johnson, principal of the Parrsboro schools, gave a brief address on the "Utility of Drawing" as a branch of public instruction, admirably supplemented by a class exercise with pupils from his school. Miss Gillespie, Parrsboro, gave a highly interesting exercise in reading, and Miss McKernian, Amherst, an equally useful one illustrating the philosophy of division. It should be mentioned that Mrs. Huestis of St. John, N.B., a member of the Natural History Society of that city, favored the association with valuable suggestions on the teaching of botany, and with the inspection of her beautiful collection of botanical and entomological specimens. The subjects brought before the association in the papers presented were discussed with great freedom and vigor. The next annual meeting was appointed to be held at the village of Acadian Iron Mines, Colchester county, on the second Thursday of June, 1883.

The anniversary of Acadia college was celebrated at Wolfville, N. S., on the 31st May. The gathering was a brilliant one. The most interesting part of the celebration was its Cramp memorial service, at which a series of orations were delivered by Dr. Sawyer, Dr. Bell, Dr. Rand and Mr. A. Langley. We note that Hon. Neil McLeod, B.A., has been appointed a scholar of the university of Acadia college.

TORONTO UNIVERSITY COMMENCEMENT.

The proceedings in connection with the close of the late academical year of the university of Toronto came off on the 7th and 8th of June. The evening of the 7th was devoted to the annual meeting of

CONVOCATION.

which was held in Moss Hall, the home of the Literary and Scientific society of University college. The attendance was not large but the list of those present included a number of men prominent in literary, scientific, and educational circles. The chair was occupied by the Hon. John A. Boyd, chancellor of Ontario, who was re-elected for another biennial term. A considerable portion of the time of the meeting was taken up with the discussion of the question whether the Senate should insist absolutely on attendance on one year's lectures in some affiliated college, and that not the first year's. It was finally resolved by the casting vote of the chairman that no recommendation on the subject should be made. On motion a large and influential committee, with power to add to its numbers, was appointed to consider and report upon the best means of improving the financial condition and increasing the efficiency of Toronto university and University college. Of this committee the vice-chancellor of the university, W. Mulock, M.A., was nominated convener, and amongst its members are the Hon. Edward Blake, chancellor of the university and the Hon. J. A. Boyd, chairman of Convocation.

COMMENCEMENT.

The annual commencement proceedings came off in Convocation Hall on the afternoon of the 8th, the chancellor presiding. The following is a list of the art graduates, and medallists of the year:—

M. A.—J. J. Baker; I. J. Birchard; E. R. Cameron; T. Davidson; C. Donovan; A. Hamilton; W. A. Huston; F. H. Keefer; A. G. Leonard; T. H. Lyall; J. P. McMurrich; J. Mutch; W. G. Wallace.

B. A.—A. F. Ames, Cainville; J. Baird, Scarborough; A. Blair, Ratho; W. H. Blake, Toronto; C. J. Campbell, Toronto; J. Caven, Toronto; J. M. Clark, St. Mary's; L. J. Clarke, Winnipeg; L. C. Corbett, Corbett; W. F. W. Creelman, Collingwood; W. A. Duncan, Russell; H. L. Dunn, Welland; J. C. Elliot, Port Robinson; W. Elliot, Morewood; W. T. Evans, Waterdown; D. Fasken, Elora; W. O. Galloway, Toronto; C. T. Glass, London; E. G. Graham, Brampton; J. Gray, Woodburn; A. H. Gross, Whitby; W. J. Greig, Oshawa; J. F. Grierson, Oshawa; E. F. Gunther, Toronto; R. Haddow, Dalhousie, N.B.; T. P. Hall, Hornby; J. Hamilton, Motherwell; T. Hepburn, —; J. A. Jaffray, Macville; D. B. Kerr, Toronto; G. G. Lindsay, Toronto; W. J. Logie, London; S. Love, Toronto; G. S. MacDonald, Cornwall; J. McGillivray, Collingwood; A. MacMurchy, Toronto; C. A. Mayberry, Salford; C. J. McCabe, A. McDonald, Toronto; A. H. McDougall, Cannington; D. McGillivray, Goderich; R. McKnight, H. W. Mickle, Toronto; R. Moir, Hensall; J. W. Mustard, Uxbridge; A. E. O'Meara, Port Hope; S. E. Robertson, Harrison; W. L. H. Rowand, Walkerton; O. L. Schmidt, Sebringville; A. Y. Scott, Stratford; T. W. Simpson, Orangeville; G. A. Smith, Winthrop; J. Smith, J. C. Smith, Galt; T. Trotter, Woodstock; F. C. Wade, Owen Sound; A. Watson, G. B. Wiltzie, Farmersville; D. J. G. Wishart, Madoc; H. Wissler, Salem; H. J. Wright, Toronto;

The following is a list of the medallists in the various faculties:
ARTS—Classics: Gold, D. McGillivray (Goderich); silver, H. L. Dunn (Welland);—**Mathematics:** Gold, J. M. Clark (St. Mary's); silver, A. F. Anies (Cainville);—**Modern Languages:** Gold, E. J. Wright (Toronto); silver, E. F. Gunther (Toronto);—**Natural Sciences:** Gold, G. A. Smith (Winthrop); silver, T. P. Hall (Hornby);—**Mental and Moral Philosophy:** Gold, W. F. W. Creelman (Nova Scotia); silver, W. H. Blake (Toronto).

LAW—Gold, A. V. McCleneghan.

MEDICINE—University gold, R. R. Wallace; University silver, J. T. Duncan; Starr gold, R. R. Wallace.

The following is a list of the successful candidates for scholarships in the various faculties:

LAW.—Second year—A. S. Lowry; Third year—F. T. Congdon.

MEDICINE.—First year—1, H. N. Hoople; 2, L. Carr. Second year—1, J. W. Clerke; 2, A. F. McKenzie. Third year—1, W. J. Robinson; 2, F. J. Dolsen.

ARTS.—Classics—First year—1, H. Haviland; 2, W. M. Logan and J. Ross; Second year—1, W. J. J. Twohey; 2, R. A. Little; Third year—1, J. C. Robertson; 2, A. Crichton and H. R. Fairclough. **Mathematics—First year—1, R. A. Thompson; 2, A. C. McKay; Second year—1, J. Cuthbert; 2, M. Haight; Third**

year—1, G. Ross; 2, T. G. Campbell. *Modern Languages*—First year—F. H. Sykes; Second year—W. H. Smith; Third year—J. Squair. *Mental and Moral Science*—Second year—G. Salo; Third year—J. S. Campbell. *Blake Scholarship*—W. S. Ormiston. *General Proficiency*—First year—1, Heber J. Hamilton; 2, C. Hunter; Second year—1, T. G. Robinette; 2, W. G. Milligan.

The following are the prizemen for the year:

French Prose—J. Squair. *German Prose*—J. Squair. *Oriental Languages*—First year—G. Salo; Second year—J. R. Stillwell; Third Year—J. A. Jaffary, Fourth Year J. Hamilton.

The proceedings of the afternoon closed with an address from the chancellor in the course of which he explained the steps taken recently by the Senate with a view to adding to the teaching power of University college by the creation of fellowships and lectureships, and gave some useful practical advice on educational matters in general.

THE ANNUAL DINNER.

came off in the evening in the college dining hall, Dr. Wilson, president of University college presiding. The speeches were more purely academical in tone than speeches on such occasions generally are and this feature contributed not a little to the success of the reunion. The speech of the Rev. Principal Grant of Queen's college was especially outspoken and vigorous in its protest against small college endowments and it won for him frequent applause.

OTTAWA UNIVERSITY CLOSING EXERCISES.

The proceedings in connection with the close of the late session of this institution aroused this year more than the usual amount of public interest. Ottawa university is under the auspices of the Roman Catholic Church, but on the platform on graduation day a number of persons prominently connected with educational work were present, including Principal McCabe of the Ottawa normal school, Principal McMillan of the Ottawa collegiate institute, and Dr. Baptie, science master in the normal school. A practical address was delivered by Dr. Phelan, professor of anatomy in Kingston medical school, and an *alumnus* of Ottawa university. An address was delivered in French by the Rev. President of the institution. The degree of B. A. was conferred on Francis B. Latchfor of Ottawa and T. O'Hagan, principal of the Chatham R. C. separate school. The degree of Bachelor of Literature was conferred on several candidates, and the degree of M. A. on Dr. Phelan, Prof. Denyden, and Prof. Marson. To Mr. O'Hagan fell the distinguished honour of reading the salutatory poem with the appropriate title "Profecturi Salutamus."

MANITOBA UNIVERSITY CONVOCATION.

The meeting of the convocation of this university for the conferring of degrees was held at Winnipeg on the 21st of June, the following gentlemen connected with the institution being present:—The Most Reverend, the Bishop of Rupert's Land, chancellor, in the chair; Hon. Joseph Royal, M.P., vice-chancellor; Mr. T. A. Bernier, registrar; Rev. Dr. Lavoie, Rev. Prof. Cherrier, Rev. G. Duagast, Ven. Archdeacon Cowly, Ven. Archdeacon Pinkham, Rev. Canon Matheson, Rev. Prof. Hart, Rev. O. Fortin, Rev. R. Young, Hon. A. A. C. LaRiviere provincial secretary; Mr. Macarthur, and others. A considerable number of ladies occupied seats on the floor of the house and there was a fair attendance of gentlemen interested in the educational work of the province.

The chancellor in the course of his address stated that 33 candidates had come up for examination, and that all these had come from the colleges affiliated to the university. It was expected that no fewer than 18 candidates would enter on the university course next year. He referred to some of the questions requiring the attention of the council of the university, amongst other things there was needed a more precise definition of the mathematical subjects for examination, especially for honor candidates. The relation of women to the university examinations required to be defined, and the question of granting other than arts degrees had become important. The university was not yet well equipped with funds, the work of examination having been done gratuitously. He complimented the colleges on their growing efficiency and avowed his preference for giving government aid to the university, but though something might be done for the colleges as well. The graduates from St. John's college were presented to the chancellor for their degrees by Rev. Canon Matheson, who also, in the unavoidable absence

of Rev. Prof. Hart at this particular stage of the proceedings, presented the graduates of Manitoba college for similar honors.

Rev. Prof. Cherrier next presented the graduates from St. Boniface college, who in their turn were admitted as bachelors in arts. The following students having been thus presented by their colleges were admitted by the chancellor to the degree of B.A. in the usual form:—James Mackay, St. John's college; R. G. McBeth, Manitoba college; T. Warburton, St. John's college; D. J. Tait, St. John's college; Neil MacCallum, Manitoba college; G. Albert Betourney, St. Boniface college; A. M. Campbell, Manitoba college; R. R. Sutherland, Manitoba college.

The chancellor also presented to the medalists the distinctions to which they were entitled.

The registrar, Mr. T. A. Bernier, presented to the chancellor the candidates for *ad eundem* degrees. The following, who were present, came forward and were admitted by the chancellor in due form:—

T. C. L. Armstrong, M.A., university of Toronto. Jacob Bureau, LL.B., university of Laval, Quebec. Rev. H. T. Lesile, B.A., Trinity college, Toronto. J. F. Landry, M.D., B.A., Laval university, Quebec. J. E. P. Prendergast, B.A., LL.D., Laval university, Quebec. G. G. Mills, B.A., Victoria university, Cobourg. A. Dawson, M.A., university of Toronto. C. Sifton, B.A., Victoria university, Cobourg. The following candidates, who were not present, were also admitted, *ad eundem gradum*:—S. J. McKee, B.A., university of Toronto. Richmond Shafner, B.A., university of Acadia, N. S. Paulus Cherard, B.A., university of Laval, Quebec, Edwin L. Bayington, M.A., Victoria university, Cobourg.

Mr. J. Mackay of St. John's college was awarded the Governor-General's silver medal for classics, and Mr. R. G. McBeth of Manitoba college the university bronze medal. Mr. G. A. Betourney of St. Boniface college was awarded a silver medal for moral and mental science, and French course, M. A. Campbell of Manitoba college was also awarded a silver medal for the English course in the same department. Mr. J. A. McKay won the Governor-General's bronze medal at the previous examination for proficiency in classics, mathematics, and botany.

ACADIA COLLEGE—CLOSING EXERCISES.

The anniversary exercises of Acadia college were held on Thursday, June 1st and were of more than usual interest. The spacious assembly hall of the college was crowded with a brilliant audience. The orations of the graduating class were as follows:—England socially under the Tudors—Ernest A. Corey, Havelock, N.B. The problem of Russia—Rupert W. Dodge, Kentville. The Indians of Canada, their present and future—Snow P. Cook, Milton, Queens Co. The making of the English Bible—Frederic D. Shaffner, Williamston. The love of nature in Latin poetry—Arthur G. Troop, Dartmouth. English puritanism—Arthur L. Calhoun, Summerside, P. E. I. Daniel Webster—Herbert W. Moore, Portland, N. B. Ancient and modern cosmogonies—F. Howard Schofield, Black River.

After the delivery of the orations the conferring of the degree of Bachelor of Arts on the graduates took place as follows:—Ernest A. Corey, Havelock, N. B. Rupert W. Dodge, Kentville. Snow P. Cook, Milton, Queens Co. Frederic L. Shaffner, Williamston. Arthur G. Troop, Cartmouth. Arthur L. Calhoun, Summerside. Herbert W. Moore, Portland, N. B. F. Howard Schofield, Black River. J. G. A. Bolyea, Portland, St. John, in *absentia*.

President Sawyer then announced the following honorary degrees: On Rev. E. M. Saunders, Doctor of Divinity. On Hon. Sir Charles Tupper, and Hon. Dr. Parker, Doctor of Civil Law. On Prof. D. F. Higgins, Doctor of Philosophy. On C. W. Roscoe, (inspector of schools for Kings and Hants counties), Master of Arts, *causa honoris*. These announcements were received with demonstrations of applause. Dr. Saunders, Dr. Higgins, and inspector Roscoe in response to an invitation from president Sawyer briefly addressed the meeting in acknowledgment of the honor conferred upon them respectively.

The president also announced that the governors of the university had at their recent meetings decided upon more fully availing themselves of the privileges allowed them under the college charter and act of incorporation, and in pursuance of such decision had appointed six fellows and twelve scholars to be associated with and become a portion of the governing body of the university of Acadia college. The following are the names of the gentlemen appointed:—*Fellows*—T. H. Rand, D. C. L.; Rev. D. A. Steele, M. A., Rev. Dr. Saunders, Judge Johnston, Silas Alward, Esq., M. A., and Rev. S. B. Kempton, M. A. *Scholars*—Rev. A. Colhoun, M.A.; J. Parsons, B.A.; Rev. G. O. Gates, M.A.; H. C. Creed, M. A.; Hon. Neil

McLeod, B.A.; J. Y. Payzant, M.A.; B. H. Eaton, M.A.; Rev. Dr. Hopper, Rev. W. H. Warren, M.A.; J. A. Durkee, M.A.

The place of the customary oration before the associated alumni was this year filled by a most appropriate service commemorative of the life and labors of Dr. Cramp, ex-president of the college. Eloquent and appreciative addresses were delivered by the following gentlemen:—Rev. Dr. Sawyer on the "General history of the deceased scholar;" Rev. Dr. Bill, on "Dr. Cramp as a preacher;" T. H. Rand, D.O.L., on "Dr. Cramp as a teacher;" A. Langley, on "Dr. Cramp as a temperance worker."

The annual dinner of the associated alumni was a brilliant occasion. Toasts were given and responded to as follows:—"The faculty of Acadia college." Responded to by Dr. Sawyer and Dr. Higgins. "The graduating class of 1882." Responded to by H. W. Moore, B.A. "The governors of Acadia." Responded to by B. H. Eaton, M.A. "The fellows and scholars." Responded to by Rev. W. H. Warren, M.A. D. B. Woodworth was called for by some friend, and in response spoke eloquently on the Great North West—Manitoba. "Our sister colleges." Responded to by Prof. Forrest, of Dalhousie college, and Dr. Hall of the normal school at Truro. "The Press." Responded to by Rev. R. Murray, of the *Presbyterian Witness*, and S. Seldon, of the *Christian Messenger*. "Visiting friends." Responded to by Dr. Willard, of Providence, R.I., a teacher of forty years ago in Horton academy. "The ladies' seminary," spoken to by Rev. G. F. Miles.

Teachers' Associations.

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

N. SIMCOE.—Held in the model school, Barric, on the 9th and 10th June. The attendance was large, the programme well supported, and the several subjects received such an amount of good practical criticism that much important information was elicited. Shortly after 10 a.m. the proceedings were opened by J. C. Morgan, M.A., I.P.S., president, who stated that while he thought the convention should be held on two teaching days, and intended to carry out his view on future occasions, he had good reasons for the change this time, as it enabled him to obtain the invaluable services of Mr. J. L. Hughes for the public lecture, and an address at regular session. The minutes of previous meeting were read by Mr. J. B. Carruthers, sec-treas. and adopted. Mr. D. Finlayson showed how he would teach grammar to a class preparing for entrance examination. Mr. H. B. Spotton, M.A., thought common errors of false syntax should be noted and corrections made; if such were given in the text-book it would be a great advantage. Messrs. Hunter, Harvey, McKee, and others, continued an advantageous discussion on the subject. Roll w then called, after which Mr. W. Finney gave an exposition of the several methods of teaching vocal music which, he maintained, should be taught in the public school. He commended the tonic sol-fa as the most easily acquired and satisfactory in result. H. B. Spotton, M.A., H.M., Barric coll. inst., gave a very interesting and able address on the "The future of the intermediate examination." He had heard it said that "the track of the intermediate examination is marked by the whitened bones of the candidates" through the failure of so many to pass. The presence of a large number at these examinations may be accounted for by the fact that a result's fee of about sixty dollars was secured to the school for every candidate who passed. The objections were that the schools were turned into "education mills" to the mental injury of the pupil; the continual strain upon the teacher was injurious to health and many had to give it up; the teacher's abilities were often judged by the number whom he succeeded in passing, and he often unjustly suffered thereby. It is frequently difficult to get pupils to go up for examination, especially as passing is only an honor which counts for nothing in the professions except that of teaching; pupils would willingly forego this honor but they were urged to it for the sake of the fee. Bonuses were offered by teachers to draw away pupils from the schools of their own counties, which was the most unpleasant feature in the matter. Some schools had sent out advertising agents to "show their wares" and draw away pupils from good schools. On the other side of the question the condition of the high schools is enormously improved. Mr. Spotton criticised the marking at the last examination showing some anomalies that obtained. The present difficulty in the high school is how to manage the arrangement of classes so as to separate those preparing for teachers from those who are not candidates for examination. He read from Dr. McLellan's report recommending that there should be a distinction made; and he (the speaker)

would urge a distinct class for botany, chemistry, and physiology. On the motion of Mr. Harris, seconded by Mr. Hunter, a committee was appointed consisting of Messrs. Spotton, M.A., Williams, B.A., and Ryerson, B.A., representing the high schools, and Messrs. Harvey, McKee, and Waugh representing the public schools, to embody the recommendations made by Mr. Spotton and to bring in a report. Mr. T. Young gave a prelection on the "Importance of history" and the objects to be kept in view in teaching it. The matter was wisely dealt with and a very practical discussion ensued. The president would agree to have history taught to children if the first two letters of the word were deleted and it became "story." Mr. G. McKinnell read an essay on book-keeping which was well criticised by Messrs. Finney, Harvey, Jenison, and Furlong, and on the motion of Mr. Harvey a committee consisting of Messrs. McKinnell, Jenison, and Furlong was appointed to consider the place it should occupy in public schools, and to report. Mr. Johnston read a short paper on "Composition" which opened up a most profitable discussion on the subject, in which Mr. McKee of Orillia gave some admirable hints, and Messrs. Finney, Jenison, Sneath, and Hume took part. Mr. Little's paper on "Elementary arithmetic" was rather more prolix than the subject warranted and presented no debatable points. The report of the committee on book-keeping was postponed till next convention. Mr. D. Boyle, representing the Canada Publishing Co., addressed the association on the merits of the series of readers to be published by that house, and Mr. J. L. Robertson, from the firm of W. J. Gage & Co., exhibited a set of new Canadian readers and pointed out the many features of excellence the books possess. On the motion of Mr. Spotton, seconded by Mr. Williams, a committee was appointed to examine these series and report at next convention. In the evening an appreciative audience assembled in the Town Hall to enjoy a lecture given by J. L. Hughes Esq., inspector of schools, Toronto, on "Schoolroom humor." The chair was occupied by the president of the association, and at the close of an address in which the lights and shadows of school life were inimitably and graphically depicted, the talented lecturer was, on the motion of Mr. Harvey, seconded by Mr. Jenison, accorded the thanks of the meeting by rising vote and acclamation. *Second Day.* After roll-call Mr. Hughes showed how drawing could be made a useful and pleasant branch of public school study, which made such an impression on the meeting that Mr. Sneath proposed, Mr. Hume seconded, and it was unanimously resolved, "That when the school of art is established in the normal school, Toronto, the teachers in training be instructed in the principles of drawing." Mr. Spotton brought in committee report as follows:—"That this association desires to express its strong approval of the proposal to separate the intermediate examination from the public school teachers' examination, to restore the intermediate to its original position as a promotion examination, and to give greater flexibility to the course of students by the introduction of an optional group comprising botany, chemistry, and physiology; and this association is also of opinion, that, in order to obviate the evil of cramming for teachers' examinations, a minimum period of preparation, say two years after completing the work of the fifth class in public schools, should be insisted on." The importance of individual study of educational works and the benefit arising from the discussion of their subject matter at the semi-annual meetings was brought before the notice of the association and a committee was appointed to report, which they did as follows:—"Your committee appointed to recommend an educational work for study between now and the next convention beg to recommend Park's Manual of Methods as a suitable work for the purpose in view. They also recommend that the circulars issued by Stieger & Co. in reference to the kindergarten be sent for, so that the members of the association may obtain some knowledge of the working of that system." J. M. Hunter, M.A., presented the report and moved its adoption; it was seconded by Mr. Sneath and carried. Miss C. Lafferty, Orillia public school, with a second class brought from her own school, exemplified her method of teaching reading. If results are the best proof of a method Miss Lafferty's is singularly successful, for the little ones read with a fluency, modulation and general intelligence that reflected the highest credit on her system, and their neat appearance did honor to their town. Her plan is to read a passage first herself, and get the children to underline emphasized words, then to read simultaneously; this is done as a preparation. Next day the pupils make their own corrections in style, pronunciation and inflection. Mr. Hughes complimented Miss Lafferty highly on her success, and several of the teachers present expressed their gratification at giving them such an admirable plan to follow up in their own schools. Messrs. Jenison and Neil Campbell were appointed auditors. The financial report was read which showed a balance to credit of \$20.16; passed. The president vacated the chair and proposed a hearty vote of thanks to Mr. Hughes for his valuable assistance; seconded by Mr. Sneath and carried with applause. The election of officers resulted as follows:—President, J. C. Morgan, M. A., I.P.S.; vice-pres., J. M. Hunter, M.A.; sec-treas., J. B. Carruthers; managing com., Miss Lafferty, Messrs. G. Sneath, Young, Campbell, and KcKee. Delegates to provincial association Messrs. Harvey, Hunter, and Sneath. After a few eloquent words of encouragement from the president, and the transaction of some routine business, the convention adjourned to meet next time in Orillia.

NORTH HONON.—The regular semi-annual meeting of this association was held in the central school, Brussels, on Thursday and Friday, May 25th and 26th. In the absence of the president, Mr. John Shaw of Brussels occupied the chair while Mr. Malcolm Black officiated as secretary. Mr. Sparling's essay on "Self Culture of Teachers," was evidently the work of considerable thought, pointing out clearly that teachers, when once they have obtained their certificate, should not rest upon their oars, but keep themselves thoroughly posted on current events, and improve their mental status by a liberal perusal of choice works. Mr. J. L. Robertson, representative of Messrs. W. J. Gage & Co., addressed the meeting on the subject of reading books. He exhibited a new series by Messrs. Gage & Co., which for choice selection, artistic finish, and general excellence far surpasses anything we have ever seen. A committee composed of Messrs. Dewar, Duff, Henderson, McKay and Shaw, brought in the following report on this series which was unanimously adopted:—"We are of opinion that notwithstanding the annoyance to parents arising from a change of text books, our present readers owing to their many defects should be superseded by a more desirable series as soon as they can be judiciously introduced. Having carefully examined the series of readers published by Messrs. Gage & Co., we can heartily recommend them as in every way superior to the series now in use, and we believe that their introduction into the schools of the country would be a decided benefit." (Signed) Arch Dewar, I. P. S.; John Shaw, H. M. Brussels central school; R. Henderson; H. M. Blyth P. S.; W. G. Duff; H. M. Roxboro P. S.; A. M. McKay, H. M. Cranbrook P. S. Mr. Henderson read an interesting essay on "How to cultivate literary taste in schools." Mr. Robertson's exemplification of the "Tome sol-fa system" was well received. In the evening a public entertainment was given in the Town Hall. The feature of the evening was Mr. Robertson's address on the "Work and care of teachers." Messrs. Duff and Robertson each gave songs, and Messrs. Wallis and Stewart and Miss Reinhart, readings. Mr. Sparling again read his essay on "Self culture of teachers." On Friday Mr. W. E. Groves gave a short discourse on "Practical arithmetic," which brought on a brief and interesting discussion. Mr. Robertson, of Toronto, addressed the teachers on the subject of "Reading." He first pointed out the great importance of this subject, as through it we derive our knowledge of all the sciences. He gave a humorous description of the old method of teaching the alphabet, and illustrated by blackboard illustrations the most approved methods of teaching the subject. He gave some amusing examples of the sing-song method of reading, and pointed out many of the errors into which teachers and others fall in teaching and practising reading. He advised a sparing use of simultaneous reading in schools, and showed how an interesting exercise might be made out of word-building. Mr. Robertson was listened to with rapt attention while delivering his address. On concluding, Mr. Robertson was tendered the thanks of the association for his able address. The valedictory of late secretary treasurer, Mr. A. M. Taylor, was read before the association, after which a vote of thanks to Mr. Taylor was moved by Mr. Dewar, seconded by Mr. Duff. It was also moved and seconded by the same that the valedictory with the permission of Mr. Taylor, be published. A resolution of condolence to the family of the late James Hartly Esq. McKillop, was adopted and the secretary instructed to forward same to Mrs. Hartly. Also a resolution congratulating the late sec. treas. Mr. A. M. Taylor on his appointment to the head mastership of Ingersoll central school, was adopted. Mr. Dewar, I. P. S., addressed the teachers on the question "Is the cultivation of morals sufficiently attended to in the public schools?" He pointed out the most prevalent faults common among pupils in the public schools, such as rudeness of manner and speech, copying, prompting, &c., and showed that the indulgence of these habits in youth depraved the morals and destroyed self-reliance, which is an important factor in forming good moral character. Mr. Dewar's remarks were pointed and forcible. He also referred to the negligence of some teachers in making out the annual and semi-annual reports. The election of officers was next called for and resulted as follows: President Mr. R. Henderson, Blyth; vice president, Mr. W. Duff, Roxboro; sec. treas. Mr. W. E. Groves, Wingham. Mr. Ferguson of Wingham, was appointed delegate to provincial association in Toronto. Messrs. W. T. Bray and Dr. McDonald, Wingham were appointed auditors. The meeting then adjourned to meet again in Seaforth in early autumn.

EAST GREY.—The semi-annual meeting of the East Grey teachers' association was held at Meaford on the 25th and 26th ult. Nearly all the teachers in the division, and also trustees and others were present. The president, Mr. M. Mackinnon of Meaford, presided. Routine business was first proceeded with. After the reading of the minutes of the previous meeting by the secretary, Mr. Farewell, Messrs. Grier and Henderson were appointed delegates to the annual convention of the Ontario teachers' association. The president explained the reason for the absence of Mr. G. W. Ross, and stated that it was impossible owing to other engagements on the same days, for the publishers of the CANADA SCHOOL JOURNAL to send a representative to the present meeting. He spoke of the excellence of the JOURNAL, and thought it would be well for the association to consider whether each member should be supplied with a copy out of the association funds. It was then decided

that each paying member should receive a copy from the association. The regular programme was then proceeded with. The president delivered an address on "The Bible in the public school." He believed the Bible should be read in our schools, but saw serious objections to its use as a text-book. He was afraid its introduction as a text-book would cause less reverence for the Word, lead to denominational teaching, and seriously impair the working of our admirable school system. The main agents in religious teaching must be ministers, sabbath school teachers, and above all parents themselves. Mr. John Whyte then explained his method of teaching "Dictation." Mr. A. Grier, inspector, discussed "School law," and dwelt especially on the changes made at the recent session of parliament. Mr. George Lindsay read a paper on "Super-annuation." He disapproved of the sliding scale system of payment which he characterized as iniquitous, and in the interests of the well paid teachers of the towns and cities. According to this system, he said, pensions would not be given according to services rendered, but money paid—an unheard-of thing. No action was taken as the Association had disposed of the matter at a previous meeting. Mr. Henderson with the aid of the blackboard explained his method of teaching "Music." He thought that music should be taught in all our schools, and said by a little attention every teacher would be able to teach it. Rev. Mr. Clark in his address on, "Memories of Dr. Ryerson," dwelt mostly on the great educational services of the Reverend Doctor. He set him up as an example to young men of what industry, perseverance, and moral rectitude can accomplish. An excellent essay on "Home training," was read by Rev. Mr. Johnston. He spoke of the importance of good early training, and pointed out the many mistakes made by parents. Mr. Jas. McMillan discussed "Practical education." He thought much of school study was useless save as a mental exercise. He recommended more attention to Botany and other sciences. Rev. Mr. Large read a paper on "Fictitious Reading," showing the evils of so much light frivolous reading, and the importance of improving time by the reading of what is useful and practical. The discussions which followed the introduction of each subject were interesting and profitable. The entertainment on the evening of the first day was a decided success. The cornet band with the aid of Mr. Kelly, a noted vocalist, and others, made a pleasant and enjoyable evening.

NORTH YORK.—The teachers of North York convened at Newmarket on the 26th and 27th of May. The minutes of the previous evening were, after a slight correction, approved. Miss Birnie of Newmarket model school, was called on to teach a class of children to spell. Her method was good, but provoked considerable criticism, some teachers thinking time could be saved by spelling orally instead of adopting her method of writing. The subject of uniform promotion examination was then discussed. It was thought a desirable plan, and a committee was named to collect information and to lay a plan before the convention at its next meeting. Mr. Armstrong, head master of Aurora school, took up his subject, "How to teach composition in school." He spoke of the value of the knowledge and the disgrace attending the lack of knowledge of this important branch. He thought the subject should be commenced in the lowest classes and continued to the higher grades. The convention agreed that it was injurious to assign such subjects as "Ambition," "Virtue," &c., &c., to pupils for composition as their minds was not able to grasp them thoroughly. The nominating committee reported at this stage and the following persons were elected to office.—Mr. Fotheringham, inspector, president; Mr. J. E. Dickson, H. S. M., vice-president; Mr. W. F. Moore, principal of Nobleton school, 2nd vice president; Mr. S. E. Jewitt, secretary and treasurer; Miss Annie Birnie of Newmarket, librarian; Messrs. Rannie, Armstrong, Holland, MacPherson, and Stone, managing committee. Professor Huntman was present and gave a very interesting lecture on the phonic method of reading. A vote of thanks was tendered to him. Mr. W. F. Moore read an excellent essay on "How to secure the co-operation of the pupils." Messrs. Dickson, Moore and Rose were appointed to draft a memorial of regret on Dr. Ryerson's death. Mr. Love sang the "English Lion" with good effect. Mr. Marton of Newmarket high school, illustrated his method of teaching decimal fractions. Mr. Marton seems to be master of his subject (mathematics) and deserved the vote of thanks that was tendered to him. At the evening session Mr. W. F. Moore, sang Tennyson's new song "Hands all round;" Miss Birnie rendered "The last Rose of Summer" in good style (instrumental). The Petch quartette choir sang a few pieces very well, also "Our Homes," by Mr. Petch. Mr. F. Spence from Toronto, spoke for an hour and a half on "Brain conflicts." This gentleman has the true gifts of an orator and dealt with his subject in masterly style. Miss Birnie sang a fine song in an appropriate manner. On Saturday morning Prof. Huntsman gave a half hour's lecture on phonography. Mr. F. Spence took up the subject of "Temperance in school." He said he would teach it as lessons in hygiene. The lecture was good and instructive. Miss Watson of Nobleton sang "Yesterday" very nicely. Mr. Scott of Toronto, gave two excellent addresses on History and Fourth Book Literature. Both lectures were full of thought and showed Mr. Scott to be a man of originality and ability. The convention then adjourned to meet at the call of the president.

LENNOX AND ADDINGTON.—The semi-annual meeting of this association was held in the model school building on Thursday and Friday, the 18th and 19th May. The first day at 10 o'clock a. m., the president Mr. Bowerman called the meeting to order and congratulated the teachers present on the large turn-out at the opening, there being over sixty teachers present from all parts of the county, some coming over forty miles to be present on that occasion. After the election of officers the president thanked the teachers for the honor they had conferred upon him in again electing him to the very important position which he occupied. He referred to the great loss the cause of education had sustained in the death of two of its leading educationists, Dr. Ryerson and A. T. Marling, M. A., high school inspector, and suggested that something should be done, before the meeting broke up, towards drafting a memorial to be placed on the books of the association. Mr. Burrows then gave his method of teaching the R. R. systems of Canada. It was evident from the way in which he handled the subject that he had taken a great deal of time in the preparation of the subject. His effort was highly appreciated by the teachers, and received a hearty applause. The president, called attention to some recent changes in the school regulations. 1st. That hereafter third class certificates shall be provincial. 2nd. That the renewal of third class certificates shall remain with the Minister of education, but annual reports as to the merits of such teachers signed by the inspector and the trustees of the section which he has taught are to be sent to the Minister. 3rd. There are to be district third class certificates. For the purpose of granting such certificates the Minister shall appoint a board of examiners. The subject of promotion examinations was then taken up. It was found that the system employed last year was not altogether successful, owing to the fact that the responsibility of conducting the examination rested entirely upon the teacher, which left room for a good deal of dissatisfaction in the minds of suspicious parents. It was finally resolved to divide the schools up into groups of five schools each, and that the teachers of each group should form the examining board for the group. The examinations are to be held in June and September of each year. A committee was then appointed to wait upon the county council and ask for a small grant to defray the necessary expenses for carrying on the promotional examinations. The meeting then adjourned to meet again in the evening at 8 o'clock, in the Town Hall. At the appointed time a large number assembled. The chair was occupied by the warden, Mr. U. Wilson. The first subject on the programme was a paper on the salary question by Mr. J. W. Black, H. M. east ward public school. Mr. Black reviewed the whole subject, from the time the teacher taught at \$5 per month and board, with the extreme pleasure of boarding around, up to the present time. The chairman then invited the members of the association to discuss the subject. Mr. Irwin, H. M. of Bath public school gave an admirable essay, on the reciprocal relations between teachers and parents. On Friday morning the meeting opened at the appointed time when most of the teachers were present. Mr. Rose, H. M. of Selby public school, then gave his method of teaching mental arithmetic which was well received. Mr. Tinsdale, H. M., Newburgh public school, being called on, gave his method of teaching literature; he gave some very valuable hints in that direction. The salary question was then taken and was warmly discussed by Messrs. Tinsdale, Bowerman, Hicks, Martin and others. Mr. Patton, who had been a teacher in this province for over a quarter of a century, was then called on, and gave a very interesting account of his first school, and some of the pleasures of boarding around. The committee appointed to draft a memorial being called on, presented the following:—Whereas, since our last session it has pleased God in His divine Providence to remove two of our eminent educationists, in the person of Dr. Ryerson, the distinguished founder of our educational system, and inspector Marling, we, the teachers of Lennox and Addington, desire to put on record our high appreciation of the services rendered by them to the cause of education, and our regret at the loss sustained not only by their immediate friends, but also by the province at large by their removal. Signed, C. Feasenden, W. M. Irwin, J. Bowerman, F. Burrows, D. Hicks, J. E. Mabec. The meeting adjourned until 1.30. On resuming, Mr. F. Ruttan, B. A. and Gold Medalist in natural science of Toronto university, was called on to give a lecture on the geology and mineralogy of the county of Lennox and Addington. He occupied two hours and a half and was listened to with marked attention by all present. On taking his seat he was greeted with prolonged applause by the teachers, after which a vote of thanks was given to the lecturer. The meeting then adjourned to the Town Hall at 8 o'clock p. m., when Miss Robertson gave an exposition of the kindergarten system, which she exemplified in a manner which left no doubt in the minds of the audience assembled that she thoroughly understood the subject. A fair audience greeted Miss Robertson, and all were well pleased with the entertainment.

ONTARIO—Held in the high school, Uxbridge, on 2nd and 3rd June. The attendance was rather small all through the several sessions, and many of those whose names were on the programme did not put in an appearance. The proceedings were opened by D. McBride, M. A., H. M. Port Perry high school, president. The minutes were read by the

sec. treas., Mr. A. G. Henderson, and on the motion of Mr. D. Jennings, adopted. Mr. Henderson, in the absence of Mr. Eddy, introduced the subject "Reading" and dwelt more particularly on elocution. A spirited discussion on the exercise ensued, joined in by Messrs: Jennings, McBrien, I. P. S., Lockyer and others. In the afternoon Mr. Henderson gave an extremely practical and useful address on "Book-keeping" showing how it could be advantageously taught in the public schools by adopting the simple accounts he had ruled on the blackboard, and going through actual business transactions with the pupils. On the motion of Mr. Magee, M. A., H. M. Uxbridge high school, seconded by Mr. McBrien, I. P. S., a cordial vote of thanks was unanimously given to Mr. Henderson for his excellent address. Mr. D. Jennings then took up "Fourth Book Literature," and advocated the teaching of collateral subjects in bringing out the whole sense of the lessons, such as geography, grammar and analysis, Latin roots, &c. Mr. Jennings was listened to with great attention and at the conclusion of his able and extremely practical address was warmly applauded. The subject was pursued in discussion with much ability by Messrs. McBrien, J. Willis, J. Brown, H. M. Whitby model school, and others. G. H. Robinson, B. A., H. M. Whitby high school, proposed the following resolution which was seconded by Mr. McBrien and carried unanimously:—"Resolved, that the county of Ontario teachers' association, upon this the first occasion of its meeting after the death of the Rev. Egerton Ryerson, D. D., L. L. D., late Chief Superintendent of Education for the province of Ontario, desires to express, and to place on record, its sense of the immense debt of gratitude the country owes to him under the blessing of Providence in founding and fostering our national system of education, the pride and heritage of our country; and to express the sense of the severe loss the teaching profession has sustained in the death of one who, both in his active work and his retirement, was in every respect the teachers' friend." The inspector, in a few earnest words, eulogized the memory of the distinguished deceased, and Rev. A. Davidson, and Rev. J. A. McClung also spoke affectingly of the great work that had been done by him for education. Mr. Robinson then proposed the following resolutions:—"That in the opinion of this association, the granting, by the Minister of Education, to private schools, having no connection with the state, and under no state control, the privilege of having the entrance examination and the intermediate examination, as obtain in the high schools, conducted within their walls and for the special advantages of their pupils, is a departure from the spirit of our educational system and the manner in which it has hitherto been interpreted; is likely to lead to great abuses; to injure the reputation and finances of the national schools; to introduce into our school system other questions than education; and that such privileges should be withdrawn from private schools and confined strictly to the national schools. Also, that a copy of this resolution be forwarded to the Minister of Education."—It was seconded by Mr. Magee, and after some discussion joined in by Messrs. Jennings, Davidson, Henderson, Magee, Crosby and Rev. A. Davidson, in which it was elicited that Pickering college was granted the privileges mentioned, the resolution was put and carried *sem con.* Mr. Jennings was warmly thanked by the association, on the motion of Mr. J. Brown, for his address on literature. *Second day.* The forenoon was devoted to a discussion on text books. As regards readers, Inspector McBrien said the series now in use were "the worst in Christendom," and spoke in high terms of the new series published by W. J. Gage & Co. Several teachers expressed dissatisfaction at the present series, and after some discussion, the matter was relegated to the standing committee to report at next session. Mr. Jennings tendered his resignation as vice-president of the association, as he was about to leave for British Columbia where he had accepted the head mastership of a school in an Indian missionary settlement. He expressed the cordial feelings he possessed for the association during the past ten years and the kind relationship that existed between the members and himself, and said that he should always remember them in the far-off land where his sense of duty called him and where he felt the lessons of experience he had learned while a member of the association would be turned to good account. Many of the teachers present testified to the worth and excellence which endeared Mr. Jennings to them, and hoped that he would prosper in his new sphere. On the motion of Mr. J. Brown, seconded by Mr. J. Lockyer, the following resolution was carried by rising vote:—"Resolved, that this association receives and accepts the resignation of Mr. Jennings with deepest regret, and desires to express the high esteem in which he has ever been held by its members both as an honored member and officer, and as an earnest and successful teacher in the county; and likewise to wish him even a greater measure of success in his new sphere of labour than has attended his efforts while one of us. In taking leave of him it cannot omit the opportunity of expressing its approval of the wisdom displayed in selecting a Christian gentleman and worker so eminently fitted for the position to which he has been called." Mr. Jennings expressed his gratitude for the kind feelings which prompted the resolution. Mr. Magee was elected vice-president and committee member in place of Mr. Jennings. Mr. J. Willis, Whitby, and W. W. Tambllyn, M. A., Oshawa, were appointed delegates to provincial association, after which the convention adjourned to meet at Whitby at call of general committee.

SOUTH SIMCOE.—The eight session of this association was held in the public school, Beeton, on the 19th and 20th ult., under the presidency of Rev. T. McKee, I.P.S. Minutes of previous meeting were read by Mr. J. C. Morrison, secretary, and confirmed. Mr. T. J. Atkins took up his method of teaching "Notation and Addition," which elicited a discussion on the various methods of teaching addition, joined in by Messrs. F. Wood, H. P. Hobson and Dr. Forrest. Several teachers having contributed to the Question Drawer, a profitable hour was spent in explanation and discussion on the different topics thus introduced. In the afternoon Mr. C. W. Chadwick read a paper on "Geography" which was highly appreciated. Miss Springer read a cleverly written essay on "The Teacher as a Moulder of Character," for which, on the motion of Dr. Forrest, seconded by Mr. E. Ferguson, she was tendered the cordial thanks of the association. The Question Drawer having been resumed and the advisability of promotion examinations being one of the questions, the matter was warmly discussed, but it was decided to postpone action until the secretary could ascertain from other counties how the system worked. Oral examinations, the age at which children should be first sent to school, and other important subjects were discussed, chiefly by Dr. Forrest, Messrs. Wood, Chadwick, Hipwell, Williams, B.A., Ferguson and York. Mr. Williams, B.A., H. M. Collingwood, C.I., gave an eloquent address on "The Benefit of the Study of English Literature," for which, on the motion of Mr. Morrison, seconded by Mr. Chadwick, he received the thanks of the association. A committee consisting of Messrs. Wood, Chadwick, McCandless, York and Williams, was, on the motion of Mr. Williams, appointed to consider the advisability of supplying one or more Educational Journals to the members. In the evening Mr. G. M. Adam read a lecture on "Live to be Useful," in the Court House. Dr. Forrest proposed and Mr. Williams, B.A., seconded a vote of thanks to the lecturer, which was passed unanimously. The president, Rev. T. McKee, occupied the chair. *Second Day.* The committee on Journals gave their report to the effect that each member pay the sum of \$1.50, and that the CANADA SCHOOL JOURNAL and the *Educational Monthly* be supplied to paying members for one year. On the motion of Mr. Hipwell, seconded by Mr. Morrison, the report was adopted. In the discussion on the report Mr. Morrison stated that it was the desire of the association to avail themselves in this most practical manner of the grant received from the County Council and to encourage the teachers to become paying members. As the attendance at the meeting was small the president said that in future he would send to the Minister of Education the name of every teacher who does not attend the convention of the association. On the proposition of Mr. Williams seconded by Mr. Wood, it was resolved:—"That the secretary give notice to all the teachers that the requirements in regard to associations will be enforced at next meeting, unless a valid excuse be sent for non-attendance." Dr. Forrest then took up "Grammatical Analysis" selecting some sentences which contained difficulties observed at several examinations. By simple signs he illustrated his plan of teaching and showed how he would dispose of the difficulties and render them comparatively easy of comprehension. His remarks were combated by Messrs. Williams, Chadwick, Hobson and Stewart and a lively discussion ensued. Mr. Ferguson then in a masterly manner showed his plan of teaching "Copy Book and Commercial Writing." He advocated the use of the Beatty series of Penmanship, and explained its principles, commenting on the excellent grading and general superiority of this series. The election of officers then came on, resulting as follows: President, Mr. F. Wood; Vice-pres., Mr. W. C. Chadwick; Sec-treas., Mr. J. C. Morrison; Committee of Management, Dr. Forrest, Rev. Thos. McKee, Messrs. Luck, Ferguson and Hobson. Moved by Mr. Chadwick, seconded by Mr. Wood:—"That only two delegates be sent to Ontario Teachers' Association;" carried. Moved by Mr. Wood, seconded by Mr. Luck, "That Dr. Forrest and Mr. Chadwick be delegates," carried. Moved by Mr. Wood, seconded by Mr. Chadwick:—"That the next meeting of the association be held in Cookstown at call of executive," carried. Adjourned.

EAST VICTORIA.—The teachers of East Victoria met in convention at Lindsay on the 25th of May, the proceedings, as usual, taking up the greater part of the following day as well. In the absence of Mr. S. Armour, the president, the chair was taken up by the inspector Mr. J. H. Knight who also delivered on the evening of the 25th a public address on "Public Examinations." The remainder of the programme for the evening meeting was filled up with readings by W. F. Seymour and J. D. MacMurchy. The first place in the programme of the convention proper was accorded to "Pronouns," a topic which was handled by Mr. O'Boyle with more than the usual amount of originality and of freedom from the restraints of formal grammar. The claims of "Short-hand" were ably advocated by Mr. J. Head who, as a skilled phonographer, naturally preferred and highly recommended that peculiar system of short-hand which goes by the name of "phonography." The deep interest taken in this subject justified the selection made by those who placed it on the programme. "Fractions" occupied the next division and the practical manner in which Mr. J. C. Smyth dealt with the subject won the hearty approval of the meeting. An exceedingly practical address on "How to save Time," by Mr. W. F. Seymour, was listened to with marked attention but the great number of the useful hints with which it bristled made it

impossible to give over the mere synopsis of his method. On Friday morning Dr. Curry, inspector of Haliburton, read a very practical paper on "School Work and Physical Development," for which he was warmly thanked by the Association. A paper containing some practical views as to how "conventions" should be managed, was read by G. F. Sherwood, and a very able and, for its length, comprehensive review of the history of English literature was given in the form of a paper on that subject by A. Caruthers, B.A. During the day the question drawer was opened from time to time as the state of the programme warranted and many of those present took part in the discussion of such practical questions as: "How would you check truancy?" "Are prizes in schools beneficial?" "Should fractions be taught before or after the compound rules?" "Should spelling be taught orally?" &c. The election of officers resulted in the following list for the coming year:—President, J. H. Knight; 1st V. P., J. C. Smyth; 2nd V. P., Miss Peplow; Secretary, J. Head; Treasurer, G. A. Irwin; Librarian, J. D. MacMurchy. The meetings were unusually well attended and the convention was more than an average success.

NORTH HASTINGS.—This Association met in Madoc, May 18th and 19th. The minutes of last meeting were read and adopted, after which the report of Committee on Promotion Examinations was read and approved, and the action of the Committee endorsed. The printed regulations for the examinations were then adopted. Mr. Morton was appointed delegate to the Provincial Association. Mr. Beall read an article from the *Century Magazine*, entitled "Hints on Reading," after which the Association adjourned. In the afternoon, after roll call, Miss Wootton taught a primary reading class in a manner that could not fail to be instructive to those who saw and heard it. A short discussion on the subject followed. After a reading by Miss McDermid, Dr. McLellan introduced the subject of Intelligent Teaching of the Simple Rules. After a short intermission, Mr. Hicks introduced the subject of History, dealing with it generally. He called attention to the fact that the purpose in teaching this as other subjects is to prepare the pupils to work for themselves. Mr. Mackintosh then took up Grammar and Composition. In the evening, Dr. McLellan delivered a most eloquent address on "Teacher and Parent in Relation to the School," to a large and deeply interested audience, who showed their appreciation of the lecture by frequent applause, and by the hearty vote of thanks tendered the lecturer at the close. On Friday, Mr. Mackintosh addressed the teachers on the approaching Uniform Promotion Examinations, and resumed the discussion of Grammar and Composition, giving many valuable suggestions as to the proper teaching of these important subjects. Mr. Jenkins then discussed the Geography of North America, which he would teach by means of both map and map-sketch. After a short discussion, Dr. McLellan took up the subject of "Reading, and How to Improve it." He dwelt on the importance of Reading, calling it the key which unlocks the doors of all other knowledge. He advised teachers in teaching it to beginners to combine the phonic with the word method, and analyze all simple words. The subject of School Management was discussed by Mr. Miller, who gave many valuable hints on the management of pupils both in the school and at home. In the afternoon, after a reading by Mr. Hicks, Dr. McLellan discussed the subject of Good and Bad Questioning, giving examples of both. He spoke first of the objects of questioning, then the qualifications of the questioner, and lastly of the characteristics of good questions. Dr. Dafoe then gave a most valuable address on Hygiene, for which he received the thanks of the Association. The Question Drawer was opened and questions answered by Dr. McLellan and Mr. Macintosh. A Reading by Miss Riddell followed, after which it was moved by Mr. Hicks, seconded by Mr. Miller, and carried unanimously, "That the thanks of this Association be tendered to Dr. McLellan, for his valuable assistance in making this a successful meeting." To this Dr. McLellan briefly replied. The following resolutions, moved by Mr. Mackintosh, seconded by Mr. Wood, were passed:—"That this Association desires to put on record its deep sense of the irreparable loss sustained by the Province generally, and the cause of Education in particular, by the death of Rev. Dr. Ryerson, to whose wise conception and great administrative abilities we owe our unrivalled system of national education." "That this Association tender their sympathy to the widow and family of Dr. Ryerson; and, that a copy of this resolution be transmitted to them." After singing the National Anthem the association adjourned.

SOUTH GREY.—The semi-annual meeting of this association was held in the Town Hall, Lechertown, on the 25th and 26th May. There was a good attendance on both days. After the usual routine business was transacted the president, Mr. M. N. Armstrong of Durham model school, delivered a well prepared and practical address which was well received. The inspector was present at all the sessions of the convention and took a hearty interest in the work. Before the programme was entered on several committees were appointed. The following subjects were introduced and discussed the first day. "The necessity and best methods of class marking," by Mr. T. Hall; "The use and abuse of emulation in school" by Mr. Irvine; "Mathematical geography" by

Mr. Gossline; "Mistakes in pronunciation" by Mr. W. Campbell, and "Text books in school" by Mr. McMaster. Mr. Williams H. M. of Collingwood collegiate institute was present during the afternoon session and readily gave the benefit of his knowledge and experience to the members of the association. The inspector read well prepared answers to a series of questions sent to question drawer. After preliminaries on Friday the first business was receiving reports of committees appointed the preceding day. The committee on nominating office bearers for next year gave in their report through Mr. Gossline which was after some discussion unanimously sustained. The following are the office bearers for the ensuing year:—President, M. N. Armstrong; vice-president, M. P. McMaster; managing com., W. J. Patterson, W. L. Dixon, S. Neely and W. Sharpe; delegate, M. P. McMaster; auditors, Donald McDonald and Chas. Ramage; sec.-treasurer, John C. Bain. Report from librarian was handed in by inspector. Auditors' report read and accepted. Mr. Williams, B. A. of Collingwood then gave a most admirable address on "English literature" which was highly appreciated by the members of the association. Mr. D. Boyle of the Canada Publishing Co. gave an address on "What Canadian reading-books ought to be," strongly urging the claims of the series proposed to be published at an early date by the above Company in Toronto. It was deemed advisable to adjourn the discussion on readers till the afternoon. Mr. W. Campbell then introduced his subject, "The infinitive and participles" and as might be expected and as Mr. C. intended the paper gave rise to an animated discussion which had to be adjourned. The afternoon was mainly occupied by the discussion on readers, one or two whose names were on the programme giving place to the gentlemen from Toronto. Mr. W. J. Gage advocated the claims of the new series of readers published by his house some time since and which are being extensively used in other provinces of the Dominion, and Mr. Boyle again urged the merits of the series that are being prepared by Campbell of Toronto. As comparatively few of the members of the association had a proper opportunity of fully examining the Messrs Gage & Co's series of readers it was not deemed wise on the part of the association formally to endorse them but those teachers who had proper opportunities of examining the readers expressed the pleasure and the profit they would have in using them instead of the series at present in use. The secretary was authorized to forward a copy of the following minute to all the members who had not an opportunity of hearing the matter discussed and carried at the meeting. Resolved:—"That the fee for membership for ensuing year shall be 50 cents, and that all members paying the same shall be entitled to receive a copy of either the *Canada School Journal* or *School Examiner* for one year commencing June, 1882, and that the payment of the additional sum of 50 cents shall entitle a member to receive both journals." On the evening of Thursday a very successful entertainment was given in the Town Hall. Addresses were delivered by Rev. Mr. McLeod, Mr. Williams, Dr. Christie and Rev. Mr. Phillips. Reading by Mr. M. N. Armstrong. The music was supplied by several young ladies of Flesherton and by Mr. Anderson whose rendering of several Scotch songs was, as usual, much admired. JOHN C. BAIN, Sec.

PRESCOTT.—The regular semi-annual meeting of the Prescott teachers' Association, was held in the high school, Hawkesbury, on the 9th of June, 1882. About fifty teachers were present. The president, Mr. W. J. Summerby, I. P. S., opened the proceedings with a very interesting address on "Education in the United Counties," comparing the educational standing of the united counties with the other counties of Ontario. The following were elected officers for the ensuing year:—President, Mr. W. J. Summerby, I. P. S.; vice-president, Messrs. J. A. Houston, B. A., and T. O. Page, B. A.; secy.-treas., F. Bissett, L'Original; committee of management; Messrs. D. Marshall, O. Duford, J. W. McCutcheon, Miss Hyde and Miss de Tilley. The subject of "Hints on arithmetic" was then taken up by Mr. C. R. Gray, giving many useful hints and explaining fully a few methods of writing problems on the blackboard for junior classes, so as to save the time and labor of the teacher. An excellent essay on "Letter writing" was read by Mr. J. W. McCutcheon, explaining afterwards by examples on the blackboard, his method of teaching the subject. A short discussion followed. In the afternoon Mr. F. Bissett read an essay on "Incentives to study," which was well received,—dealing especially with the following points,—approbation, disapprobation, emulation, and giving of prizes. "A method of writing" was then taken up by Mr. C. R. Gray, in which he pointed out the defects of the system, at present used in our schools, and the difficulties teachers have in teaching it. He advocated the adoption of the "half engrossing hand" and illustrated his method by numerous examples. Considerable discussion followed. Mr. E. B. Robinson followed with an able essay on "How not to teach" pointing out many errors of method into which teachers are apt to fall. During a short intermission the committee of management met and it was decided that the next meeting of the association should be held at Vankleek Hill, on the 6th and 7th of October next. On the meeting being again called to order Mr. J. A. Houston, B. A., read a highly suggestive essay on "Modern history" clearly pointing out the important part newspapers should play in school work, especially in teaching history and geography, and in cultivating a taste for good reading. Mr. D. Marshall followed with a very instructive essay, on "The teacher out of school," touching on the following points in a very practical manner.—The teacher's habits,—employment of leisure time—out-door exercise—finances and social standing. Several other subjects were to have been taken up, but the gentlemen having charge of them not being present, it was considered advisable not to continue the meeting on Satur-

day. The association then adjourned to meet again at Vankleek Hill, on the 6th and 7th of October next. Dr. McLellan not being able to attend, the lecture which was to have been delivered by him on Friday evening was postponed.

Readings and Recitations.

FOUND AT LAST.

"Mister, no doubt you have all the learnin' that's required in a school teacher, but it wants more than learnin' to make a man able to teach school in Cranberry Gulch. You'll soon find them out if you try. We've had three who tried it on. One lays there in the graveyard; another lost his eye and left; the last opened school and left before noontide for the benefit of his health. Now you're a slender build, and all your learnin' will only make it worse, for all our young folks are rougns and don't stand any nonsense!"

This was what one of the trustees of the district said to my friend Harry Flotee, when he made application for the vacant position of teacher.

"Let me try. I know I am slender, but I am rough and have a strong will," said Henry.

"Jest as you like. There's the school-house, and I'll have notice given if you want it done," said the trustee.

The notice was given and there was a good deal of excitement in the gulch and along the Yuba flats. More than fifty young people of both sexes made an excuse to drop into the tavern to get a sight at the fellow who thought he could keep school in that district, and many contemptuous glances fell on the slender form and youthful face of the would-be teacher. Eight o'clock on Monday morning came, and Harry Flotee went down to the school-house with a key in one hand and a valise in the other.

"Ready to slope if he finds we'er too much for him," said a cross-eyed, broad-shouldered fellow of eighteen.

The school-house was unlocked and the new teacher went to the desk. Some of the young folks went to see what he was going to do, though school was not called. Harry opened his valise and took out a large belt. Then, after buckling it around his waist, he put three Colt's revolvers there, each six barrels, and a bowie knife eight-teen inches in the blade.

"He means business!"—muttered the cross-eyed chap.

The new teacher now took out a square card about four inches each way, walked to the other end of the school-house and tacked it up against the wall. Returning to his desk, he drew a revolver from his belt, and quick as thought sent ball after ball into the card, till there was six balls in a spot not much larger than a silver dollar. By this time the school-house was half full of large boys and girls. The little ones were afraid to come in. Then the teacher walked half way down the room with the bowie knife in his hand, and threw it with so true a hand that it struck quivering in the very centre of the card. He left it there and put two more knives of the same kind in his belt and quietly reloaded his yet smoking pistol.

"Ring the bell; I am about to open school." "A SNA!"

He spoke to the cross-eyed boy, the bully of the crowd, and the boy rang the bell without a word.

"The scholars will take their seats; I open school with prayer," he said sternly five minutes later.

The scholars sat down silent, almost breathless. After prayer the teacher cocked a revolver and walked down the floor.

"We will arrange the classes," he said. "All who can read and write will rise. Of them we will form the first class."

Only six got up. He escorted them to upper seats, and then began to examine the rest. A whisper was heard behind him. In a second he wheeled, revolver in hand.

"No whispering allowed here!" he thundered, and for an instant his revolver lay on a level with the cross-eyed boy's head.

"I'll not do so any more," gasped the bully.

"See you do not. I never give assistance to trifling," said the teacher, and the revolver fell.

It took two hours to organize the classes, when done, they were well organized. Then came recess. The teacher went out, too, for the room was crowded and hot. A hawk was circling overhead high in the air. The teacher drew a revolver and the next second the hawk came tumbling down among the wondering scholars. From that day on Harry kept school for two years in Cranberry Gulch, his salary doubled after the first quarter, and his pupils learned to love him as well as to respect him, and the revolvers went out of sight within a month. They had found a man at last who could keep school.—*San Francisco Chronicle*.

PASTOR DANKMARDT.

POMERANIA, 1807.

'Twas in the Northern German land,
Fast by the Baltic Sea,
When the French Emperor sent h's troops
To bend the people's knee,

And dwell within their houses,
Feasting on wine and corn,
Till German hearts should learn to feel
The might of foreign scorn.

They came to Bodenstede,
A hamlet green and still,
With fountain in the market place,
Where maids their pitchers fill.

They overran the villago street,
They overran the inn,
They stole the peasants ripening crops,
And strove the maids to win ;

And up and down throughout the night
They sang their ribald song,
While hidden evils darted forth
To join the lawless throng.

How fair was Bodenstede !
But deeds the Frenchmen wrought
Among her pleasant summer fields
No peaceful harvest brought.

The people seized the soldiers,
And bore them to the strand,
And shipped them to a barren shore
Within a hostile land,

And then returned rejoicing ;
But he, the nations' faté,
Quickly dispatched a mightier corps
To hold the conquered state.

Alas for Bodenstede !
How sad the sun uprose
That day the foreign flags returned
Before his golden close !

Rode forth Commander Mortier :
"Seize all the men," he cried,
"Who rule in Bodenstede,
And place them side by side ;

"And at the signal given,
Shoot each man where he stands.
They that remain shall live to see
Their blazing homes and lands."

Then forward stepped the pastor ;
His eyes were bright as flame ;
"If any man is shot, shoot me !
Mine is the guilt and shame.

"I bade the people to revolt,
And drag the men away ;
I sent them to the Swedish shore ;
'Twas I urged on the fray.

"Hear me, O sire, how innocent
These people surely are ;
I pray thee burn my guilty roof,
But all the others spare."

The stern Commander Mortier
Heard what the pastor said,
One moment stood irresolute,
Then turned his horse's head :

And putting spurs to flank, they rode
Out from the wandering town ;
And as they passed, the word was given,
"These fisher-huts burn down !"

A few poor sheds where no man dwelt !
No blood that day was spilled :
And thus Commander Mortier
The Emperor's law fulfilled.

Those battle-fields are overgrown,
Dim is their glory now ;
But Virtue ever wakeful shines ;
The stars are on her brow.

The pastor in his flowing gown,
Before the armed host,
Joyfully giving life and home
If ho may save the lost :

Deep in the German father-land
This rooted memory grows,
And safe within the children's heart
The living picture glows.

—ANNIE FIELDS, in *Harper's Magazine* for January.

THE OLD BRICK SCHOOLHOUSE.

BY GEO. E. BURLEIGH.

The Old Brick School House on the green,
With its pyramid roof and windows high,
And the sentinel poplars, tall and lean,
That seemed to my fancy and boyish eye,
Standing up stify and brushing the sky
As a trooper's plume is seen,—
I figure them still as I saunter by.
Though house and trees, and the green itself,
Have gone at the touch of Time, the elf ;
Who leaves, for old things laid on the shelf,
Only new ones,—and a sigh !

How the bolt-up benches were hacked and hewn
By the Yankee jack-knife's hungry edge,
Into scrap, transverse, and demi-lune ;
What sculptured names on the window-ledge,
And beetle-head profiles, with nose for a wedge,
Just splitting a carved moon !
And how the dear dumpies, with legs too short,
Hung on the fore-forms perilous perch,
With nothing to touch on the back, but the birch,
And nothing below to recover a lurch,
But the far-floor futilely sought !

There were gaps in the wall and a crack round the door,
Where the wind would come and whistle in school,
And gaps in the all-molien floor,
To serve, as the head broiled more and more,
To keep us the dear feet cool !
And the wood would fall in stormy days,
So only the boist'rous boys could stay ;
With logs and laths in a roaring blaze,
To warm the house we would nearly raze,
In the other sense, with our tearing plays.
Through the howling of gale(y)-day.

The fire-place, which had long subdned
The ardor of fuel to "latent heat,"
For the stubborn rebel, hot and rude,
Proved most, for a cooling dungeon meet.
While the huge stove-pipe,—an iron street,
Or Menai bridge, pursued.
By the haunting notion a fall would suit.
The boys below as a striking joke,
Would slip its joints like a crab, and do't,
Scorching the fingers put rashly to't.
While fire and boys rushed out with a hoot,
And the whole thing ended in smoke !

There were noble boys and fairy girls,
Whom now I see through the haze of years
As through that smoke's voluminous curls,—
My eyes repeating the same old tears,
Though moving far in their sundered spheres
Their chequered web unfurls ;
Some plant new States in the stately West,
Some plant potatoes and onions here ;
Some rock their little ones on the breast,
And some, if less happy perchance as blest,

Over the bed of a darling's rest
Are dropping a mother's tear.

We've a new brick schoolhouse, stiff and tall,
The front threelegged with columns white,
And elbowed into the street by a wall;
While squash and cabbage usurp the site
Of the former, as if there by right,—
The old heads done in small!
But sooth if I were a boy, as then,
I would long to see the old hut back;
My heart would sigh for each dear old crack,
And my jack-knife burn for a place to hack,
Though for hacking it burned again.

REVIEWS.

The annual report of the superintendent of schools for the State of Wisconsin for the year ending August 31, 1881 has just come to hand. According to him a survey of the educational movements of the State shows that improvements have been secured in the following points: (1) a steady and healthful advancement in all grades of schools and methods of school work; (2) a more manifest expression of the spirit of harmony and earnest zeal in the management and teaching of schools; (3) a more general and decided recognition of the prominent defects in the public school system and greater willingness to remedy these defects; (4) a growing sentiment in some sections in favour of employing teachers with better qualifications, and for longer terms; (5) an increased and more uniform attendance of pupils; (6) a wider dissemination of the most reliable information about hygienic laws as applied to the construction of school houses, the oversight of school grounds, and the care of children while in school; (7) a marked progress in the methods of classifying and instructing the pupils in ungraded country schools.

AN ETYMOLOGY OF LATIN AND GREEK. By C. S. Halsey, M.A.; Boston, Ginn, Heath & Co.—Our first impressions of this work are that it is admirably adapted to the object in view—that of “presenting, within the limits of a school-book, the most needful etymological information, that is not adequately furnished by the grammar or the lexicon.” It is well known that according to ordinary methods of classical instruction no systematic knowledge of etymology is obtained. We believe that this book meets a felt want in this direction. The advantages of comparative philology or historical etymology cannot be attained merely through the use of grammar and lexicon. Here, however, is a work that “gives the original and central meaning of related words, and, gathering the words themselves together, unites them by the natural bond of their common origin.” A comparison such as is here given tends not only to reveal new and interesting truth, but develops the mind and stimulates it to further investigations in this department of study. The book is got up in the excellent style so characteristic of this firm.

Poems, Songs and Odes is the title of a small volume published by the author, A. McAlpine Taylor, now headmaster of the Ingersoll model school. Such an undertaking argues on the author's part no small amount of courage in the face of the little patronage such productions have always received in Canada. There are many fine thoughts in the poems and many of them are admirably expressed, but there are also defects which might have been avoided had the *M. S.* been submitted before publication to some candid and intelligent friend. No author ever made a high reputation by trusting to the indulgence of the public. The better plan is to see that the article placed before his readers is as little open to adverse criticism as possible.

Roget's “Thesaurus” is one of the best known works on the use of the English language and one of the most useful. It is needless to introduce here any description of a work which is to be found in every well-equipped study especially when the proprietor's occupation is either translation or original composition. It will serve a much better purpose to endeavour to give some idea of the difference between the edition just published and the

first edition which was issued in 1852. Dr. Roget's original collection of synonyms was the result of fifty years' observation and work. The latest edition prior to the one now before us was issued in 1855, and though the collection was at that time a very full one, the lapse of years and the growth of the language made it inevitable that it should fall behind the times. The work of preparing this revised edition has been undertaken and carried out by Dr. Roget's son who has had the advantage of his father's memoranda and also of other valuable assistance. The general arrangement of the ‘Thesaurus’ is that of a series of categories, each made up of a word, representing a leading idea, and other words representing ideas more or less closely related to it. It is evident that many words must logically appear in more than one category, and as this would tend to make the book inconveniently large the editor has adopted the plan of substituting references to places where words have been inserted instead of repeating the words themselves. One of the important features of this revised edition is a better classification of the ideas included in the categories. The index has been considerably elaborated and now forms a peculiarly valuable vocabulary of nearly 300 pages.

Dr. Hodgson's work* is one of those ingenious and scholarly treatises which are a source of delight to the student apart altogether from their utility. It is not intended to supersede the use of “formal helps to English composition,” but rather to show those who want to write good English how to avoid errors of the more subtle kind in the use of words. No mere description of the author's method would give so good an idea of the work as a specimen of his mode of dealing with misused words. Take for instance the preposition “between”:

Quality is the fundamental notion of “between,” which cannot therefore correctly be employed with more than two objects of reference or without the two objects being clearly indicated . . . Instances of “between” with more than two objects are:

“Between the offences of blasphemy, hypocrisy, and perjury, and partaking of the guilt of all three, lies that of apostasy.” MISS COBBE, *Intuitive Morals*.

“Paxriteles is said to have definitively given the character of sensuality to Venus who had previously floated between several ideals of beauty.”

LECKY, *History of Rationalism*.

“Stirring up at the same time no little ill-will between the various races—English, French, Scotch, and Irish—who inhabited Canada.” *Westminster Review*.

“Where between every stitch she could look up and see what was going on in the street.”

MRS. GASKELL, *Mr. Harrison's Confessions*.

“The statement is dovetailed in between an attack on aristocratic converts to Rome and young men in business who attend Ritualist ceremonial.” *Saturday Review*.

“If he does not distinguish between the province of reason and emotion—the most difficult of philosophical problems—he keeps clear of the cruder mysticism.”

LESLIE STEPHEN, *Hours in a Library*.

Of course the author indicates how the errors in his specimens of bad English are to be corrected, and his remarks on the correct use of words are nearly always unexceptionable and are often peculiarly instructive. The work is arranged in parts, the first of which contains in alphabetical order spurious words and words used with other meanings than their own; the second deals with blunders in the forms of words; the third treats of errors in arrangement and collocation; and the fourth discusses instances of confusion of thought and expression. In other words the four departments of the book deal with vocabulary, accident, syntax, and rhetoric respectively.

MAGAZINES.

NORTH AMERICAN REVIEW.—In the number for June, Senator W. B. Allison has a paper on “The Currency of the Future” in which he indicates the measures that will have to be taken by Congress for insuring a stable currency after the national debt has been extinguished. “A memorandum at a venture,” by Walt Whitman, is an explanation of his purpose and point of view in trenching upon topics not usually regarded as amenable to literary treatment. “Andover and Creed Subscription,” by Rev. Dr. Leonard Wooley Bacon, is a philosophical review of the present state of dogmatic belief in the churches. Hon. George F. Seaward, late minister to China, in an article entitled “Mongolian Immigration,” makes an argument against anti-Chinese legislation. Dr. John W. Dowling, Dean of the New York Homeopathic medical college, comes to the defence of the Hahnemannian school of medicine against a recent attack upon its principles and methods. O. B. Frothingham has a sympathetic article on Swedenborg. Not the least important paper is one entitled “Has Land a Value,?” by Isaac L. Rice, it being a criticism of one of the fundamental postulates of Henry George's political economy. Finally, Charles F. Leydecker essays to prove that a “National Militia” is a constitutional impossibility.

THE DAY OF REST has been received. It contains a variety of articles on a number of subjects, and will interest its readers.

*Errors in the use of English. By the late Wm. B. Hodgson, LL.D., Professor of Political Economy in the University of Edinburgh. New York, D. Appleton & Co., Toronto, Willing & Williamson.

Announcements.

THE ONTARIO TEACHERS' ASSOCIATION.

The twenty-second annual meeting of the Ontario Teachers' Association will be held this year in the public hall of the Education Department, in this city, on the eighth, ninth, and tenth of August. The association has, for nearly a quarter of a century, undertaken to discuss all kinds of questions connected with the educational system of the province, and on many of them it has from time to time pronounced very decided opinions. These opinions have, very properly, been treated with great respect by the Department, and many of the most useful improvements of recent years are the result of suggestions made by the Association. At the present time there is more need than ever that the inspectors and teachers should zealously watch the tendencies of our very excellent, but not yet perfect system, and contribute the results of their experience for the guidance of those who are placed in charge of it. For this reason we hope to see a larger and more representative attendance than ever before. The following is the official programme of proceedings:—

TUESDAY, 8TH.

- 10.45 A.M. The Treasurer's Report and General Business.
- 2.00 P.M. Reports of Committees.
- 3.30 P.M. "School Hours and Vacations."—Mr. F. S. SPENCE.
- 8.00 P.M. President's Address.—A. MACMURCHY, M.A.

WEDNESDAY, 9TH.

- 2.00 P.M. "How to make Teachers' Associations more useful."—G. W. ROSS, M.P.
- 4.00 P.M. "Drill in Music."—Mrs. G. H. RICHES.

8.00 P.M. An Address by J. A. McCABE, LL.D. Principal Normal School, Ottawa. Subject, "The Schoolmaster Abroad."

THURSDAY, 10TH.

- 2.00 P.M. Election of Officers.
- 2.30 P.M. "Inductive and Deductive Methods in Education."—Prof. M. MACVICAR, Ph.D., LL.D.
- 4.30 P.M. "Text Books in Public Schools."—Mr. J. B. SOMERSET.
- 8.00 P.M. "Temperance in Public Schools."—Mr. W. H. HOWLAND.

Prof. GOLDWIN SMITH, will, it is expected, address the meeting during this evening.

The Sections will meet during the forenoon of each day.

PUBLIC SCHOOL SECTION.

- "Christmas & Midsummer Shows (Examinations)."—Mr. R. LEWIS.
- "Granting of higher Certificates to thoroughly successful Teachers of long standing in the Profession."—Mr. S. McALLISTER.
- Revision of Programme. Text Books. High School Entrance Examination.

HIGH SCHOOL SECTION.

- "Training of High School Teachers."—C. FRESSENDEN, B.A.
- "Relation of High Schools to the University."—J. MILLAR, M.A.
- "Proposed Modifications of the Intermediato."—G. ROBINSON, M.A.
- "High School Programme of Studies."—H. J. STRANG, B.A.
- "Legislative Aid to Secondary Education."—A. P. KNIGHT, M.A.

PUBLIC SCHOOL INSPECTORS' SECTION.

- "How to make Teachers' Associations more useful."
- "Uniform Promotion Examinations."
- "Public School Inspection."
- "How to obtain the best results from County Model Schools."
- "Public School Programme."

ARCHIBALD MACMURCHY, ROBERT W. DOAN,
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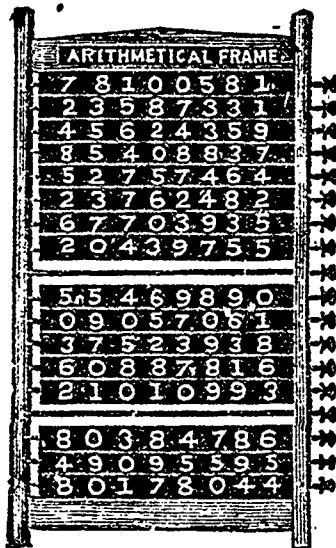
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The hints for teaching spelling are excellent. I have shown it to a number of experienced teachers, and they all think it is the best and most practical work on spelling and dictation ever presented to the public. It will supply a want long felt by teachers.

Plan Ingenious.

J. S. CARSON, L.P.S., Strathroy.

The Practical Speller is a superior little work, and should find its way into every public school. The plan is ingenious, and for aught I know may be original.

Very Happy Arrangement. W. J. HENDBY, Fr. Co. Mod. School, Yorkville.

The plan is an excellent one. The groups of words are nicely arranged and graded, so that common words, or those that are most frequently used, are to be learned first. It is a very happy arrangement that of the reviews at the end of each part, and the selection of extracts containing sentiments of moral worth, and possessing literary excellence, to be used for dictation and also for memorizing. On the whole it is the best I have met with.

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E. J. OWEN, Prin. Academy, Lunenburg, N.S.

The preface is capital. I am charmed with the practicalness and freshness of the first four parts. I have at least a dozen different treatises on spelling and not one of them comes up to my idea of what a spelling-book should be as you are does.

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The arrangement and grading of the different classes of words I regard as excellent. Much benefit must arise from committing to memory the "Literary Selections." The work is admirably adapted to our public schools, and I shall recommend it as the best I have seen.

Preface Endorsed. N. M. CAMPBELL, H. M. Co. Egin Model School

I am well pleased with it. I endorse every word in the preface. Would like to see it introduced into every school.

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G. D. PLATT, Co. School Insp., Pictou.

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I am favorably impressed with the plan of the work, while the typography is excellent. I think it a decided improvement upon the present text-book.

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It possesses, in a marked degree, the necessary elements of such a work. There are several features, notably the well-arranged lists of words and names in common use, with the accompanying exercises for review, and the choice literary selections, which must make it a general favorite, and materially aid in securing for it a place among our standard text-books.

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Admirable Work. HOWARD MURRAY, Prin. Academy, New Glasgow, N.S.

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Collection of Gems. M. L. FIELDS, Prin. Graded School, Bridgetown, N.S.

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Well Prepared.

H. HUBBARD, I.P.S., Sherbrooke, Que.

It seems to me to be well prepared, and well adapted for general use as a manual, particularly in dictation exercises.

Classing of Words.

E. J. LAY, Prin. Academy, Annapolis, N.S.

I am much pleased with it. I like the plan of grading the lessons, and also the classing of words pertaining to certain trades, professions, etc. I have found it very useful in dictation exercises. Have recommended it to several teachers.