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The Canada School Journal.

VOL. II.

TORONTO, MAY, 1878.

No. 12.

THE HON. GEDEON OUIMET, Q. C., D. C. L.

Prior to the Confederation of the British North American Provinces, the administration of the Laws of Public Instruction in Lower Canada was confided to a "Superintendent of Education." The office was filled, first, by Dr. J. B. Meilleur, appointed in 1842, and subsequently, from 1855 to 1837, by his successor, the Hon. P. J. O. Chauveau. The Superintendent was a non-political functionary, being neither a member of the Government of the day nor of the Legislature; but he exercised, nevertheless, advisory functions in respect of legislation concerning Public Education, and a recommendatory voice as to the distribution of the public money appropriated by the House of Assembly for its advancement. At the epochs of Confederation, the British North America Act having delegated the control of Public Education almost exclusively to the Provincial authorities, the office of Superintendent was merged in that of a Minister of Public Instruction, who, besides being a member and the head of the Local Cabinet, might represent a constituency in the Federal as well as in the Local Legislature.

The subject of this notice—the Hon. Gédéon Ouimet—on Mr. Chauveau's retirement in 1878, was called upon to succeed him, as Premier of the Provincial Government and Minister of Public Instruction. Although holding a seat in the House of Assembly he was, fortunately for the interests of Education, free from the outside cares that had devolved on his predecessor as a member of the Federal Parliament; and, in consequence, the supervision of educational affairs became, in a marked degree, more efficient than it could have been before. Nevertheless, the union of the cares of State with those appertaining to Public Education was held by many to be incongruous, and in several respects hurtful to the cause of Education, notwithstanding the acknowledged advantages accruing to it from its having an influential patron and advocate in the Cabinet. Happily, the connection was abolished by an Act of the Local Legislature passed in 1875, which enacted that the administration of the Educational affairs of the Province should be replaced in the charge of a Superintendent. Public sentiment pointed to the Hon. Gédéon Ouimet as the person most eligible for the important position, and he was named accordingly on Feb. 1st, 1876. An interval of about 18 months had occurred since he had ceased to be the head of the Educational Department, and



during which the Hon. Mr. De Boucherville had been Minister.

In the comparatively brief period which has passed since the Hon. Mr. Ouimet has had charge of the educational interests of the Province of Quebec, apart from politics, a very powerful impulse has been imparted to the Educational machinery, and already a very gratifying progress has been made. The School Acts, passed and amended from time to time, in the last 37 years, and which had become very complicated in respect of practical use, and, in some cases, obsolete or inoperative, have been carefully revised and reprinted, with marginal references very useful to members of School Boards and others engaged in educational concerns. The work of the Department itself has been re-organized and rendered more efficient than before. In respect of correspondence and official intercourse with School Commissioners and Trustees, with Inspectors, and those charged with special duties in carrying into effect the laws of Public Instruction, much improvement has been effected, and this has been, in a great measure, brought about by the issuing of several important circulars, defining the functions of all concerned, instructing them in particulars and details of their duties, and encouraging, at the same time, more elevated views of their nature. On a small scale the system of public exhibitions of educational work was introduced last season, with gratifying success, so that a beneficial emulation has been stimulated amongst managers of institutions, teachers and scholars, which has led to the making up of an extensive and most interesting collection of educational objects for the forthcoming International Exhibition at Paris.

It is worthy of mention—a fact of some significance in its bearings upon the interests of a mixed population like that of the Province of Quebec—that Mr. Superintendent Ouimet is regarded with much favour by the minority of the Province generally. In all cases in which Protestant and Roman Catholic educational interests infringe upon each other, or come into collision, he has the reputation of being strictly impartial in his decisions; and, so far as one can judge from the frequency of his presence at Protestant institutions on public occasions, and from his published address, it cannot be doubted that he is at heart a real friend of education irrespectively of creed or nationality.

The law of 1875 modified, in several respects, the relations between the Superintendent and Council of Public Instruction, trans-

ferring to the Committees of the latter, Protestant and Roman Catholic, the recommendatory functions previously exercised by the Superintendent alone as respects the distribution of the funds for promoting Superior Education. Also, to these Committees exclusively appertains the duty of regulating the Boards of Examiners throughout the Province, and the sanctioning of the text-books for use in all the Public Schools. By the same law, provision was made for two secretaries or deputies in the Department of Public Instruction, who perform their duties under the Superintendent's direction, and to whom, respectively, the departmental work is delegated according as it concerns Protestant or Roman Catholic education. In this behalf, the Superintendent's Deputies are the same as have been employed in the Department since Confederation—Dr. Louis Giard and Dr. Henry Miles.

The Hon. Mr. Ouimet's past career may be briefly summed up as follows: He was born at Ste. Rose, P. Q., in 1823, and is now, therefore, 55 years of age. He received his early education at the Colleges of St. Hyacinthe and Montreal, in which last named city he had the benefit of careful tuition by the noted *savant*, the Abbé Duchesne. He studied law and was called to the Bar in 1844, and during some years practised at Vaudreuil, of which place he was Mayor, and was appointed Q.C. in 1867. From 1858 to 1861 he sat for Beauharnois County in the Canadian House of Assembly. He has been President of the St. Jean Baptiste Society, Montreal, and of the Institut Canadien Français, and Batonnier of the Bar of the Province of Quebec. From Confederation to the year 1878 he was Attorney-General of the Province, and then became Premier and Minister of Public Instruction. He is a D.C.L. of the University of Bishop's College, Lennoxville, and the author of the Municipal Code of the Province of Quebec, and of the Law on District Magistrates, and has carried, in the Legislature, important amendments on the qualification of jurors in criminal cases, and also in the Code of Civil Procedure. His well-known urbanity, legal eminence, experience in public business, and impartial zeal in the cause of public education, not only qualify him, in a mixed community like that of Quebec, for the important public post which he occupies, but justify the hope of a bright future for education in the Province of Quebec.

Gleanings.

READING IN COMMON SCHOOLS.

BY J. M. GREGORY, LL.D.

Ought reading to be taught in our common schools? Certainly, my friend. But what reading? how much? and how? Let us consider the question without prejudice. In the common schools, as now managed, about one-half of the time is given to the reading lessons. A country superintendent of schools told the writer that in his county nearly two-thirds of the time in school is spent in reading-class. Is this necessary? Is it profitable? Is this not one of the thieves of our school system, which rob it of its fruitfulness, and bring upon it the too common reproach of poverty in results? Let us look at it carefully but fearlessly.

Children must be taught to read printed books; reading does not come by nature. But the vocabulary of little children is small, and to learn to read such books as they can understand can be done usually in a few weeks. A term or two at most will be sufficient, if the children are of sufficient age. It should be done at home; but as many parents have not the time, and fewer still the inclination, some of the children must evidently be taught to read in school. This is agreed.

But ought this teaching to go farther than the simple words and sentences which children easily understood? Need the reading lessons drag on through term after term, and year after year, consuming half the school-life of the majority of our children? Of what use those long series of reading books, filled with the mere fragments of literature; or of those time-wasting reading lessons, in which each pupil reads a single short paragraph, and then stands idle for the next quarter or half-hour, it may be? Occasionally a skilful teacher may make it a little better, and throw a little life into the tedious monotony; but the teachers get tired of the well-thumbed pages and paragraphs as well as the children, and they let things go. Listen to the dreary droning of the "choice extracts," out of which both teachers and pupils have long ago chowed the last drop of sweetness!

A MORE EXCELLENT WAY.

The writer taught his own five children to read. The task was not a long or difficult one: it occupied a few of the odds and ends of time to be found in the busiest life. It was as good as play. Having read to the little one a few short stories to excite its curiosity, then, by the so-called word method, it was taught some of the more common words, and shown how to find out others. The story books were then put into the little hands, and the work went on of itself: no urging was needed—the charm of the story did the business. There was no foolish attempt to force the child to read what it did not understand. If the story was not interesting, it was remorselessly let alone, and a better one was found. Doubtless many a hard tussle was had with new words and big ones; but the story could not be given up, and so the hard word was mastered. Sometimes the children came of their own accord to read me some amusing passage, and corrections were made in their pronunciation; but nothing was forced. Their taste for books grew till they had to be restrained from reading too much, and thus injuring their health. Their knowledge of words steadily increased; their intelligence was fed; and before they went to school at all, they became better readers than any school-taught children of my acquaintance. They were not remarkable children. One of them learned with much difficulty, but once started in the story book, he became as fond of reading as the others. In the families of several of my acquaintances the same plan has been tried, and with the same result.

Let this method be tried in our common schools. Let a school be supplied with at least fifty dollars' worth of the brightest and best story books for children that can be found. Let two hours a day of the time now given to reading lessons be allowed to the children to read the story books, on condition that they first learn their lessons, if you will. Occasionally, let the child that has found something too interesting to be kept to itself, be permitted to read it aloud to the teacher or to the school. Lessons in articulation and in voice-culture may be given as such, at the proper time. They are not necessarily connected with reading lessons. The older pupils may also take lessons in elocution if the teacher knows how to teach it. Elocution belongs to speaking rather than to reading. Let it be studied in its own place, and for its own uses.

THE ARGUMENT.

Our common-school studies miserably fail to make intelligent people. Arithmetic, grammar and geography may help to discipline the mind, but they do not feed the intelligence. Our literature—our books—these are our true storehouses of knowledge. Books are the cheapest and best of all teachers to those who love them and can use them. A reading people can never be an ignorant people. The children who read stories will learn to love books. They will pass from stories to history, poetry, philosophy, science, and the whole round of learning, and especially if the other parts of their school work be well done.

The cost of the story books will be less than the prices of the discarded reading books. Economy is on the side of reform. The schools will gain in interest and fruitfulness. Dull intellects will awaken. Thoughts will kindle. Talk will be heard, full of imagination, reasoning, conjecture and fruitful debate. The other lessons will be better learned, both because of the increased intelligence, and to win the time for more reading. Good readers will be multiplied. The terrible monotone will cease; and our children, no longer spoiled by pretended reading lessons, will read as naturally, easily and pleasantly as they talk.—*N. E. Journal of Education.*

THE SCHOOLMASTER.

He studieth his scholars' natures as carefully as they their books; and ranks their dispositions into several forms. And though it may seem difficult for him in a great school to descend to all particulars, yet experienced schoolmasters may quickly make a grammar of boys' nature, and reduce them all (saving some few exceptions) to their general rules.

Those that are ingenious and industrious. The conjunction of two such planets in a youth presages much good unto him. To such a lad a frown may be a whipping, and a whipping a death; yea, when their master whips them once, shame whips them all the week after. Such natures he useth with all gentleness.

Those that are ingenious and idle. These think, with the hare in fable, that, running with snails—so they count the rest of their

school-fellows—they shall come soon enough to the post, though sleeping a good while before their starting. O, a good rod would finely take them up napping!

Those that are dull and diligent. Wines, the stronger they be, the more loos they have when they are new. Many boys are muddy-headed till they be clarified with age, and such afterward prove the best. Bristol diamonds are both bright and squared and pointed by nature, and yet are soft and worthless; whereas orient ones in India are rough and rugged naturally. Hard, rugged, and dull natures in youth acquit themselves afterward the jewels of the country; and therefore their dullness at first is to be borne with, if they be diligent. The schoolmaster deserves to be beaten himself who beats nature in a boy for a fault. And I question whether all the whipping in the world can make their parts who are naturally sluggish rise one minute before the hour nature hath appointed.

Those that are invincibly dull and negligent also. Correction may reform the latter, not amend the former. All the whetting in the world can never set a razor's edge on that which hath no steel in it. Such boys he assigneth over to other professions. Shipwrights and boatmakers will choose those crooked pieces of timber which other carpenters refuse. Those may make excellent merchants and mechanics who will not serve for scholars.—*Thomas Fuller: 1608-1661.*

A FEW WORDS ON FEMALE EDUCATION.

(Translated from the German by F. H. LEHMANN, TEXAS.)

Give your daughters a thorough education. Teach them to prepare a nourishing diet. Teach them to wash, to iron, to darn stockings, to sew on buttons, to make their own dresses. Teach them to bake bread, and that a good kitchen lessens the apothecary's account. Teach them that one dollar is one hundred cents, that one only lays up money whose expenses are less than his income, and that all grow poor who have to spend more than they receive. Teach them that a calico dress paid for fits better than a silken one unpaid for. Teach them that a full healthy face displays a greater lustre than fifty consumptive beauties. Teach them to wear strong shoes. Teach them to purchase, and to see that the account corresponds with the purchase. Teach them that they ruin God's images by wearing strong bodices. Teach them good common sense, self-trust, self-help, and industry. Teach them that an honest mechanic in his working dress is a better object of our esteem than a dozen haughty, finely dressed idlers. Teach them gardening and the pleasures of nature. Teach them, if you can afford it, music, painting, and all other arts, but consider these as secondary objects only. Teach them a walk is more salutary than to ride in a carriage; and that wild flowers are worthy objects of admiration. Teach them to reject with disdain all appearances, and to use only yes or no in good earnest. Teach them that the happiness of matrimony depends neither on external appearances nor on wealth, but on the man's character. Have you instructed your daughters in these principles? Fearlessly allow them to marry; they will make their way through the world.

—The passions of childhood and youth need to be restrained, the motives elevated and refined, the hopes moderated, and the fears assuaged by the teaching of wisdom and experience, by examples of patience, fortitude, and self-denial, and by the discipline of a perfect obedience and subordination to rightful authority. The enthusiasm of the *true teacher* never dies, neither does he become sour and peevish, nor does he fail to make due allowance for youthful foibles. The true teacher is a life long student. He grows in knowledge and wisdom as he increases in years. He preserves the freshness of his spirit by copious draughts from the fountain of truth, and by cultivating those graces of a character which attach rather than repel the sympathies of those whom he instructs.—*Educational Weekly.*

—In a lecture before the Spelling Reform Association, in St. Louis, W. T. Harris, Superintendent of the Public Schools of the city, thus enumerated some of the evils of the present system of spelling: 1st. It stands in the way of a sound, comprehensive, national education. Hence the prevalence of the illiterates. 2nd. No one is certain how to pronounce a word he has only seen written and never heard spoken. 3rd. No one is sure how a word is spelled which he has only heard pronounced and never seen written. 4th. It throws a barrier in the way of all sound and accurate philological research. He thinks the term "orthography," as applied to the

present system, a misnomer, and says that it might more properly be called "heterography."

—Remember that you can educate a child to good citizenship for about a hundred dollars with almost perfect success, whereas you will be compelled to feed and clothe and house a pauper, and if a pauper-criminal, as usually happens, you may have to lock up and chain him at the expense of a thousand dollars; and what do you get? The same pauper or criminal always growing worse, more dangerous, more expensive. Will you help to make good citizens, or let the children grow up to ignorance, pauperism, and crime?—*Central School Journal.*

MUSIC FOR GIRLS.—We like music,—like it very much,—but in our opinion it should not be made the chief end of a girl's educational existence. Let her be taught that her voice and her fingers are not the most important part of her character. Our motto is, give girls just as thorough, and just as substantial an education as is given to boys; let the general education be the same, then let the taste of the student and the means of the parent determine the kind and extent of the special education.—*Indiana School Journal.*

—At a recent teachers' examination in a certain county in this State, a lady who held certificates for the last five years, bounded Wisconsin on the north by the North Sea, and said the Po was the longest river in Europe. Another old teacher being asked by the superintendent whether this country was a democracy, replied: "No; but it would have been if Mr. Tilden had been elected. Since Mr. Hayes was elected, it is a republic." We are informed that these were not exceptional answers.—*Wisconsin Teacher.*

—A county superintendent of public instruction wrote to each person that was examined at the teachers' examination, asking if they were engaged, and if so, by whom, and at what salary. One young lady in the northern part of the county writes: "I am not engaged, but would be delighted to receive any attention, or proposal for an engagement. Of course I would like a salary, or some one with an income; but rather than miss an opportunity for the nuptial joys of wedded life, will not be particular about the salary."—*Winfield Courier, Kansas.*

—It is a remarkable fact for coeducationists to consider, that Miss Lizzie Hunt, of the North-western University, Evansville, Ill., took the first prize at the inter-collegiate contest for oratory at New York on the 10th ult. The judges were Bayard Taylor, Gen. J. R. Hawley, and Rev. E. H. Chapin. Eleven collegas competed for the honor, which was awarded to a woman. It is no wonder that Congress is afraid of woman suffrage.

—"Encourage" is the best word in our language. It is a lifting word, and its power is equal to the strength of the user. The teacher more than any other needs to feel its strengthening influence, and he more than any other should know how to encourage wisely.

—Knowledge acquired merely with a view to examination or recitation is usually very shallow and imperfect, and soon passes out of the mind when the occasion that prompted the effort is passed.—*Dr. Whewell.*

—The hearing of lessons should not occupy more than one hour and a half daily, the remainder of the day being devoted to *actual teaching*, when the lessons for the following day may be explained by the teacher. In advanced schools, answering in *concert* should be abolished.—*E. V. DeGraff.*

—The following definition, written in one of the examination papers of a prominent high school in Michigan, is too good to be lost: "A thermometer is a vacuum filled with mercury with the air all pumped out and closed at the top."

—There is nothing more frightful than bustling ignorance.—*Goethe.*

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The Canada School Journal.

Recommended by the Minister of Education for Ontario.

Recommended by the Council of Public Instruction in Quebec.

Recommended by the Chief Supt. of Education for New Brunswick.

TORONTO, MAY, 1878.

—The letter of Rev. Father Stafford, in another column, is worthy of special notice. His liberal offer is deserving of the highest praise. It will no doubt be fully appreciated by his co-religionists, and should do a good deal to advance the interests of Separate School education. Father Stafford, in making his generous offer, is merely extending to the Province a portion of the good things which he has for many years been giving to his parish.

Our educational institutions have not yet been very liberally endowed by private citizens, and it is to be hoped that others may be stimulated by the action of Father Stafford.

SUMMER NORMAL CLASS.

In harmony with the suggestion of Mr. Platt, P. S. Inspector, Prince Edward, in the April number of the JOURNAL, that a vacation class for teachers should be held in the Thousand Islands during the summer holidays, a letter has been received from Dr. E. O. Haven, President of Syracuse University, and President also of the "Thousand Island Camp Association," kindly offering accommodation on Wellesley Island for such a class. A Canadian gentleman has been requested to prepare a course of lessons and engage a staff of competent instructors. The expense to teachers would be merely their board, at very low rates. The Island will be much more accessible this year than formerly. Those who can attend the class take advantage of the other interesting meetings going on the Island if they choose to do so. It has been suggested that Arithmetic be added to the subjects named in the last JOURNAL. Teachers may expect particulars in our next number.

—A bill has been introduced into the United States Congress, one clause of which reads as follows:—

"The School officers shall introduce, as a part of the daily exercises of each school in their jurisdiction, instruction in the elements of social and moral science, including industry, order, economy, punctuality, patience, self-denial, health, purity, temperance, cleanliness, honesty, truth, justice, politeness, peace, fidelity, philanthropy, patriotism, self-respect,

hope, perseverance, cheerfulness, courage, self-reliance, gratitude, piety, mercy, kindness, conscience and will."

It is questionable whether great benefit would follow the giving of set lessons on the subjects in every school. There is no doubt, however, that the school itself should be so governed and conducted as to give a constant "object lesson" on each of them. Precepts are good, but practice makes much deeper impressions. Froebel made the cultivation of morals and the acquiring of good habits, without giving any theories to the children, a prominent part of his Kindergarten system. The Regulations for Ontario are prepared with a similar view. The following is laid down as part of the duties of Teachers:

"Each Master and Teacher is enjoined to evince a regard for the improvement and general welfare of his pupils, treat them with kindness combined with firmness, and aim at governing them by their affections and reason rather than by harshness and severity. Teachers shall also, as far as practicable, exercise a general care over their pupils in and out of school, and shall not confine their instruction and superintendence to the usual School Studies, but shall, as far as possible, extend the same to the mental and moral training of such pupils, to their personal deportment, to the practice of correct habits and good manners among them, and omit no opportunity of inculcating the principles of TRUTH and HONESTY, the duties of respect to superiors, and obedience to all persons placed in authority over them."

COMPULSORY EDUCATION IN ENGLAND.

There is no class of people in this country who declaim so loudly against stringency in school regulations relating to attendance, punctuality, &c., as a portion of those who have come from the British Isles, and especially from England. It is amusing with what fluency they often talk of "the rights of the subject," "British liberty" and similar themes. They "wonder how long such tyrannical nonsense would be tolerated in England." "Why, such outrageous laws would soon raise a rebellion there," &c. It is useless to attempt to reason with such men, and it may aid in convincing some of them to read the following, clipped from an English paper:—

"John Watson, greengrocer, of 25 Stelman street, Hackney, was summoned under the Elementary Education Act, for employing his own child, under ten years of age, in a trade. The proceedings were taken under Section 5 of the Act of 1876, and were the first of the kind under the Act, which came into force this year. Mr. Hotherington, Sup't of Visitors for the district, stated that under the section no person was allowed to take into his employment any child under the age of ten years and upwards who had not obtained certificates for reading, writing and elementary arithmetic. If it were said that the child in question was over ten years, he was in a position to prove that the child had never obtained such certificates. John Gainsborough, a 'visitor' to the School Board, deposed that William Watson, aged nine years and six months, the son of the defendant, was absent from school. He saw the boy on October 20, washing a cart used by his father in his business. On the 21st the boy was shovelling coal in the shop, and on November 2nd witness saw him in his father's

cart delivering goods in Rendlesham-road, Hackney. Mrs. Watson said the boy had turned ten years. Mr. Bushby asked if the boy had certificates, and was replied to in the negative. Mr. Bushby said that under the 47th section no parent was allowed to employ his child in any trade. The penalty was 40s., but as the defendant had not been previously summoned he reduced it one-half, and ordered the defendant to pay 20s. and costs, or suffer fourteen days' imprisonment."

There must surely be something wrong with the British Lion! Think of it! A man, nay an *Englishman*, fined "20s. and costs, or 14 days' imprisonment," because he kept his own son at home from school to wash his own cart, shovel his own coal, and run messages. *Long-suffering* Canadians should think of this and similar cases, when they are asked to explain the reason for the absence of their children, and get cross about it. It augurs well for the future of England, that she has such an Education Act, such school "visitors" and such magistrates as Mr. Bushby. Canada is not yet abreast with England in this matter, nor is public sentiment here so fully in harmony with the law as it is there.

HIRELING TEACHERS.

It is to be regretted that those teachers who deserve the above title will not be likely to read the forcible description of themselves given in the article of Rev. John May in another column. Not many of them will see it, however, unless some kind friend sends them a copy. They never take an educational Journal. Even sending a copy of the article would, in many cases, fail to produce the desired effect. They would not take the trouble to read it. They read. To be sure they do. You can find a certain kind of literature in their rooms. A new York Superintendent relates the following conversation with one of them:

"Be you an author?" asked a young lady of me, at a sociable which followed an institute in one of the northern counties of the State.

I replied that I sometimes got things into print when I paid for my own type-setting.

"I'm so glad to talk with a real live author," she continued, "for I am literary myself."

"Are you, indeed?" I replied.

"O yes," she went on; "why, I read through the whole Waverley Novels last term: twenty-five volumes."

I suggested that she must have sat up late o' nights.

"O no," she said, "I read 'em all in school-time."

Didn't that interfere with her classes?

"O no. Short lessons and long recesses. They liked it, and so did I."

Just so. But how did the parents like it; or rather how would they like it, if they took interest enough in school matters to know how their children were getting along? The scholars liked their play, and probably it was better for them than the miserable "grinding" they would get from the teacher, but, when they grow up to be men and women, how will they feel, when they enter the battle of life and find themselves unable

to cope with their fellows on account of inadequate education? Many teachers by indulging their pupils gain their temporary affections at the certain loss of their respect when they grow to be men and women.

No true friend of education would like to see the teacher's position made more onerous, or the tenure of his office less permanent. The genuine teacher is entitled to a position which has not yet been accorded to him. But while this is the case, it is equally true that the mere "hireling" holds a place out of which he ought to be turned without hesitation and without sympathy. There are other positions in which incompetency or indolence may do less harm, and the interests of society demand that the teacher should be a person of honesty at least, to say nothing of intelligence. The tests applied to the teacher's work are not sufficiently searching. Even with our system of county inspection under the Government the test is not close enough, or constant enough. Most Inspectors have too many schools to inspect. Superintendent Gilmore said, at the National Teachers' Association at Baltimore, in 1876:

"When I have hired a man to chop wood and he comes for his pay, the question I ask him is whether he has done the work. But when the teacher comes for his month's salary, and is asked whether he has put his scholars a month ahead in scholarship, mental growth and general culture, all he can say is that he holds a certificate and has spent six hours a day in the school-room."

The "annual" system of engaging teachers is partly to blame for the fact that idle and incompetent teachers can exist. They can go into a community where they are not known, and secure their agreement, and they are safe for a year. Annual agreements are unfair to the good teacher. It is a humiliation to have to appeal year by year to trustees for permission to continue in his position. The most satisfactory form of agreement is that made for an indefinite period, during good behaviour, and while giving satisfaction. Such agreements should provide for the closing of the engagement by either party on giving a certain specified notice. The question of a teacher's competency should depend upon the report of the Inspector mainly. The good teacher would thus be safe, and by the united action of the Inspector and Trustees the "Hireling" would be compelled to vacate his position for some more worthy person.

THE BIBLE IN PUBLIC SCHOOLS.

There is a portion of the community in Ontario who favour the introduction of the Bible as a text book into the Public Schools. They desire to have it expounded as well as read. By far the larger part of the population, however, while they agree that the Bible, or portions of it, should be read as a part of the opening and closing exercises of the school, hold that the pupils in Public Schools should not receive explanations as to the precise meaning and application of the passages read in the Bible, but merely enough to enable them to understand the words, so that they may read them correctly.

Many reasons are urged to show that it would be improper to expect or allow all teachers to conduct religious services in schools. Two of these seem to be sufficiently conclusive. First, the children of the same Public School belong to different denominations, and their parents would naturally object to have one set of religious opinions laid down for all. Second, the teachers are not all members of the church. It is true that every teacher has to show that he is a person of good moral character before he receives his certificate; but this does not guarantee him to be qualified to give instruction in doctrinal matters to the pupils entrusted to his care.

Honourable Adam Crooks, Minister of Education, issued two circulars during the month of April, which clearly explain the law and regulations relating to the use of the Bible in the Public Schools of Ontario. These circulars were called forth by a deputation from the Synod of the Presbytery of Hamilton and London, who waited upon Mr. Crooks and submitted to him the following questions:

1. May the local Trustees, without contravening the School Law, require teachers to use the Bible, in whole or in part, as a text book, giving such instruction as is needed for the proper understanding of what is read?

2. Is there anything in the regulations and programme at present in force to prevent the introduction of such reading of the Holy Scriptures as part of the regular course of instruction and work of the school, when the Trustees desire this to be done?

In reply Mr. Crooks, after giving the Law and Regulations relating to the subject, explains their design and the mode of carrying them out, as follows:—

“The management of the Public Schools in their several localities rests, under the Act, with the Trustees or School Boards (as the case may be), who are constituted corporations for this purpose, and possess all powers expressed or implied which are necessary for efficiency, subject in the exercise of them to the General Regulations of the Department.

“Recognizing this duty and responsibility on the part of Trustees and School Boards, the Education Department, in May, 1877, adopted a new Programme, or Course of Study, for the Public Schools, which took effect on the 15th August, 1877, in lieu of the Limit Table and Programme under the General Regulations of the former Council of Public Instruction. By the new Regulations no ‘time’ or ‘limit’ table is prescribed, except so far as the Trustees or School Board and Teacher may choose to regulate this, and the Course of Study is to be followed so far only as the circumstances of the particular school will allow. The attention of Trustees, School Board and Teachers is also expressly called to the special provisions with respect to Religious Instruction contained in the General Regulations of 1874.

“As our political system is founded upon Christianity, and all our laws are in subordination to its principles, the Public School Act and Regulations have thus consistently recognized Religious Instruction as part of the ordinary exercises of the Public School, and have been carefully framed so as to secure to parents generally the training of their children in the truths of our common Christianity.

“It will be seen that these Regulations are recommendatory and not mandatory, and leave the authority and duty with the Trustees or School Board of requiring their Teachers to use the Bible in whole or in part as one of the subjects of the ordinary exercises of the school, with such explanations (not of a denominational character) as may be requisite for the proper understanding of the language read.

“This authority is, however, always subject to any objection on the part of the parent or guardian of any pupil to his or her joining in such religious instruction. According to my interpretation, therefore, of the Law and Regulations applicable to Public Schools in Ontario, I beg to reply to your two questions in the affirmative, and to advise your Synod that, *firstly*, School Boards and Trustees can lawfully require their Teachers to use the Bible or portions thereof as part of the ordinary exercises of the school, giving, however, such explanations only as are needed for a proper understanding of what is read; and *secondly*, there is nothing in the Regulations or Programme respecting the Public Schools now in force which can prevent the introduction of such reading of the Holy Scriptures as part of the regular course of instruction and work of the School when the Trustees or School Boards require this to be done. But, on the contrary, the Law permits, and the Regulations strongly recommend, the daily practice of such religious exercises.

“It will thus be seen that it is open to parents generally, whatever may be their different churches, to cordially unite with Trustees, School Boards and Teachers, in promoting such religious exercises in the Schools, and thus to improve the character of our youth, and so form a community distinguished not only for its intelligence, but for its fair dealing and law-abiding and moral qualities.”

Mr. Crooks subsequently issued the following supplementary memorandum on religious instruction:

“Referring to my memorandum on Religious Instruction in the Public Schools, there seems to be a misunderstanding with reference to my interpretation of the Law and Regulations as to the reading of portions of the Holy Scriptures as part of the ordinary exercises of the School. This arises in part from the form of expression used in my summary of the Law and Regulations. They, when properly considered with the text of the Law and of the Regulations, will be found to go no further than the Regulations themselves recommended, namely, that the daily exercises of each Public School be opened and closed by the reading of portions of Scripture, and by prayer. This is repeated amongst the powers and duties of teachers, who are directed to see that these Regulations shall be observed. It will, however, be noticed that this is entirely recommendatory to Trustees, and my opinion on the Sombra case clearly expresses that these Regulations were not imperative, so that they *must* be carried out by the Trustees, but recommendatory only.

“My reference to the two questions put by the Deputation should be read by these considerations, which were explicitly put forward in order that the grounds for coinciding to the limited extent mentioned, might be understood by all parties with whom any responsibility in this matter rests.

"It is not intended by any expression of mine, that the reading of any portion of Scripture be attended with any exposition, or instruction in the nature of an exposition, of the text, and that explanations should be limited to the better understanding simply of the words used."

It would thus appear that it is not in accordance with the Regulations to have the Bible read at any time in a Public School except during the opening and closing exercises.

Contributions and Correspondence.

NOTES ON EDUCATION IN GERMANY.

BY H. C. DAYNE, M.A., PH.D., HALIFAX HIGH SCHOOL, NOVA SCOTIA.

In all countries possessing a complete Educational system there are three grades of instruction. There is the primary instruction of the Elementary Schools, the Secondary of the High Schools, Academies, Lyceums or Gymnasias, and the special higher instruction of the Universities, Polytechnic Institutes, &c. Germany possesses all of these—and all, too, in a more highly developed state than any other country in the world.

In order to comment on the merits of the Educational system of Germany, and to deduce from its study some facts which may be of advantage to us in our New Dominion, it will be requisite to make a necessarily brief review of these different classes of schools.

We prefer to commence with the Secondary instruction of Germany, as that which, upon the whole, is the most characteristic of the country, and forms the nucleus of the entire system. This instruction is imparted in three classes of schools designated *Gymnasien* (Gymnasiums), *Realschulen* (Real Schools), and *Höhere Burgerschulen* (Upper Burgher Schools). Above these institutions stand the Universities and more special institutes, below them the Primary Schools. All these classes of Secondary schools as well as the Universities are under the immediate control of the Minister of Public Instruction. The State has carefully reserved to itself the direction of the higher education of the country.

The support of the Gymnasiums, Real Schools and Higher Burgher Schools is, in some cases, entirely by the community in which they are situated; more frequently, however, this support is supplemented by State aid; and often the schools are exclusively dependent upon the State. A few enjoy a considerable interest accruing from invested funds.

The Gymnasium is the institution which, of the three, enjoys the highest position. It is the school whose instruction is immediately preparatory to the studies of the University. It corresponds roughly to the Grammar and High Schools of Scotland, and to the Public Schools of England. Like these, the Gymnasium had its origin in the Cathedral and Monastery schools of the pre-reformation period, which, amid the advances of the 17th and 18th centuries, became much widened in their curriculum and much higher in their aims. As university courses became developed these schools fell naturally into their place as preparatory institutions to the University. In Germany, as in England and Scotland, the ancient classics formed, and still form, the nucleus of study.

The Gymnasium has six grades or forms, having the Latin designations *Sexta*, *Quinta*, *Quarto*, *Tertia*, *Secunda* and *Prima*. Instruction commences with *Sexta* and ends with *Prima*, being thus the inverse order of the public schools of England, in which the sixth form is the highest grade in the school. Each of these six classes is generally divided into two sections, an upper and a lower,

for the purposes of instruction. The sixth and fifth grades form the inferior division of the school, the fourth and third the middle, and the second and first the higher. The length of time allotted to the studies of the several classes is, to *Sexta*, *Quinta* and *Quarto* one year each; to *Tertia*, *Secunda*, *Prima* two years each; nine years in all. In general, a boy enters the Gymnasium at 9 years of age and quits the same for the University at 18. A still higher class than *Prima* called *Selecta*, is sometimes formed, and is under the immediate direction of the head master. It is composed of a selected few of the *Prima*, whose attainments and abilities warrant a special course of instruction.

The so-called *Lehrplan*, or programme of study, indicating the subjects of study and the time allotted to each, is drawn up by ministerial authority. This programme is not minute in its regulations, but confining itself to the subject of study and the allotment of time to each, it admits of considerable freedom of arrangement to individual teachers. The total weekly number of hours fixed for school work is in *Sexta* 28 hours, in each of the others 30 hours. Classes open in summer at 7 a.m., and continue until 11 a.m. In winter the morning session is from 8 to 12; the afternoon session is from 2 to 4 the whole year round. There is but one half holiday in the week, upon Thursday. Saturday is a teaching day as well as others.

The distribution of time allots 10 hours weekly to Latin ($\frac{1}{3}$ of whole time). Greek, which begins in *Quarto*, has eight hours weekly; German two to three hours; Mathematics three to five hours; French (in higher classes only) three hours per week; Geography and History two to three hours. Science two hours. In towns and villages which are unprovided with Real Schools or Higher Burgher Schools the study of branches of Science and the more extended pursuit of Geography and Mathematics may be substituted in lieu of Greek; but in all Gymnasiums, properly so called, Greek usurps a prominent place and reserves one quarter of the whole time to itself. Besides the subjects mentioned, drawing, music and gymnastics form a regular part of the course of instruction. For those designing to pursue subsequently a University course in Theology, Hebrew is also a compulsory study in the higher divisions of the school. The objects steadily contemplated in the instruction of the Gymnasium is, as it is styled, the *Allgemeine Wissenschaftliche Bildung* of the pupil, i.e., the general development of his mental powers, without regard to the special applicability of the subjects taught to future pursuits in life. The method of instruction followed is in all Gymnasiums much the same. In the higher classes the chief Latin and Greek authors are read and criticised in detail. The writings of Cicero, Tacitus, Horace, Plato, Thucydides, &c., are studied consecutively. They are treated in the first instance as literary productions to be read and studied for the thought they contain and the beauty of the language in which the thought is clothed. This does not preclude, however, a more detailed grammatical and philological criticism accompanying each lesson. The classical instruction of the Gymnasiums is characterized alike by the amount of Latin and Greek literature overtaken during the course of study, and by the minute and accurate knowledge of the grammatical form of the philological structure and of the literary beauties of the language which is gained. The students are often required to give an oral account in Latin of the lesson which has been assigned for the day, or to write Latin essays on certain topics arising out of the lesson.

(To be Continued.)

—A teacher ought to know of everything much more than the learner can be expected to acquire. He must know things in a masterly way, curiously, nicely, and in their reasons.—E. Everett.

THE HIRELING SCHOOLMASTER.

BY REV. JOHN MAY, M.A., PUBLIC SCHOOL INSPECTOR, CARLETON.

For an infant people we are justly proud of our school system. No expense, no pains, have been spared in the erection of the stately edifice. Strong are its foundations, lordly its pillared aisles and lofty domes, exquisite its polish. A true master-builder laid its corner-stone and another is adding the coping-stone with "shoutings" of praise. The first legislative wisdom in the land, the choicest administrative ability, have been put under tribute. Funds without stint have been supplied for its need. The workmen on its walls have been cheered by the plaudits of the multitude. The face of the country has been lined as a chess-board to facilitate the work. Thousands of school sections, wards, and districts; a legion of Trustees, Teachers, Examiners, Inspectors, books, pamphlets, papers, reports; all manner of aids and appliances are brought into requisition in order that our youth of both sexes may gain a sound, useful, practical training for their several callings in life, or be enabled to mount the ladder of knowledge from the little school in the woods to the University itself. Will it be credited that the power to frustrate and render nugatory all this paraphernalia of educational enterprise, to reduce the actual harvest of all this machinery and exertion to *nil*, is still suffered to reside in a single one of all these agencies, the success of all the others being absolutely dependent on his will? Incredible! but so it is. The very life of the school system dwells in the schoolmaster. He is its *heart*. When this organ is healthy and vigorous, growth and beauty are diffused throughout; when it ceases to beat, or is embedded in the "fatty degeneration" of sloth or indifference, what can follow but degeneracy or death? And in not a few sections this school-death reigns undisturbed. The schoolmaster holds the key of success. He shuts or opens, binds or looses, at pleasure. He is the arbiter of educational destiny. He is the main pillar of the temple; and woe to the building when he is untrustworthy! On him rests a responsibility not elsewhere surpassed. In him resides a power, in him is vested a trust, far-reaching, sacred! And yet, in every County in the Province may be found teachers who are utterly insensible of this responsibility, utterly recreant to this trust. Practically unassailable, the hireling defies every criticism, and smiles at every futile assault. In vain may Legislatures deliberate; Ministers issue manifestoes; Inspectors scrutinize and condemn; "Central Committees" elevate the standard "to the plucking" point; Trustees remonstrate; taxpayers growl and grumble;—*the hireling teacher frustrates, defies, laughs at them all!* And

— "little he'll reck if they let him sleep on
In the place where the School Law has laid him."

In any human being sloth is a vice; in the teacher it is a crime.

We feel sympathy, not indignation, towards the teacher who does his best, in vain. We pity incapacity: we *loathe* unprincipled dereliction of duty. When failure springs from pure indolence or sheer indifference, words fail to characterize the fault as it deserves. The lazy teacher is a downright criminal—a living, barefaced fraud—a salaried calamity. In the first place, he obtains money under false pretences. Is this the extent of his criminality? By no means. His salary (a dead loss to the section) forms but a single item in the school disasters of the year; and it is not the principal item. Think of the time far worse than wasted in that school of forty or fifty children!—precious weeks and months gone, never to return!—at a period of life when every hour is gold. The true seed-time is lost forever! Nor is this all. Money squandered—time lost: what next? Habits of idleness or trifling contracted. Think of the demoralizing influence of bad example daily brought to bear on the plastic, imitative mind of

youth! From the person and character of the teacher flows forth a ceaseless stream of unseen mystic power, moulding the youthful character for better or for worse. Mere inaction does not arrest the process. The teacher who tries to kill weary time by whittling a stick, is silently but surely whittling out of his pupils any habits of industry they may have acquired. It is difficult to expose in words the deep, far-reaching effects of an influence so malign. Banish it from the sacred precincts of the schoolroom! Make the teacher a present of his year's salary the first morning of the year and let him go. Do anything, everything but allow an indolent master for a single day to shed his baleful influence around your children. Were it possible for such a one to leave the school where he found it—no better, no worse—he would be comparatively blameless. But it is not so. The unfaithful teacher not only adds nothing to the work already done, but mars, disfigures and in part destroys. To habits of industry, order, neatness in the pupil, succeed those of idleness, confusion, and slovenliness—habits at best slow of removal, and which may adhere to the character while life endures. In a word, when we consider the mighty influence of example, and especially the teacher's example—his demeanor, personal appearance, morals—on the minds of those committed to his charge, it is simply impossible to calculate his power for good or for evil.

And now for the remedy. Is there none? Can it be possible that law and regulation are both silent on so grave a matter as this? Will it be believed that the unprincipled hireling can, in the name of a noble calling, with absolute impunity continue to rob school sections and devastate youthful character? If I am not mistaken, he can. Now, if this be the true state of the case—if it is a fact that no remedy is provided for an evil which, if universal, would suffice to stifle education everywhere, and which, being, as it is, not uncommon, actually does paralyze only too many schools in the rural districts annually, then surely it is not too much to say that the defect is a serious, a fundamental one, a substantial grievance, crying aloud for earnest consideration and swift redress.

Before proceeding further, I must anticipate a possible objection. The existence of the evil may be admitted; the lack of remedy denied. It may be said that the existing "Form of Agreement" between Teachers and Trustees contains all that is required as a guarantee of faithfulness on the part of the former, or redress on that of the latter. I deny this. It is quite true that the teacher solemnly binds himself to "teach faithfully;" so far, so good. Now, suppose he should not teach faithfully, where is the redress on the part of the trustees? Remonstrance might fail; threats pass unheeded; dismissal would be a dangerous resource. How could inefficiency be proved in a Court of Law? Many a worthless pedagogue may thank the fear of consequences for that sublime immunity from molestation which he enjoys in the occupancy of his sinecure. There are occupations in which a single day's idleness would mean disaster to the idler. Teaching is not one of them. There is not the least difficulty in holding office here, one year at least, without evincing more than the very faintest resemblance of exertion. An experienced hand especially knows how to accomplish this. Always at his post—doing nothing—who can touch him? Punctuality and routine effectually screen him from all outside interference. Is not the mill always in motion? and who, assuming to weigh or measure the peculiar grist, could positively swear to the number of bushels? Entrenched in a position impregnable to legal batteries, the hireling laughs at all comers. Trustees bewail their contract; the taxpayer growls; the Inspector condemns; the school-desks are sparsely occupied; the very hireling himself sees, feels, understands it all; *n'importe*, there he is; and there, too, in undisturbed possession he will remain till his term expires, when he means to seek for "pastures new." The

little bit of personal exertion involved in his annual quest of a new field of uselessness is cheerfully incurred as the very moderate purchase of another twelve-months *otium cum dignitate*. Everybody knows how the matter stands, but who can prove it?

My sole object in this paper is, first, to diagnose a widespread malignant disorder, and then to prescribe a remedy. The malady is indeed chronic, but the purgative will prove effectual. It is this. Let the school law be so amended or so supplemented, that the Inspector and Trustees may act conjointly in dealing with all cases of inefficiency, in a summary manner and with perfect immunity from the risk of legal prosecution. Let them be empowered to sit in judgment on the teacher at any time during the period of his engagement. Let it be made their duty to do so, on receipt of a complaint of inefficiency made against the Teacher, in writing, and signed by any three ratepayers of the section. Let their decision be final, and let the power of instant dismissal vest in the Trustees, should the decision of the Board of Trial be adverse to the Teacher, and bear the signatures of the Inspector and two of the Trustees at least.

Finally, let it be lawful and compulsory for the Trustees to pay the teacher in full up to date of dismissal, and for the Inspector to publish his name as a dismissed teacher in the SCHOOL JOURNAL, should his failure be the result of mere carelessness or indifference. Some such remedy as this would prove as effectual as it is desirable for the relief of the present distress.

To the Editor of the Canada School Journal.

SIR,—It appears we have very few Roman Catholic Separate School teachers holding 1st class A. Normal School certificates. I shall be glad to give a premium of one hundred dollars to any Catholic teacher who may win a first-class A. at Toronto. This offer to continue for 10 years, but not more than one such premium to be given each year. I suppose it is our own fault if a Normal School into which so many thousands of our money has gone has yielded us so little advantage.

I have the honour to be, yours truly,
M. STAFFORD, P.P.

Lindsay, April 15th, 1878.

To the Editor of the Canada School Journal.

SIR,—I notice in some American journals that Public School teachers are proposing to organize Mutual Benefit Life Assurance Companies, and I desire, through the medium of the CANADA SCHOOL JOURNAL, to bring the matter before the teachers of Canada. The idea is for teachers to form themselves into a regular association on whose members a tax of one dollar each is levied on the death of any member. This, while only a trifle to each teacher, produces a large total for the benefit of the friends of the deceased. I would like to hear from some teachers on the subject.

Yours, &c., S. H. M.

Mathematical Department.

Communications intended for this part of the JOURNAL should be on separate sheets, written on only one side, and properly paged to prevent mistakes.
ALFRED BAKER, B.A., Editor.

YOUNG'S METHOD OF FINDING STURM'S FUNCTIONS.

The numerical labour of finding Sturm's functions for determining the limits of the roots of an equation, becomes very considerable as the degree of the equation increases. Young's method proposes to diminish the difficulty of the process by a plan similar to Horner's synthetic division.

The problem is to divide, with the least expenditure of labour, a rational polynomial in x of the n^{th} degree, by another of the degree $n-1$, avoiding the entrance of fractions into the quotient or

remainder. Let the dividend be $ax^n + b'n^{n-1} + c'x^{n-2} + d'x^{n-3} + \dots$, and the divisor $a'x^{n-1} + b'x^{n-2} + c'x^{n-3} + d'x^{n-4} + \dots$. The remainder of degree $n-2$ presents itself after two terms of the quotient have been found. The first of these two terms, when incorporated with the divisor, destroys the first term of the dividend, giving remainder of degree $n-1$, the first term of which is in like manner removed by the quotient; and we have then the remainder sought. That the first terms of the quotient may be integral, it is only necessary to multiply the dividend by a' . The first term of the remainder is then $(a'b - ab')x^{n-1}$, so that the second term of the quotient would be $\frac{a'b - ab'}{a'}$, which may be fractional. Accordingly, to effectually preclude the entrance of fractions, multiply the dividend by a'^2 ; the quotient must then be $a'ax + (a'b - ab')$. Multiplying then each of these terms by the divisor, and writing down the several partial products with the signs changed, and instead of actually subtracting them from the dividend, the work under this dividend will arrange itself as follows, the remainders being really obtained by addition:

$$\begin{array}{r} a^2ax^n + a^2bx^{n-1} + a^2cx^{n-2} + a^2dx^{n-3} + \dots \\ - a'aa'x^n - a'ab'x^{n-1} - a'ac'x^{n-2} - a'ad'x^{n-3} - \dots \\ \hline - (a'b - ab')a'x^{n-1} - (a'b - ab')b'x^{n-2} - (a'b - ab')c'x^{n-3} - \dots \\ \hline 0 + 0 + a''x^{n-2} + b''x^{n-3} + \dots \end{array}$$

The first two terms in the result disappear; we may avoid then putting down the terms from which these zeroes arise. The first term $a'x^{n-1}$ in the divisor when multiplied does not occur in the terms that go to make up the remainder. By allowing its sign, therefore, to remain unaltered while the other terms of the divisor change sign, no error will be produced, and we shall form more readily the coefficients of the quotient; for multiplying crosswise in $\frac{a' - b'}{a + b}$ we obtain $a'b - ab'$, and multiplying the first two terms, $a'a$. Lastly, the coefficients only need be retained. The whole process will then arrange itself most conveniently as follows:

$$\begin{array}{r} \begin{array}{l} \text{Multipliers.} \\ A = (a'b - ab') \\ B = aa' \\ C = a'^2 \end{array} \quad \begin{array}{r} a' - b' - c' - d' - \dots \\ \times \\ a + b + c + d + \dots \\ \hline - Ab' - Ac' - Ad' - \dots \\ - Bc' - Bd' - Be' - \dots \\ + Cc + Cd + Ce + \dots \\ \hline a'' + b'' + c'' + \dots = \text{1st rem.} \\ - a'' - b'' - c'' - \dots = \text{1st remainder with signs} \\ \text{changed.} \\ \hline - a'' + b'' + c'' + \dots = \text{1st remainder ready for} \\ \text{next division.} \end{array} \end{array}$$

$$\begin{array}{r} \begin{array}{l} A' = -a''b' + a'b'' \\ B' = -a'a'' \\ C' = a'^3 \end{array} \quad \begin{array}{r} \times \\ \begin{array}{r} A'b'' + A'c'' + \dots \\ B'c'' + B'd'' + \dots \\ C'c' + C'd' + \dots \\ \hline a''' + b''' + \dots = \text{2nd rem.} \\ - a''' - b''' - \dots = \text{2nd rem. with signs changed.} \\ \hline - a''' + b''' + \dots = \text{2nd rem. ready for next division.} \end{array} \end{array}$$

$$\begin{array}{r} \begin{array}{l} A'' = a'''b'' - a''b''' \\ B'' = a''a''' \\ C'' = a'^4 \end{array} \quad \begin{array}{r} \times \\ \begin{array}{r} A''b''' + \dots \\ B''c''' + \dots \\ - C''b'' - \dots \\ \hline a'''' + \dots = \text{3rd rem.} \\ - a'''' - \dots = \text{3rd rem. with signs changed.} \\ \hline \&c., \&c. \end{array} \end{array}$$

In the above the cross indicates the mode of formation of the first term in the multiplier. By recalling the ordinary process of division from which the above is derived, we see that $(a'b - ab')$

does not involve x , that aa' is a coefficient of the first power of x , and that both multipliers of the divisor, or upper line, while a^2 is a multiplier of the dividend, or lower line, and does not involve x . Remembering this enables us to see at what terms we must start to multiply the upper line ($a' - b' - c' - d' - \dots$) by A and B respectively in order to obtain in each case a term involving x^{n-2} , the first power of x retained; and also at what term we are to start to multiply the lower line by C in order to obtain a term involving x^{n-2} .

If the multipliers have a common measure it may be struck out, and the multipliers, thus reduced, used instead.

If at any stage the terms of the remainder have a common factor it may be struck out, and the remainder, thus reduced, used instead. Changes of sign must not be made.

We append a numerical example:

Required all the Sturmian functions of $x^4 - 3x^3 - 2x^2 + x - 3 = 0$.

Here, the first dividend is $x^4 - 3x^3 - 2x^2 + x - 3$, and the first divisor, i.e. the first derived function, $4x^3 - 9x^2 - 4x + 1$. Young's method will be as follows:

		4 + 9 + 4 - 1	
		X	
		1 - 3 - 2 + 1 - 3	
-3		-27 - 12 + 3	
4		16 - 4	
16		-32 + 16 - 48	
		-43 + 0 - 45 = 1st rem.	
		43 - 0 + 45 = 1st rem. with sign changed.	
		43 + 0 - 45	
		X	
		4 - 9 - 4 + 1	
-9 x 48		0 + 405	
4 x 48		-180	
(48) ²		-172 + 48	
		-352 + 448 = 2nd rem.	
		352 - 448 = 2nd rem. with sign changed	
		11 - 14 ÷ ing by 32.	
		11 + 14	
		48 - 0 + 45	
602		8428	
473		0	
121		5445	
		19873 = 3rd rem.	
		-13873 = 3rd rem. with sign changed.	

The Sturmian functions accordingly are:

$$\begin{aligned}
 &x^4 - 8x^3 - 2x^2 + x - 3 \\
 &4x^3 - 9x^2 - 4x + 1 \\
 &48x^2 + 45 \\
 &11x - 14 \\
 &-13873.
 \end{aligned}$$

So far as finding the positions of the roots is concerned, we might have stopped at the first remainder, $48x^2 + 45$, since this cannot change sign, and Sturm shows that when we arrive at a remainder which cannot change sign the remaining steps are unnecessary. Again, the last step was quite superfluous, since we required merely the sign of the remainder on dividing $48x^2 + 45$ by $11x - 14$, and substituting $\frac{14}{11}$ for x in $48x^2 + 45$, we see the remainder must be positive, and therefore that the last Sturmian function must be negative.

The correspondence received during the past month will be attended to in our next issue.

Practical Education.

Queries in relation to methods of teaching, discipline, school management, &c., will be answered in this department. J. HUGHES, TORONTO.

CONVERSATIONAL COLUMN.

1. Please define "tattling," and show the difference between "tale-bearing" and the giving of proper information to a teacher. A pupil is a "tale-bearer" when he informs his teacher on a fellow pupil in order to gratify a revengeful or spiteful desire to have him punished. He is not a "tale-bearer" when he gives information to his teacher, either voluntarily or at the teacher's request, concerning destruction of school property, immorality, or any course of conduct calculated to lower the moral tone of the pupils generally, or subvert the proper authority of the teacher. A judicious teacher will be very careful not to encourage an undue amount of informing on a fellow pupil. No pupil should ever voluntarily inform on another without first giving him an opportunity to state the matter himself to his teacher. The teacher should never ask any pupil for specific information in reference to any wrongdoing without first giving the culprit a chance to acknowledge his error, or guilt.

2. Which is the most effective style for the teacher to adopt, a high or a low tone of voice?

A low tone, by all means. It is much more impressive in teaching, and infinitely more effective in securing good discipline. Children soon cease to attend to a teacher with a loud voice pitched on a high key. It is not surprising that they do so. Teachers should speak in a natural tone, and quietly. It wears themselves less, and benefits their pupils more than a high tone does. Many a teacher has a restless, uneasy class because his voice has too much resemblance to the sound of saw-filing. A teacher who speaks in a forced, high key, makes his mark upon his pupils, and turns out a class of loud talking ranters, whose speaking in private and public life is shorn of all its beauty and half its power.

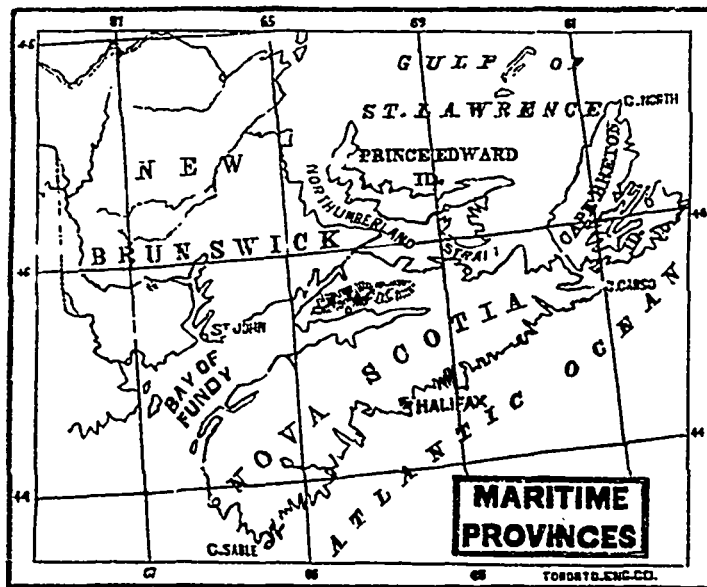
MAP DRAWING.

III.

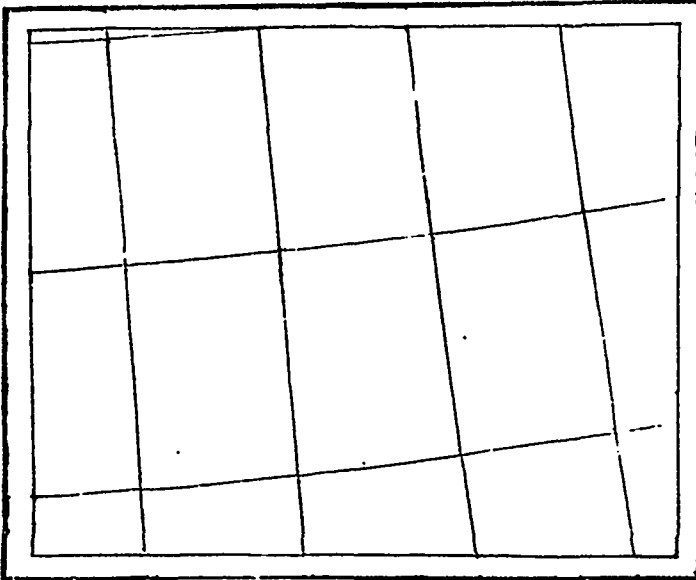
OUTLINING.

This should first be done in pencil. The coast line should be drawn first; rivers, mountains, cities, &c., can be sketched afterwards. The map of the Maritime Provinces of the Dominion may be used by way of an illustration.

NUMBER ONE.



NUMBER TWO.



Having, as already instructed, drawn No. 2, the *projection* of No. 1, the pupil begins to draw the coast line, commencing at the N. W. corner. It is evident to any one that the parallels and meridians drawn in the *projection* may be used as construction or guiding lines in drawing the coast line and in fixing the position of every portion of the map. When the projection has been accurately drawn the outlining is a simple matter. It is only necessary to draw the small portion which lies in the figure formed by two parallels and two meridians at a time. Each step may be taken separately and the whole is certain to come out right. In the map now to be drawn, for instance, the pupil can easily see that the right hand coast-line begins on the border line a short distance below p. 48, and crosses m. 67 very near its intersection with p. 48. These two points of crossing should be first marked. He may then be led to see that between these two points the line very nearly forms a right angle. The line may then be drawn lightly and freely. The pupil should not attempt to follow the minor indentations of the coast line too slavishly. Boldness of movement in drawing the outline is very desirable. The points where p. 48 is crossed and re-crossed should next be marked, and the line drawn to the point where it crosses the second time. The point where it crosses m. 65 should next be marked, and the line drawn so far. In this way the pupil proceeds, guided always by the projection lines until the whole coast line is completed. Rivers may then be drawn, and the position of cities, &c., fixed. The projection lines still serve as reliable guides.

If it is desired to increase the size of the map, say three-fold, this can be accomplished by increasing the distances on the border lines between parallels or meridians to three times their original length. This may be done by means of a pair of compasses and the ruler with the scale of lengths. The ruler itself may be used without the compasses. It may be applied to the side of the map and the distance between two parallels noted. This should be multiplied by three, which will give the length of the border line between the parallels in the new map, &c. It must be carefully noted that the distances between the meridians at the top and bottom are different in most maps.

COLOURING.

Having drawn the outline in pencil, the next thing to do is to apply the colours. Water colours should be used. The colours should be formed into a *thin wash*, by rubbing the blocks of paint in the saucers with sufficient water. In laying on the colours, the camel's

hair brush should be well filled with colour and applied quickly, so that the paint may not dry in streaks. The same country should be gone over two or three times in succession to give it depth of colour, and smoothness of finish. If the paper used is porous, it will aid in securing a free flow of the colouring matter to go over the surface about to be coloured with a brush filled with pure water.

The sea line is usually done in blue, and is best finished when two or three lines of colouring are drawn around the coast line, that next to the coast line being darkest.

The boundary lines of countries are sometimes the only parts coloured.

It is advisable to lay on the colour before lettering, or "lining in" in India ink, as the colour causes the ink to spread, if put on after it.

LETTERING AND LINING IN.

This should be done with India ink applied with a fine pen. The coast line, rivers, &c., should be "lined in" with ink where they have been marked in pencil. The lettering should be carefully done. Plenty of time should be taken in doing this part of the work. Practice in printing letters should precede map-drawing.

It is important that the names on a map should follow the general direction of the part for which they stand. Thus Northumberland Strait forms a *double curve*, and its name is printed in a similar curve. In such cases it is difficult to obtain the proper direction for the letters of the name. Whenever letters have to be printed in a curved form the direction of each letter must be different; they cannot be parallel to each other. The proper slope of each is found by drawing construction lines from the centre of the imaginary circle of which the curve forms a part, and continuing them beyond the circumference of the circle. In "Northumberland," for instance, the first part of the word from N to E forms a curve, which, if continued, would form a circle whose centre would be very near the R in the word "Prince," while the last part of the word, if continued, would form a circle whose centre would be near the head of the western part of the Bay of Fundy. It will be seen on examination that the letters of the word point towards either of these centres.

In making mountains the pupil should note the fact that the short lines drawn on each side are not parallel.

NOTE.—It must be remembered by the teacher that the method of map drawing briefly explained in the above and the preceding article is *not intended to be practised* in the school room. Such map drawing should be done as "home exercises." School exercises in map *sketching* will be continued in the June number of THE JOURNAL.

HEALTH IN SCHOOLS.

I.

LIGHT AND SIGHT.

Thoughtful and practical educators are more and more directing their attention to the subject of School Hygiene. It is admitted by all that the most cultivated intellect does not usually do much for the happiness of its possessor or the benefit of humanity, if it is joined to an enfeebled body. Teachers are, however, very liable to forget the complex nature of the beings which it is their duty to develop. They are generally satisfied if they attend to the intellectual growth alone of their pupils. Physically, socially and morally, the education of the young is commonly neglected altogether, or receives merely a *negative* attention in school. But the physical requirements of scholars cannot be attended to entirely by the teacher alone. The trustees are responsible to a great degree for some of the injuries inflicted too often upon pupils in school. Enough care is not taken, in building school houses, to

have them properly lighted and ventilated. Experiments and investigations, made during the last few years in Europe and America, have disclosed some startling facts in relation to the amount of *myopia*, or near-sightedness, to be found among the pupils in public schools. An examination made by physicians, specially skilled in treating the eye, was made in Breslau, St. Petersburg, Koningsberg and Lucerne. The eyes of over 20,000 pupils were tested, and the astounding discovery made, that, while there was scarcely any near-sightedness on the part of children during the first half year of their school life, over 60 per cent. of those in the most advanced classes had defective eyesight. This is a matter which demands the most serious attention of all who are connected with educational affairs. The chief cause of this vast amount of near-sightedness is the incorrect system of lighting school-rooms. The Austrian schools are now the best lighted in the world. In them, the light is admitted only from the LEFT side. The other three walls of the school-room are *opaque*. The worst possible light is that which comes from the *front* of the pupils. No light should be admitted to a school-room from the *right* side of the pupils. A *rear* light is not so harmful as that which comes from the *front* or *right*. A late English authority, in treating of ophthalmic diseases caused by improper light in school buildings, says: "The remedy is, to have the light sufficiently strong, and let it fall on the desk from the left hand side, and as far as possible from above." The expression "from above," just quoted, does not mean through a sky-light. The left side of the room should contain as many windows as possible, and they should extend from a line about a foot and a half above the heads of the pupils nearly to the ceiling.

Teachers are, however, frequently blameable for much of the near-sightedness of their pupils. They allow them to hold their eyes too near their slates, or copy books, or reading books while using them. Fifteen inches is recommended as the proper distance for the normal eye, from an object, in order to secure the most perfect vision. As teachers have to use their eyes a great deal at *night* in studying, and correcting exercises, etc., the following rules, prepared by Dr. D. F. Lincoln, Secretary of the Health Department of the American Social Science Association, will be worthy of their especial attention:—

RULES FOR THE CARE OF THE EYES.

"When writing, reading, drawing, sewing, etc., always take care that:

- "(a) The room is comfortably cool and the feet warm;
- "(b) There is nothing tight about the neck;
- "(c) There is plenty of light, without dazzling the eyes;
- "(d) The sun does not shine directly on the object we are at work upon;
- "(e) The light does not come from the front; it is best when it comes over the left shoulder;
- "(f) The head is not very much bent over the work;
- "(g) The page is nearly perpendicular to the line of sight—that is, that the eye is nearly opposite the middle of the page; for an object held slanting is not seen so clearly;
- "(h) That the page or other object is not less than fifteen inches from the eye.

"Near-sightedness is apt to increase rapidly when a person wears, in reading, the glasses intended to enable him to see distant objects.

"In any case, when the eyes have any defect, avoid fine needle-work, drawing of fine maps, and all such work, except for very short tasks, not exceeding half an hour each, and in the morning.

"Never study or write before breakfast by candlelight.

"Do not lie down when reading.

"If your eyes are aching from fire-light, from looking at the snow, from overwork, or other causes, a pair of coloured glasses may be advised, to be used for awhile. Light blue or greyish blue is the best shade; but these glasses are likely to be abused, and usually are not to be worn except under medical advice. Almost all

those persons who continue to wear coloured glasses, having perhaps first received advice to wear them from medical men, would be better without them. Travelling vendors of spectacles are not to be trusted. Their wares are apt to be recommended as ignorantly and indiscriminately as in the times of the "Vicar of Wakefield."

"If you have to hold the pages of *Harper's Magazine* nearer than fifteen inches in order to read it easily, it is probable that you are quite near-sighted. If you have to hold it two or three feet away before you see easily, you are probably far-sighted. In either case, it is very desirable to consult a physician before getting a pair of glasses, for a *mistake* may permanently injure your eyes.

"Never play tricks with the eyes, as squinting or rolling them.

"The eyes are often troublesome when the stomach is out of order.

"Avoid reading or sewing by twilight, or when debilitated by recent illness, especially fever.

"Every seamstress ought to have a cutting-out table to place her work, on such a plane, with reference to the line of vision, as to make it possible to exercise a close scrutiny without bending the head or the figure much forward.

"Usually, except for aged persons or chronic invalids, the winter temperature in work-rooms ought not to exceed sixty degrees or sixty-five degrees. To sit with impunity in a room at a lower temperature, some added clothing will be necessary. The feet of a student or seamstress should be kept comfortably warm while tasks are being done. Slippers are bad. In winter the temperature of the lower part of the room is apt to be ten degrees or fifteen degrees lower than that of the upper.

"It is indispensable, in all forms of labour requiring the exercise of vision on minute objects, that the worker should rise from his task now and then, take a few deep inspirations with closed mouth, stretch the frame out into the most erect posture, throw the arms backward and forward, and, if possible, step to a window or into the open air, if only for a moment. Two desks or tables in a room are valuable for a student—one to stand at, the other to sit at."

SUBJECTS FOR TEACHERS' INSTITUTES.

It is very desirable that the meetings of Teachers' Associations should be conducted in as practical a manner as possible. Committees cannot be too careful in the selection of subjects for illustration and discussion. Of course, each Association will have some subjects of special importance to itself, but there are many which must prove of interest to all. The following list of subjects is taken from the last report of the Superintendent of Schools for the City of Springfield, Illinois. They were taken up at the *monthly* meetings of the Teachers of that city in the year 1876. They are given as suggestions for Committees in preparing programmes for Institutes. The names of those who conducted the exercises are given, to show how very largely the ladies took part in the work. It is time that the lady teachers of Canada took a much more prominent part in such meetings. The large majority of teachers are females, and they undoubtedly possess special ability for the performance of many of the duties of their profession. If they took a larger share in the proceedings of Teachers' Institutes they would necessarily take a greater interest in their work. They would observe more, read more, and think more about their duties and the best methods of performing them.

Writing lesson at each meeting throughout the year....Jas. O. Sampson
 Address by the Chairman.....A. J. Smith
 Class drill in Mental Arithmetic.....Miss E. M. Hughes
 How to teach descriptive Geography.....Miss Mary Patterson
 How to teach pupils to read.....Miss Augusta Trapp
 The Centennial.....Miss Lillie V. Tillotson
 How to make lazy boys learn.....Miss Mary J. Sell
 Should all teachers do their part in the Institute?....Miss Kate Croley
 How to teach declamation.....Mr. Geo. E. Dawson
 Should the time given to a written examination be fixed...Mr. A. J. Smith
 Practical Arithmetic.....Mr. N. B. Hannon
 Paper on Reading.....Mr. A. J. Smith
 Tact in teaching.....Miss Maggie E. Muir
 Class drill in English Grammar.....Mr. A. J. Smith

Visiting schools.....Mrs. M. L. Feitshans
 VentilationMiss Mattie Adams
 The German University.....Mr. Geo. E. Dawson
 How to secure cleanliness and neatness.....Miss Kate I. Enos
 How to dispose of pupils failing in examination.....Miss Julia E. Kane
 A class of teachers in English Literature.....Miss Sarah P. White
 Are examinations, oral or written, tests of scholarship? Mr. N. B. Hannon
 Paper on Reading.....Mr. F. E. Feitshans
 Remarks on Reading.....Mr. Jas. O. Sampson
 Drawing.....Miss M. J. Bassett
 Good order.....Miss Lydia A. Patterson
 Patience with dull scholars.....Miss Jennie Irwin
 Are our eyes to be closed to any fault?.....Miss Kate Webster
 Books and their use.....Miss Abba Sutton
 How much assistance should be given in recitation?.....Miss L. Sayward
 How to secure good attendance.....Miss Rebecca Hudson
 A half hour.....Mr. J. H. C. Irwin
 Written examinations.....Miss C. M. Adgate
 Class drill in reading.....Miss Jennie Irwin
 Class drill in history.....Miss Maggie E. Muir
 Manners in school.....Miss Mary H. Kingman
 Geography of Illinois.....Miss Anna M. Pender
 Morals in school.....Miss Nettie Wiley
 Discussion of the above question.....Messrs. Smith and Brooks
 Spelling.....Miss Esther Carriell
 City of London.....Miss Elcaner Maxwell
 History of Illinois.....Miss Lizzie Pender
 Lesson in drawing.....Miss Mary H. Kingman
 Select reading.....Mrs. Mary E. Feitshans
 Compositions in school.....Miss Anna McCrillis
 Incentives to study.....Mrs. Annie Foeshe
 Ink, and its use.....Miss Lillie Foley
 The blackboard.....Mr. Geo. F. Dawson
 Lesson in drawing.....Prof. Holmes
 New York City.....Miss Lizzie Hughes
 Slates and slate work.....Mrs. Eliza McManus
 Slang.....Miss Maggie E. Muir
 Primary arithmetic.....Mrs. Rebecca Cook
 Drill in grammar.....Mr. A. J. Smith
 First steps in school.....Mrs. Mary J. Flower
 Drill in drawing.....Mr. A. J. Smith
 Class drill in grammar.....Mr. N. B. Hannon
 History of Russia.....Miss Maggie E. Muir
 Drill in drawing.....Miss Kate Croley
 Drill in geography of Turkey and Russia.....Andrew M. Brooks
 Drill in drawing.....Mr. A. J. Smith

To show the manner in which the exercises of the Institute were conducted throughout the year, we give below the programme of the meeting held Nov. 25th :

Opening exercises by Prof. F. R. Feitshans.....to 9.10
 Reading minutes by the Secretary, Miss S. P. White.....to 9.15
 Class drill in English grammar, Mr. A. J. Smith.....to 9.40
 Points of a recitation in reading, paper by Mr. F. R. Feitshans..to 9.50
 Points of a recitation in reading, remarks by Jas. O. Sampson..to 10.00
 Queries—Tact, Miss M. E. Muir; Ventilation, Miss M. Adams;
 Visiting in schools, Mrs. M. E. Feitshans; Cleanliness
 and neatness, Miss Kate Enos
 Discussion of the above topics, conducted by the Superintendent..to 10.35
 Recessto 10.50
 Queries continued—Pupils left in passing grade, Miss Julia E.
 Kane; Class in English literature in Insti-
 tute, Miss Sarah P. White; Tests of scholar-
 ship, Mr. N. B. Hannon.
 Discussion of the above topics, conducted by the Superintendent..to 11.10
 Writing lesson by James O. Sampson.....to 11.30
 Lecture on the German University, George E. Dawson.....to 12.00

MENTAL ARITHMETIC. II.

J. A. McLELLAN, M.A., LL.D.

AIM AND SCOPE.

“A man,” says Locke, “cannot have too much Arithmetic.” If the great philosopher is right, it may be said with equal truth that a boy cannot have too much Mental Arithmetic. The highest results of the study of the sciences, whether we consider the value of the discipline it gives or the utility of the knowledge it imparts, can be secured only by systematic mental training. The long and barren reign of rule and formula was mainly due to the fact that

the methodical teaching of Mental Arithmetic had no place in our schools. Given a slate, a pencil and a rule, and the pupil was supposed to be seized of the elements necessary to the development of all the intellectual energy and the attainment of all the practical knowledge with which Arithmetic could possibly be concerned. It cannot therefore be a matter of surprise that under the tyranny of methods which made no appeal to the intelligence, the subject became utterly repulsive to the great majority of students; and even the small minority lost half its value as an instrument of education. But what are the aim and scope of intellectual Arithmetics?

1. Is its design simply to render the student expert in mechanical operations, which, by long practice, may at last be performed without resort to written methods? Is it merely the application of special rules, concise, but of limited application, by which the result in certain Arithmetical computations may be quickly reached? Quickness and accuracy in calculation are of course arrived at in the study of the science; but certainly its primary object is not to render the student and the business man independent of written work. In actual calculations the careful business man, however thoroughly he may have been drilled in Mental Arithmetic, will always betake himself to his faithful pen and pencil. Yet there can be no doubt that it gives facility in computation; it develops a power of rapidly determining the elements of a problem; of seizing on the relations between the known and the unknown; and of instantly marshalling the arguments which alone are necessary to the logical conclusion. And thus the student who has been trained in rational methods will be found to have solved his problem and obtained the desired results, while the slave of rule and routine, lost in a maze of bewildering conditions, is yet vainly ransacking his storehouse for rules and formulæ for a possible clue to his deliverance.

2. But its primary aim is to discipline the mental powers, and at the same time to put the pupil in intelligent possession of all the principles required in ordinary written arithmetic.

Its value in discipline can hardly be over-estimated. It forms the habit of patient investigation, and rapid and clear conception; it aids materially in strengthening the memory and cultivating the faculties of abstraction and generalization; it develops to a high degree the power of continuity of thought; it familiarizes the mind with the forms of strict logical inference—every correct solution rigorously observing the laws of the syllogism, and exhibiting an argument whose validity Aristotle himself could not question. It imparts habits of accuracy in the use of language, caution in the admission of premises, acuteness in the detection of fallacies, and ingenuity in analysis and comparison. The necessity of fixing the attention on all the elements of a problem, the rapid transition from one operation to another, and from one argument to another, the series of quick and accurate calculations which have to be carried on—“contribute materially to produce that readiness of recollection, and that presence of mind so important in practical life.”

3. Mental arithmetic is not intended to usurp the place of written arithmetic; on the contrary, it should be an introduction and a constant auxiliary to written work. The principles involved in mental solutions are universally true, and therefore of universal application. In fact, mental training affords the only rational preparation for a thorough mastery of the practical methods of written arithmetic. It constantly appeals to the pupil's intelligence; it proceeds methodically and by easy steps from the known to the unknown; and by the frequent repetition of carefully graded examples, it puts the pupil in possession of the more important principles of arithmetical science. He is made familiar with almost every type of question he is likely to meet with in written

arithmetic; and becomes so thoroughly disciplined that even in the most complicated problem he grasps the principles involved, and notes every necessary step in the solution before he ventures to make a single figure. With such mental drill, the student will have but little difficulty with the more difficult process of written arithmetic; without it, he is likely to depend on hand-work rather than brain-work—to hurry into the manufacture of figures before he has formed the conceptions and outlined the arguments of which his figures are only the visible expression.

We shall now proceed to illustrate the rational method of teaching arithmetic, taking up the fundamental rules, analysis, fractions, and percentages.

Notes and News.

ONTARIO.

Uxbridge has decided to have military drill taught in the High School.

Bowmanville School Board has resolved to have drill taught in accordance with the Provincial programme.

The Ottawa P. S. Board has appointed Mr. Wm. Rae to the position of Librarian, at a salary of \$150 per annum.

A Columbian magistrate recently fined a pupil for resisting his teacher.

Toronto Public School Board has taken steps for the establishment of an Industrial School.

At its last meeting, the Toronto School Board instructed the Committee on School Management to consider the advisability of establishing a Kindergarten.

London has opened a School of Art and Design. Col. Walker, W. R. Meredith, M.P.P., Mayor Lewis, W. Saunders, Ald. J. R. Peel, John H. Griffiths, W. L. Judson and Charles Chapman are the Committee of Management.

Mrs. Mackenzie, the wife of the Premier, encourages the teaching of the useful domestic arts. She recently presented two gold medals for proficiency in plain sewing and domestic economy to a girls' school in Ottawa.

The Hastings County Council has voted \$100 apiece to the five back townships for school purposes.

At the recent examination of the faculty of Law in McGill College, the gold medal was taken by a lady, Miss Elizabeth Torrence.

At the late professional examination at the Normal School, Ottawa, thirty-four out of a class of forty successfully passed. Forty five out of forty-eight passed in Toronto. The following are the names of the successful candidates:

TORONTO.—Thomas Beattie, John R. Chisholm, Thos. J. Collins, S. K. Davidson, M. G. Dippel, Dilman Erb, J. Forbes, A. W. Gerrie, George J. Gibb, Albert D. Griffin, Jacob B. Hagey, M. S. Hallman, Colin Johnson, Byron Jones, W. M. Leigh, William Linton, Isaac W. Lucia, Charles Miles, John McCabe, James W. Orr, James Phelan, Jas. W. Robinson, Alex. Skene, Jas. Stirton, Geo. Steurnagel, J. E. Tompson, T. R. Walmsley, H. E. Webster, Elizabeth Brooks, Barbara Cattanaeh, Maggie Creighton, Lizzie Cassack, S. J. Dale, Barbara Foote, Kate Garnsey, C. B. Gordon, M. E. Gray, Isabella Hamilton, Mary McCall, Annie Sinclair, Josephine Smith, J. L. Sutherland, Emma C. Field, Janet Patterson, Norman W. Ford.

OTTAWA.—Wm. C. Allin, Charles E. Bell, Wm. Bickell, Wm. Boal, Robert Boal, Alex. Cochrane, Darino Dean, Robert C. Dobbin, John Kelly, Joseph Law, David Lent, John A. Murphy, John McArthur, Wm. A. McIntyre, Geo. W. Sine, George E. Sneath, Jas. C. Steele, David M. Stewart, Egerton J. Unger, Jas. Whaley, Chas. Whyte, Thomas Young, Ellen Calder, Euphemia Campbell, Lucy E. Hinch, Alberta Jones, Millie Livingstone, Angelina Myers, Etta McIlroy, Aggie McMurchie, Annie C. Steacy, Agnes Wilson, Humphrey Johnson, David H. Waugh.

Brantford Collegiate Institute has organized a Company for military drill. It is fortunate in having two graduates of the Kingston Military College as students. The students also have a good literary society.

The Public School Board of Brantford decided at its last meeting to appoint a Truant Officer.

The number attending the High School in St. Thomas is increasing so rapidly that an additional teacher has to be engaged.

In an address recently delivered before the Lanark Teachers' Association, G. W. Ross, M.P., made the following comparisons between the attendance at the schools of Ontario and those of other countries. He pointed out that in 1875, out of a school population in the United States of fourteen millions, four and a half millions did not attend at all, being about 60 per cent., while in Ontario 98 per cent. of the school population were in attendance more or less. Extending his comparisons to European countries, he stated that in Norway one in every six of school population attend throughout the year; in Prussia, famed for her compulsory system of education, one in every seven; in Scotland, one in every nine; in Austria, one in every ten; in France, one in every twenty-one; in Russia, one in every seven hundred; and in Ontario, one in every three and a half.

LIST OF SUB-EXAMINERS.—The following is a copy of an order-in-Council approved by His Honour the Lieutenant-Governor the 15th day of April, A.D. 1878:—

“Upon the recommendation of the Honourable the Minister of Education, the Committee of Council advise that the gentlemen named in the annexed list be appointed sub-examiners at the next intermediate and second-class examinations:—

“Certified.

(Signed),

“J. G. SCOTT,

“Clerk Executive Council, Ontario.

“15th April, 1878.”

1. Professor Bain, Victoria College, Cobourg.
2. Alfred Baker, M.A., Mathematical Tutor, University of Toronto.
3. James Brown, M.A., Mathematical Master, Upper Canada College.
4. W. J. Alexander, B.A., Gilchrist Medallist and Professor in Prince of Wales College, Charlottetown, P.E.I.
5. William Dale, M.A., Classical Gold Medallist (University of Toronto), Rector of the High School, Quebec.
6. John Galbraith, B.A., Mathematical Gold Medallist (University of Toronto), Civil Engineer.
7. Alfred M. Lafferty, M.A., Classical Gold Medallist (University of Toronto.)
8. F. E. Seymour, M.A., Medallist and late Examiner in English and History (University of Toronto).
9. G. B. Sparling, B.A., (Victoria College), Assistant Mathematical Master, Upper Canada College.
10. T. H. Redditt, Undergraduate in Honours (University of Toronto) and Assistant Master in Upper Canada College.
11. D. B. McTavish, B.A., (Queen's University).
12. J. A. Culham, Undergraduate in Honours (University of Toronto).
13. James Panton, B.A., Science Medallist (University of Toronto).
14. Rev. Septimus Jones, M.A., Bishop's College, Lennoxville, late Inspector Public Schools, Belleville.
15. Rev. E. H. Mockridge, B.D., Trinity College, Toronto, late Head Master of St. Mary's High School.
16. Rev. G. M. Milligan, M.A., (Queen's University), late Head Master High School, Bath.
17. J. E. Weatherell, B.A., Classical Silver Medallist (University of Toronto), Professor in Canadian Literary Institute, Woodstock.
18. John A. Patterson, M.A., Mathematical Gold Medallist (University of Toronto).
19. C. Logan, B.A., late of Trinity College School, Port Hope.
20. Donald Munro, B.A., Holder of 1st Class Certificate, Grade B., late Head Master Public School, Lindsay.

The following resolution was carried unanimously at the late Teachers' Association of the County of Haldimand:—“Moved by C. W. Harrison, seconded by W. S. Wood, and resolved, that whereas the Literature required for the 3rd Class Certificates is more extensive than that for 2nd, and whereas it is desirable to avoid the necessity for an extra class in those Schools in which pupils are being prepared for each examination, the Literature for candidates for 3rd class should be a part of that required for second.”

On Wednesday, the seventeenth of April, the Honourable the Minister of Education by special invitation of the Board of Public School Trustees of the City of Ottawa, paid a visit of inspection to the Public Schools of that city, more particularly the schools placed by the Board at his disposal to be used as Model Schools in connection with the Normal School.

In the afternoon Mr. Crooks visited the St. George's Ward Primary School, the Central School East, the Victoria Ward Primary School, and the Central School West. At the latter, the model departments were closely inspected, the ordinary school exercises being proceeded with as if no strangers were present. Mr. Crooks briefly addressed the pupils, and complimented both teachers and pupils upon their proficiency in the various branches of education, and expressed his gratification at his visit.

Leaving the Model School, the party, which consisted of a number of the members of the School Board, went to the Wellington Ward Primary School, and a thorough inspection was made of it.

In the evening a reception was given to Mr. Crooks in St. James' Hall. It was crowded with the parents and friends of the pupils of the Public Schools. A number of distinguished gentlemen, members of Parliament and others, occupied seats on the platform. Mr. Robinson, the chairman of the Board, presided.

Some of the pupils were present, and were examined in Music, Arithmetic, History, Geography and Book-keeping. Mr. Le Sneur, chairman of the Committee on School Management, read an address to Mr. Crooks, who replied in a highly complimentary manner.

Mr. Crooks visited the Ottawa Normal School on the 18th of April, and was received by Prof. MacCabe, Principal of the institution, and the other members of the staff of teachers—Prof. Riddell and Prof. Baptie. Mr. W. G. Ross, M. P., and Mr. J. C. Glashan, Inspector of Public Schools, both on the Board of Examiners, were present.

Mr. MacCabe stated to the Hon. Minister of Education that they had not prepared to give him a formal reception by presenting an address, but welcomed him as the head of the Educational Department, paying an informal visit to one of the principal institutions under his care. The Normal School system had only been carried out during the past few years, having previously been doing common school work, and the result was very satisfactory. It gave students who had received a literary training a chance of going through a professional course at a very light expense. He returned thanks on behalf of the students, and other teachers, and himself, for the honour of the visit.

Mr. Crooks, in reply, said that it gave him great pleasure to meet them. The school here had been established on the recommendation of the late Superintendent of Education, Rev. Dr. Ryerson. It was intended to establish a model school as well, but the Normal was first necessary, hence it had been constructed. The department was very liberal, and gave every encouragement to teachers to take a professional course. The expense was only \$40 for a term. In England it cost £200. The school here has done its work as well as the one at Toronto, and the benefits of the Normal Schools would become more apparent year by year. He spoke of the County Model Schools as institutions which would do much good. Messrs. Glashan and Ross also addressed the students.

NOVA SCOTIA.

The schools and colleges are already preparing for the terminal examinations, the sessions of most of the colleges ending early in June. Dalhousie College closed on the 24th April, leading the way in this, according to the Scotch system. It has had a very successful session, and will turn out a good graduating class. One of its graduates, D. C. Fraser, of New Glasgow, who was two or three years ago President of the Dalhousie Alumni Society, was this winter appointed a member of the Legislative Council and of the Executive Council. The Premier, Hon. P. C. Hill, is a Fellow of the University of Halifax, and D.C.L. of King's College, Windsor; Hon. E. Farrell, also a member of the Government, is a Fellow of the University and a graduate of St. Mary's College, Halifax, so that educational interests ought to be, and are, well looked after by the Government.

The University examinations for the year begins this month, May, with the first M.B., second M.B., and M.D. examinations, followed in June by the Gilchrist Scholarship examination. Arrangements have been made by the University of London to hold its First and Second B.A. examinations here simultaneously with those in London.

Mount Allison Wesleyan College and Acadia College close in the first week in June. The former will send a large class to the examinations of the University of Halifax.

The Halifax Medical College closed its session on the 13th of April, when the degree of M.D., C.M., was conferred on Thomas Malcolm and D. M. Johnson. Messrs. N. E. McKay, Moore and Johnson passed the primary examination. Mr. T. Malcolm took the prize for best final examination, and Mr. McKay that for best primary examination, Mr. Moore obtaining honourable mention.

Dr. George Law Sinclair, has been appointed assistant-physician at the Provincial Hospital for the Insane.

A movement is on foot to establish a training ship at Halifax, for the education of homeless and destitute boys.

The Technological Institute has proved a surprising success, the classes being largely attended.

Professor George Lawson, M.D., Ph.D., has been delivering a course of lectures on Agriculture, which was well attended.

The High School site difficulty has been overcome, and building operations have begun.

According to the "Notarial Act" all candidates for admission to the study of the Profession of Notary must produce a certificate, signed by the Director of a Seminary or the President of a College, that they have gone through a complete course of studies, including Latin elements, syntax, method, versification, electoric and philosophy. It does not appear plainly what is included under the various subjects here specified, nor yet whether this group of studies constitutes a complete course, in the sense intended by the framers of the Act. From what can be gathered on the matter it would seem that the article in question had been made to meet the requirements of those institutions, where French methods of education prevail. Those institutions where English methods have the ascendancy would gladly substitute one or more branches of Mathematics for some of the literary subjects in the list.

The annual Convocation for the conferring of degrees in the Faculties of Law and Medicine in connection with McGill University was held on Saturday afternoon, the 30th of March, in the William Molson Hall, McGill College. The attendance was large. The Hon. C. D. Day, Chancellor of the University, presided. The number of graduates in Medicine was twenty-seven, in Law twenty-nine. The whole number of students during the session in both faculties was 161, of which number 90 were from Ontario. Of the twenty-seven graduates in Medicine, nineteen were from Ontario. The winner of the prize for the final examination was T. W. Mills, M.A., of Hamilton. The winner of the Elizabeth Torrance gold medal in Law was P. B. Migneault.

On the 11th of April a Convocation for the purpose of conferring the degrees in Medicine was held at Bishop's College, Lennoxville. Mr. K. W. Heneker, Vice-Chancellor, presided. The number of graduates was ten; number of students during the session forty-three. During the examination Drs. Paquet and Gibson, representing the College of Physicians and Surgeons, were present. The Vice-Chancellor and Prof. Lobley appealed for assistance to the College, which had recently suffered great losses by fire. Among those present on the dais was Sir F. Hincks.

The following are some of the chief provisions of the Act of last session to amend the Laws respecting Public Instruction. An appeal lies from the decisions of the Chief Superintendent to the Council of Public Instruction, or to one of the Committees. Each of the Committees can appoint sub-committees, and can alter or fix the date of the holding of the meetings of the Board of Examiners. The Lieut-Governor in Council can alter the limits of, or subdivide, existing school municipalities, and erect new ones. School Inspectors are ex-officio visitors of Academies and Model Schools, under the management of Commissioners, in their district of inspection. The Superintendent, and by his appointment the Secretaries of his department, the editor of the *Journal de l'Instruction Publique* and the School Inspectors have power to examine witnesses under oath in all enquiries respecting schools. Saturday is declared a holiday. The Superintendent is to have a copy of every engagement of teachers sent to him. The Principal of the Polytechnic School is to make an annual report. In accordance with this report the Superintendent is to grant the diploma of C.E. Commissioners cannot raise more than \$3000 in any one year for school building purposes; not more than \$1000 in any one year for the requirements of such superior schools as may be under their control. An Auditor of school accounts may be appointed by Commissioners. Minutes of proceedings of the sittings of Commissioners are to be kept. The account books are to be of the form and formulae established by the Superintendent, and not otherwise. Educational institutions not receiving aid from municipalities are exempt from taxation for municipal purposes. In case of absence the Superintendent can delegate his powers to one of the Secretaries of the Department.

BRITISH COLUMBIA.

Matters and things educational in this Province are pursuing "the even tenor of their way" notwithstanding the recent attempt at retrogression by discontinuing the Victoria High School.

The office of Deputy Superintendent of Education has been abolished; but the saving thus effected must be very temporary in its character, as assistance in some shape or other, in the Educational Office, cannot be long withheld.

After passing the half-year's estimates, including \$20,000 for Public School purposes, the Local Legislature was dissolved on the 10th ult. General election to come off almost immediately. Whatever may be the complexion of the next House, the Free School system will be fostered to the utmost extent of the Provincial revenue.

Letters from school teachers in the Eastern Provinces, and often from the States, are constantly reaching the Education Office in Victoria asking for situations, or all sorts of information. To all such but one reply can be given, namely, that should they go to the Pacific province they must take their chances of obtaining schools. With perhaps half-a-dozen such letters on file for answering, a situation or two was unexpectedly vacant; so that if some of these correspondents had only gone instead of writing, they would, as a matter of course, have dropped into work immediately on arrival. It is impracticable to import teachers for particular situations, as two or more months must elapse before they could reach the Province, while in the meantime the schools would have to remain vacant. Hence the necessity of making use of whatever material is on hand when vacancies occur, however indifferent such material may be.

The item in March number of the SCHOOL JOURNAL stating that Dr. Carlyle had "been appointed agent in Ontario for securing teachers for British Columbia" may be the means, if not contradicted, of greatly increasing the correspondence of that gentleman. He was agent for a while in 1875, and after a supply of teachers had been obtained the agency was discontinued, and no re-appointment has since been made.

FOREIGN.

COST OF EDUCATION.—The total cost per capita, based on the daily average attendance, in twenty of the leading cities of the United States:

Cities.	Supervision and Instruction.	Incidental or Contingent Expenses.	Total Cost per capita.
Baltimore.....	\$17.37	\$4.52	\$21.89
Boston.....	23.44	7.96	31.40
Chicago.....	16.73	3.33	20.06
Cincinnati.....	19.84	4.50	24.34
Cleveland.....	15.79	4.93	20.72
Columbus.....	15.96	6.22	22.18
Dayton.....	19.28	6.30	25.58
Detroit.....	12.42	6.20	18.62
Fort Wayne.....	17.87	6.58	24.45
Indianapolis.....	16.25	4.67	20.92
New Haven.....	18.09	4.72	22.81
Newark.....	15.00	4.92	19.92
New York.....	21.62	7.76	29.38
New Orleans.....	22.22	6.04	28.26
Pittsburg.....	19.13	6.02	25.15
Rochester.....	16.26	8.68	24.94
St. Louis.....	20.92	9.20	30.12
San Francisco.....	26.36	7.42	33.78
Springfield, Mass.....	21.83	8.56	30.39
Toledo.....	16.08	6.82	22.90

The Diet of the Grand Duchy of Coburg has resolved to give school teachers, after twenty-five years' services, their full pay as pension for life.

General Eaton, Commissioner of Education, reports that about 957,000,000 acres of land, \$47,785,177.93 in money, have been given outright by the United States Government to aid the cause of education.

The King of Sweden has made the University of Upsala a donation of 40,000 crowns, the yearly revenue from which is to be distributed as premiums to young authors of scientific works.

The Marquis of Bute has contributed to Glasgow University £170,000 sterling, for the endowment of Memorial Hall.

Gymnastic exercises for young ladies are a part of the regular instruction in a large number of the schools in Germany. In the higher schools in Berlin they have been for some time compulsory, and in October the same system was extended to all the communal schools for girls in the German capital.

It is said that the School Board of Glasgow, Scotland, has arranged to establish evening classes for teaching cookery.

Twenty-one freshmen were suspended from an English college because a professor couldn't find out who placed a ten ounce tangle in his chair. He, however, knew all about who sat down on it.

The New Haven Board of Education, at a late meeting, ordered that telephones be substituted for the telegraph system, to connect the various schools. Also, an order that no child shall be received in the lowest primary-room after the first week of any term, if not capable of entering a regular class.

A Maine Education Association lately passed the following resolution: *Resolved*, That this Association deem it for the interests of education that the text-books be owned and furnished by the towns.

Massachusetts has 6 Normal Schools with an attendance of 1067 pupils. There are 218 students in the State Normal School alone.

The Massachusetts Board urge the compulsory establishment of "technical" schools in towns of 10,000 inhabitants, and say, also, that the public-school course must eventually be extended so as to include free universities. The Board urge that private schools in the State should be brought under supervision similar to that of the public schools.

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.

BRANT COUNTY.

The next meeting of the Institute will be held in the Collegiate Institute, Brantford, on Friday and Saturday, May 3rd and 4th. Programme of Exercises:—**FRIDAY**, 9 to 10 a.m.—Preliminary business. 10 to 10.30 a.m.—English History (Stuart Period), Wm. E. Bradley. 10.30 to 11 a.m.—Arithmetic, the Unitary Method, Alex. Bourke. 10 to 11.30 a.m.—Spelling, how to teach it, J. W. Narrowway. 11.30 to 12 a.m.—Lecture on Hygiene, by Dr. D. Leslie Phillip, Brantford. 1.30 to 2 p.m.—A Reading from Dickens, by P. A. Whitney. 2 to 2.30 p.m.—Natural Science, J. W. Aytoun Finlay. 2.40 to 3 p.m.—English Literature and Composition, Dr. M. J. Kelly, I. P. S. 3 to 4 p.m.—Church Tower Literature, W. H. C. Kerr. 4 to 4.30 p.m.—Hints on School Discipline, James Mills. 4.30 to 5 p.m.—Report of Committee on Organization, &c. **SECOND DAY**, 9 to 9.30 a.m.—Hints on factoring in Algebra, W. Rothwell. 9.30 to 10 a.m.—Arithmetical Fractions, how to teach them, W. McIntosh. 10 to 10.30 a.m.—Music in School, J. J. Sims. 10.30 to 11 a.m.—English Grammar, J. Potch. 11 to 12 a.m.—Methods of teaching Arithmetic, Algebra, or Reading, by J. A. McLellan, LL.D. 1.30 to 2.30 p.m.—A Paper by S. Arthur Marling, M.A. 2.30 to 3.30 p.m.—An Address by Rev. Wm. Cochran, M.A., D.D. 3.30 to 4 p.m.—Experiences, Charles Chasgrain. 4 to 5 p.m.—Miscellaneous. On the evening of the first day, a public meeting will be held, when Dr. McLellan, of Toronto, will deliver his Lecture, entitled "This Canada of Ours." Music and Readings will add to the attractiveness of the evening's entertainment.

Dr. M. J. KELLY, President.

W. ROTHWELL, Secretary.

WENTWORTH.

The next regular meeting of this Association will be held in the Lecture Room of the Hamilton Collegiate Institute, on Friday and Saturday, 3rd and 4th of May. Programme.—**FRIDAY**, May 3rd.—Forenoon Session—10 to 11 a.m., Miscellaneous Business; 11 to 12 a.m., Examination Questions, Arithmetic and Grammar. Afternoon Session.—1.30 to 2 p.m., Election of Officers; 2 to 3 p.m., English Literature, T. C. L. Armstrong, M.A.; 3 to 4 p.m., Training of Teachers, Geo. Dickson, B.A.; 4 to 5 p.m., Question Drawer. Evening Session.—7.30 p.m., Moral Culture, Rev. S. D. Rice, D.D.; A Talk about Tonnyson, Rev. W. Stewart, D.D. **SATURDAY**, May 4th.—Forenoon Session—9 to 10 a.m., Music and how to teach it, A. Scott Cruickshank; 10 to 11 a.m., Stocks and Percentage, W. H. Ballard, M.A.; 11 to 12 a.m., How to teach reading, G. W. Johnson; 12 to 1 p.m., Miscellaneous Business. Vocal and instrumental music will be furnished by Professor Johnston and Collegiate Institute Glee Club. These meetings are open to the public. J. H. Smith, P. S. Inspector, President, Ancaster; Charles Macartney, Vice-President, Greensville; Robert McQueen, Treasurer, Kirkwall; David Bell, Secretary, Rockton. The above officers, together with Mr. B. E. Moore, of Frelton, form the Executive Committee of the Association.

LAMBTON.

Teachers' Association, Division 1, Lambton. Thursday and Friday, 9th and 10th May, beginning at 9 a.m. J. A. McLellan, LL.D., Inspector of High Schools, will be present. Programme.—Thursday—9 to 10 a.m., Business Meeting; 10 to 11 a.m., Intellectual Arithmetic, Dr. McLellan; 11 to 12 a.m., Time Tables, J. S. Carson, I. P. S.; 2 to 3 p.m., English Literature, Dr. McLellan; 3 to 4 p.m., Lecture—Necessity for General Culture, Rev. J. B. Duncar; 4 to 5 p.m., Reading, Dr. McLellan. Friday—9 to 10 a.m., Algebra, Dr. McLellan; 10 to 11 a.m., Query Box, Committee; 11 to 12 a.m., Monthly examinations, T. White; 2 to 3 p.m., Object Lesson, J. Brebner, I. P. S.; 3 to 4 p.m., Grammar, A. E. Wallace; 4 to 5 p.m., How to keep pupils employed, C. A. Barnes. Dr. McLellan will also deliver a Lecture on Thursday evening, "Subject—THE CANADA OF OURS."

J. M. DUNCAN, Secretary.

C. A. BARNES, President.

NORTHUMBERLAND.—The semi-annual meeting of the Northumberland Teachers' Association was held in the Model School Building, Cobourg, Thursday and Friday, 28th and 29th March. The meeting was one of the most successful ever held in the County, and it might be added that its success was owing very largely to the presence of Dr. McLellan, High School Inspector, and President of the Ontario Teachers' Association. The President of the Association opened the meeting by delivering an able address, showing the necessity of such meetings. W. E. Sprague, Head Master County Model School, then addressed the teachers on "School Organization and Discipline." The address was replete with suggestions and methods of vital importance, which show that Mr. Sprague is thoroughly up to the position he occupies. N. L. Holmes next took up the subject of "Language Lessons," after which a discuss-

sion took place by the teachers and others, prominent among whom were Inspector Scarlett, D. C. McHenry, W. E. Sprague, Prof. Bun, A. Coleman, M. A. James, W. E. Bartlett. *2nd day.*—Dr. McLellan delivered a lengthy and excellent lecture on Arithmetic. The Doctor received the unanimous thanks of the meeting for his very interesting and instructive expositions of the subject. Mrs. Fish followed the Doctor with an object lesson. It was interesting and practical, and certainly reflects credit on the lady. Grammatical Analysis was afterwards taken up by Mr. Ash. His discourse was liberal, expressing the views of various authors on the more peculiar and difficult passages. A discussion followed, during which the connection between Language Lessons and Grammar was not overlooked. It was the opinion that since Mason's Grammar is to be the authorized text after this year, that the Language Lessons ought to harmonize in definitions, etc., with the advanced text to be used, and for this reason MacMillan's recently prepared edition was thought to be the best. Dr. McLellan closed the addresses by giving in his usual masterly style a lecture on the very important subject of Reading. In the evening, the Doctor gave a lecture, to a crowded house, which was a complete success, eliciting frequent applause from the audience. At the conclusion, Rev. Dr. Nelles, President of Victoria University, in a few pertinent remarks, moved a vote of thanks to the Doctor for his very able lecture. He was seconded by the Rev. J. Ballantine, and the motion was received with hearty applause.

LENNOX AND ADDINGTON.—The semi-annual meeting of the Teachers' Institute was held in the Model School Building, Napanee, on Friday and Saturday, April 26th and 27th. The attendance of teachers was large, and the meeting unusually interesting. Prof. Young, of Toronto, Prof. Macoun, of Belleville, and Mr. Knight, of Kingston Collegiate Institute, were present. F. Burrows, Esq., P. S. I., President, occupied the chair, and opened the proceedings by calling the Rev. Mr. Tilley, of Napanee High School, to read the minutes of last meeting. Resolutions, recommending *Swinton's Language Lessons*, petitioning for a change in the time at which the Sup. Teachers' Fund may be made available, and that no Third Class Certificates be renewed without examination, were passed at the request of East Middlesex Association. English Literature for Entrance Examination was taken up and discussed by A. C. Osborne, Esq., H. M., Napanee Model School. Prof. Young then gave an interesting lecture on the *Kindergarten* and his experience with its working in Toronto. Infant Calisthenics, by Miss Aylesworth, and a senior class, by Miss Fraser, were then introduced, and acquitted themselves in a most creditable manner, being complimented by Prof. Young especially, as well as by all present. In the evening a public lecture was delivered by Prof. Young on "Psychology, educationally considered." There was a crowded hall, and the lecture was both learned and instructive. A vote of thanks was cordially tendered to the Professor, which was moved by Rev. Mr. Young, of Napanee, seconded by Mr. Knight, of Kingston. On motion of Mr. Matheson, of Napanee High School, seconded by Mr. A. C. Osborne, Prof. Young was elected honorary member of the Association. Miss Gillen, of Napanee Model School, read an excellent essay on "Teaching English Composition," which was requested for publication. The election of officers resulted in the re-election of Mr. Burrows, president; Mr. Black, of Tamworth, 1st vice; Mr. Asselstim, Odessa, 2nd vice; Mr. Tilley, secretary; Mr. Matheson, treasurer; and an executive committee. Mr. Burrows was elected delegate to Educational Society, Eastern Ontario. Mr. Tilley read an interesting essay on "The Teacher's Work," which was requested for publication. Mr. Matheson then discussed the English Literature for Third Class Examinations. Prof. Young then gave an instructive lecture on "Practical Botany." Mr. Black introduced and discussed the subject of Arithmetic. "The Art of Penmanship" was then introduced by Mr. A. C. Osborne. The Misses Fraser and Vandyke furnished excellent selections in music. In the evening Prof. Macoun delivered an eloquent and instructive lecture to a large audience, in the Town Hall, on "The Distribution of Plants and Animals," which was highly appreciated. Mr. Knight, of Kingston, in a few eloquent remarks moved a vote of thanks, seconded by Mr. Matheson, which was cordially tendered to the lecturer. Thus ended one of the most successful and instructive institutes held in the County. Mr. Burrows, the Inspector, has labored diligently, and he has succeeded in making the teachers thoroughly alive on the subject.

Readings and Recitations.

SOCRATES SNOOKS.

Mister Socrates Snooks, a lord of creation,
The second time entered the married relation;
Miss Xantippe Caloric accepted his hand,
And they thought him the happiest man in the land;
But scarce had the honeymoon passed o'er his head
When, one morning, to Xantippe, Socrates said:
"I think, for a man of my standing in life,
"This house is too small, as I now have a wife,
"So, as early as possible, carpenter Carey
"Shall be sent for, to widen my house and my dairy."

"Now, Socrates, dearest," Xantippe replied,
"I hate to hear everything vulgarly 'my'd,'
"So whenever you speak of your chattels again,
"Say, our cow house, our barnyard, our horse and our hen."
"By your leave, Mrs. Snooks, I will say what I please
"Of my houses, my lands, my gardens, my trees."
"Say on," Xantippe exclaimed in a rage.
"I won't, Mrs. Snooks, though you ask it an age!"

Oh, woman! though only a part of man's rib,
If the story in Genesis don't tell a fib,
Should your naughty companion o'er quarrel with you,
You are certain to prove the best man of the two.
In the following case this was certainly true,
For the lovely Xantippe just pulled off her shoe,
And laying about her, all sides at random,
The adage was verified—"Nil desperandum."

Mister Socrates Snooks, after trying in vain
To ward off the blows which descended like rain—
Concluding that valour's best part was discretion—
Crept under the bed like a terrified Hessian;
But the dauntless Xantippe, not one whit afraid,
Converted the siege into a blockade.

At last, after reasoning the thing in his pate,
He concluded 'twas useless to strive against fate;
And so, like a tortoise, protruding his head,
Said, "My dear, may we come out from under our bed?"
"Ha, ha!" she exclaimed, "Mr. Socrates Snooks,
"I perceive you agree to my terms by your looks;
"Now, Socrates—hear me—from this happy hour,
"If you'll only obey me, I'll never look sour."
'Tis said, the next Sabbath, ere going to church,
He chanced for a clean pair of trowsers to search;
Having found them, he asked, with a few nervous twitches:
"My dear, may we put on our new Sunday breeches?"

THE OLD SCHOOL BOOK.

On the old school book, in its dusky nook,
With a tearful eye I gaze;
Come down, old friend, for an hour we'll spend
In talking of bygone days.
I gaze once more, as in days of yore,
On the task that vexed the brain;
The lesson done, and the victory won,
And I feel I'm a child again.

And I seem to stand with the youthful band
In the old house on the green;
I hear the fun ere the school begun,
And I join in the gladsome scene.
I take my place with a sober face,
O'er the well carved desk I bend,
And hourly pore o'er the antique lore
Of thy wonderful page, my friend.

Then our cares were few, and our friends were true,
And our griefs were rare and light;
The world was naught (so we fondly thought)
But a region of pure delight.
But time has sped, and our path has led
Through the dark and tearful scene:
And passed away are the good and gay,
Like the old house on the green.

But we'll sing no more of the days of yore,
For the tear-drop dims the eye;
Sleep on, old book, in the dusty nook,
As in years that have glided by.
No guilt we trace in thy honest face,
But a mine of gold within,
Enriched the youth, as they sought for truth,
In the old house on the green.

ANSWERS TO QUERIES.

1. Will the subjects for the third class be grouped the same as the second at the next examination? No.
2. Will a knowledge of Davies's Advanced Grammar be sufficient to enable a candidate to pass a third class examination? Yes.

3. When will third class candidates be examined? July 15th and following days.

4. Can I obtain a second class certificate by passing the Intermediate, and attending the Normal School, without first teaching on a third?—*Subscriber*. You must first teach a year, before you can be admitted to the Normal School.

5. What is the history required for second class candidates?—*Teacher*. English, Canadian, and General European History.

BOOK REVIEWS.

HOUSEHOLD EDUCATION; by Harriet Martineau. Boston, J. R. Osgood & Company, \$1.00. Miss Martineau was a close observer of childhood and its development. Her autobiography proves this. Her Household Education shows that she was a careful student of the Science of Education as well. The book was first published in 1848. It discusses thoroughly the duty of parents in regard to the physical, mental, social, and moral training of their children. The schools may be "*weak*" in some respects as their critics affirm them to be, but all thinkers now agree that the home is much *weaker*. The schools can never atone for home negligence or fully counteract home absurdities. This book is calculated to do great good, for those parents who read it. Teachers will also find many very valuable suggestions relative to discipline, management, cultivation of proper feelings, and the natural development of the faculties, in this book.

HISTORY OF CANADA; by Andrew Archer. J. & A. McMillan, Saint John, N. B. This is the history authorized for use in the schools of New Brunswick. It treats of the history of Canada as a whole, and is written in an attractive style. The arrangement and typographical execution are excellent. Several maps are inserted, and it contains valuable chronological and other tables. It is an excellent work for teachers in preparing their lessons in Canadian history.

PUNCH, BROTHERS, PUNCH. New York, Soto, Woodman & Co. Toronto, Adam Miller & Co. Cloth, 50 cents; paper, 25 cents. This is a very neat volume of short sketches by Mark Twain. Mark's sketches are always humorous, and never vulgar. The book contains nine sketches.

DESCRIPTIVE CATALOGUE OF CHEMICAL AND PHYSICAL APPARATUS. Hall & Benjamin, 191 Greenwich street, New York. These enterprising manufacturers have issued their first annual catalogue. They seem to be determined to take a first position as instrument and apparatus manufacturers. Their catalogue contains descriptions of over 600 different kinds of apparatus. Physical Science Masters in either High or Public Schools would undoubtedly be benefitted by an examination of the catalogue. The publishers will mail it to any one on receipt of a 6 cent stamp (U. S.) to pay postage.

MONTHLIES.

THE CANADIAN ENTOMOLOGIST; Edited by Wm. Saunders, London, Ont. Teachers will find great pleasure, and benefit to their health, in collecting specimens of Insects &c., for their schools or private cabinets. This journal contains much valuable information on the subject.

THE INSTRUCTOR: Cincinnati, published at the office of "*Christian World*." This is a S. S. Magazine with very good and suggestive lesson notes.

THE TEACHERS' JOURNAL: York, Penn.; Rev. P. Austadt, Editor. This is a S. S. Journal devoted mainly to the explanation of the lessons.

THE PRIMARY TEACHERS' MONTHLY: Chicago, Fairbank & Co.

Edited by Mrs. W. S. Crafts. The many friends of Mrs. Crafts do not need to be informed that a Journal edited by her must contain much of great value for Primary teachers, both in Sunday and Public Schools. The "*Primary Teachers' Monthly*" is a very practical and interesting publication.

THE SUNBEAM is a spicy family paper, which devotes a considerable space to Education. It is published at Litiz, Pennsylvania, at \$1.00 per annum. Everything in it is choice.

NEW WEEKLIES.

THE CANADIAN SPECTATOR, published in Montreal by Rev. Andrew James Bray, is a new journal which takes an independent view of matters in general, politics, religion, &c.

THE JESTER is a new humorous paper published by G. G. Desbarats, Montreal, at \$2.50 per annum. It is well written, and the illustrations are good.

Publishers' Department.

Subscribers not receiving their paper before the 15th of the month will please notify us.

Worthy of imitation.—*The Board of Public School Trustees, Ottawa, have recently ordered a copy of the Canada School Journal to be sent to each member of their Board.*

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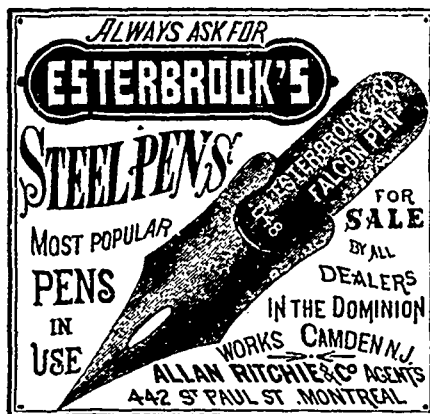
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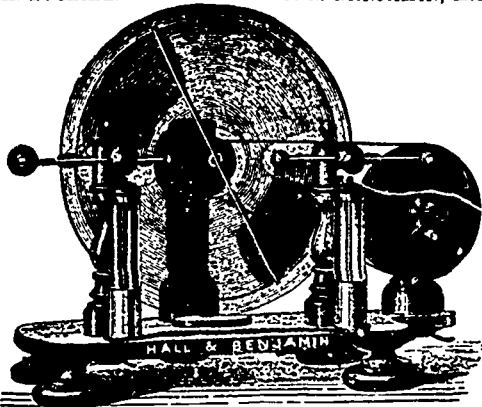
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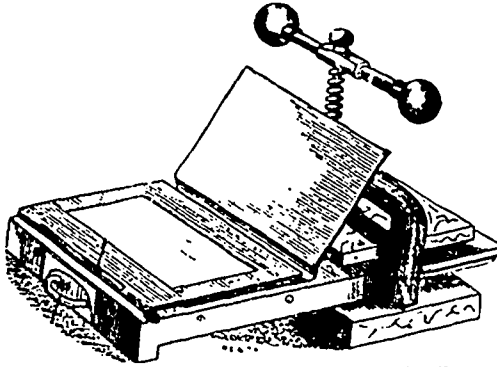
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