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The Canada School Journal.

Vol. V.

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The Canada School Journal

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CANADA SCHOOL JOURNAL HAS RECEIVED

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

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

THE CANADA SCHOOL JOURNAL IN 1881.

Our accounts from the various Teachers' Associations held last month are most encouraging. Not only has the CANADA SCHOOL JOURNAL been unanimously adopted by numerous Associations, to be supplied to the teachers partly at the cost of the Association, but at the meeting of the Teachers' Association of West Lambton, it was resolved that the Association altogether, at its own expense, should send the CANADA SCHOOL JOURNAL to every teacher in the county.

The publishers of the CANADA SCHOOL JOURNAL, on their part, are resolved to spare neither expense nor effort in their endeavors to make this journal worthy of the confidence thus bestowed on it by the teaching profession—to make it, in a word, the foremost educational journal on this continent. No less ambition ought to satisfy them or their constituents.

The publishers have lately made an addition to the editorial staff of the SCHOOL JOURNAL, and are prepared to furnish, during the coming year, an amount of matter exceeding that of any other educational paper, with full discussion of all topics of interest to the teaching profession and those connected with education. Literary reviews, and notices of all questions relating to our school system will be furnished, as well as personal intelligence, and reports of all meetings and other events of importance to teachers.

School inspectors and others engaged in educational work are requested to furnish the editor with reports of all Teachers' Associations, and other matters which ought to be placed before the profession and the public.

THE RECENT UNIVERSITY GATHERINGS.

The late University gatherings at Kingston and Toronto are somewhat noteworthy, if not remarkable in their way. That at Kingston was especially so for many reasons, while

that at Toronto had a touch of sadness about its main incident. It witnessed the closing educational career of one of the ripest, if not the ripest, scholar in the Dominion. The gathering at Kingston, on the other hand, had nothing but gladness in all of its elaborate and enthusiastic demonstration.

The Rev. Dr. McCaul took leave of University College amid universal regret, after a prolonged and honourable career as its President. To him the provincial institution owes its present high position. His acknowledged scholarship shed a lustre on the whole University, even noted, as it has long been, for its able and distinguished professors. The incident of the unveiling of the likeness* of the departing President was a very touching one; and the graceful act and speech of the incoming President on the occasion struck a responsive chord in the hearts of all present—no less felt and appreciated by the many friends of both gentlemen who were not able to witness the ceremony. While we take leave of Dr. McCaul with unfeigned regret, we welcome with no less cordiality the new President, who, by common consent, is eminently fitted for his new and distinguished position.

The gathering at Kingston to instal the new Chancellor, and to take formal possession of the extensive and handsome addition to Queen's University buildings, was indeed a memorable one for many reasons. In the first place, it inaugurated a new and significant departure in Canadian University celebrations. For the first time the representative heads of other universities and colleges were present and took part in the ceremonial exercises. This was a graceful act on their part, and to invite them was a fitting one on the part of the Queen's University. The representative heads thus present were the Chancellor of Toronto University, the President of Victoria University, the President of Albert University, the Principal of the Toronto Protestant Episcopal Divinity College, and a representative professor from McGill University. Such a gathering was truly fraternal and hopeful, and contrasted strongly with the state of things in University matters which was thus described by a recent writer on *University Consolidation* in one of our magazines. He says:—

“Unfortunately, University men in Ontario have rarely if ever acted in concert. They have either been in antagonism to one another, or have chosen to maintain the position of dignified neutrality. . . . This apathetic state of feeling, which seems chronic, we fear, is unfortunate for the University future of Ontario. By persisting in such an exploded Japanese system of non-intercourse, we are inflicting an evil on our country, and doing an injury to its higher scholarship.”

The fears of this writer have fortunately proved groundless, and we congratulate all parties concerned on the abandonment of the former system of University non-intercourse.

The gathering at Kingston was further noted for the character and variety of the speeches delivered on the occasion. There was a raciness and spirit in all of the addresses delivered,

* Painted by a rising young artist and fellow-townsmen, the oldest son of the Hon. Mr. Justice Pattison.

which added greatly to the interest and *eclat* of the occasion. The utterances of Chancellor Blake and of President Nelles were particularly striking and noteworthy. In his speech, Hon. Mr. Blake made reference to the often discussed question of "University Consolidation." He said:—

"It is obviously impossible that the educational interests of this could not be met by one institution in one place. Therefore it was not only desirable but necessary that other institutions should grow in different parts of the country. As to the degree granting power, he would say here, as he had said elsewhere, that the day may come, if now afar, when it may be centred in one institution, say the Provincial University. He did not believe that this would alter the position of the teaching staff, as each would have to stand upon its own footing. The stamp of the degree would be higher if it were conferred by one university alone. The first step towards that consummation was always apparent, in his judgment, when he saw the university increasing in its strength. The stronger the endowment, the better its staff; the more it flourished, less difficulties were in the way of the ultimate union of the graduating power."

On this subject Rev. President Nelles differed with Chancellor Blake, and was especially outspoken and emphatic in his utterances. He said:

"As to collegiate consolidation, which Dr. Grant deprecated, he could see great benefit in it. The difficulty would be in the moving of the colleges which were already established. If this could be accomplished none would rejoice more than he did, for the longer he lived the more he hated sectarianism and bigotry, and the consolidation of the colleges would break down these. As to university consolidation, the time for that had gone by. Many years ago Queen's and Victoria Colleges had urged it, and the late Principal Leitch and himself had laboured hard in that direction. The views of these colleges were in the records of University College. The failure to unite was not because of narrowness on their part, but on that of University College. As to University College, he drew an opposite conclusion from the Hon. Mr. Blake, that the stronger the universities became the more willing they would be to amalgamate. When the universities were weak they were anxious to amalgamate. But now that both Queen's and Victoria had made progress so rapidly, and had added to their buildings and teaching staffs, this put the idea of university consolidation, in his opinion, beyond the range of probability."

Want of space compels us, with regret, to omit reference to the special features of other excellent addresses delivered on this interesting occasion.

THE INCORRIGIBLES.

A reaction in favor of King Solomon's theories as to juvenile discipline seems to be setting in, at least in England, with regard to boy criminals. The rapid increase in this class is exciting attention, for its repression seems utterly inadequate. The comic journals, *Punch* and *Fun*, propose Lynch Law, and a supple or reliable rattan. Imprisonment in a common gaol, besides the danger of corrupting those not utterly depraved, is an unequal punishment. To one class of boys it is an ineffaceable degradation, while to the hardened gaol-bird it is only a species of uncomfortable hotel. Therefore, Sir William Harcourt, the Home Secretary, expressed the general sense of the community when he refused to sanction the imprisonment of boys or girls in a common gaol. The *Saturday Review*, the *London Times*, and other leading journals, advocate a sufficient but not severe whipping as, on the whole, the most equal punishment.

A similar difficulty meets us in Canada. "What to do with the Juvenile Criminal" is a question debated by several of our exchanges in all parts of the Dominion. But three weeks have passed since the Montreal papers recorded the robbery of large sums, over \$700, from one person alone, by a gang of boy-thieves, "truants" escaped from St. Laurent College. The police records of London, Hamilton, and Toronto, show that such cases do not stand alone. We believe that our contemporaries are right in suggesting corporal punishment as the most equal, and, at the same time, the most efficacious in such cases. But the remedy should be deeper—should meet the source rather than the consequences of the evil. That source he believed to be twofold: in the first place, TRUANTISM; in the second place, the free circulation of literary garbage, not exactly indecent, but sensational, vulgar, slangy, holding up the worst and most degraded examples, and treating with coarse jest, devoid of wit as of truth, all that young people ought to be taught to honor.

The best remedy for the former of these evils we believe to be that proposed by School Inspector Hughes to the Toronto School Board—the establishment of a school expressly for the class of truants.

For the second evil we claim that it is the duty of the Minister of Education to take measures by obtaining the consent of the Legislature for the establishment of a censorship of juvenile literature. It may be said that it is impossible altogether to suppress the sensational dime novel. It is true that those who have imbibed a morbid taste for such things, can perhaps always get at them, just as those who crave for the filth of the *Police Gazette* and other literature of the cesspool can always procure what they want. But we speak in the interest of the great number of children who know nothing of such things till they are tempted by the flaming broad-sheet that fills every print-shop window. There never was a time when good juvenile literature was so abundant as now. Let a little prompt action on the part of the Education Department make a clean sweep of "Mr. Jack Harkaway," of the "Boy Pirate," and all such poisonous trash, the mischief done by which to mind and morals is simply incalculable.

THE UNIVERSITY OF TORONTO.

The recent gathering at the Installation ceremony must have been a subject of pride to all who take interest in that great system of public education in Canada of which the National University is the apex and crown. With full and fitting honors to the retiring President, his successor, Professor Wilson, assumed his official place. The Minister of Education deserves the thanks of all interested in the University of Toronto for his choice of one whose services as Professor have been given for a period of twenty-seven years, whose public-spirited sense of duty has during that period made him foremost in all good works for the benefit of education and morals, and whose published writings, to the honor of Canada, have long taken a foremost place in the literature of the world.

President Wilson's address exhibited a gratifying view of the great advance made by the University during the twenty-seven

years in which he has been familiar with its working. He showed by statistics the increase ten-fold of its matriculants, and pointed with justifiable pride to the high position held by its graduates in society, in the professions, and the public service. The staff of the University is about to be strengthened by the addition of two gentlemen selected by the Minister of Education, by Professor Wilson, and others in whose judgment the public are surely justified in placing confidence, as the best men that can be found to fill their relative positions.

In speaking of the present prosperous and promising condition of the University, President Wilson added one sentence which, in view of the criticism so abundantly volunteered of late by irresponsible outsiders, seems to convey a suggestion of sarcasm, as well-applied as it is delicate: "It were to be wished that Utopian reformers would allow growths so vigorous room to grow."

IMPROVEMENT OF SCHOOL BUILDINGS.

At several of the late Teachers' Associations papers have been read and discussions held as to the best way to "Make the School Attractive." Stress has been laid, and, we think, most deservedly, on the importance of brightening and beautifying the interior of the school building. "To little children just beginning their school life, it is well that the school room should wear a pleasant and inviting appearance; for all scholars, a few pictures, a few flowers, will rest the eye and make the task work easier by pleasant surroundings; the humanizing effect of learning to value beauty, neatness and order, for their own sake, will be a valuable lesson whose effect will make itself felt in the improved appearance of home in future years. And one most valuable effect of attention to this subject will be, not only that the constituents of school sections will be more willing to go to some little trouble and expense for the preservation of school-buildings in which they see both teachers and scholars take practical interest, but that the care and adornment of the school may be made a bond of sympathy and common subject of interest between teacher and pupils. In the spring and summer the play-ground might be surrounded, or at least bordered at the front, with a margin of flowers. These might be divided into beds, each to be assigned to the care of a partial child. In winter, painted boxes, neatly made, might contain flowering plants, each of which should be under the charge of a scholar. Not only sweeping, but window-cleaning and painting, might be undertaken in common by teachers and scholars. At a very small expense, plus a little cheerful alacrity and ready example of helpfulness, the school room might be made to wear an appearance of neatness, and even of beauty, in which the scholars would soon learn to take pride. Every such lesson has its moral value.

SUPERANNUATION OF TEACHERS.

A letter on this subject appeared in the *Globe* of Tuesday, October 19th, over the signature "Magister." He dwelt on the smallness of the pittance which the present fund promises, a

result of which is that few contribute the four dollars a year required except the male teachers in the Public Schools, who are compelled to do so by the regulations. He suggests the following amendments in the Superannuation System:

1. That the annual fee be not less than \$10 a year.
2. That the law should apply to female as well as male teachers.
3. That H. S. teachers should also come under the provisions and requirements of the fund.
4. That a fee varying from \$10 to \$50 be exacted from everyone before obtaining a third, second or first-class certificate, and also from University graduates or undergraduates before receiving certificates as head masters or assistants in high schools, the superannuation fund being increased by the amount thus raised.
5. That no part of the amounts paid be returned to a teacher who retires from the profession for other duties, unless at a certain age.
6. That after 25 or 30 years' service, a teacher should have the privilege of retiring with a superannuation allowance.
7. That the allowances should be a respectable and definite amount.
8. That some inducement should be offered to teachers to advance in the profession by giving to those who secure higher certificates or take a University course increased claims on the superannuation fund.

To make the annual payments optional would never do. As female teachers compete with male teachers, and serve to keep down salaries, they should also pay a license for their privileges.

How much attention is being attracted to this most important question, the reports of the conventions in the present issue of the *JOURNAL* will show. We invite discussion of this subject in our columns. Meanwhile we think "Magister," whose programme of reform is a much more sweeping one than any of those endorsed by the conventions of last month, has made at least one good point. It is this. Sentimental reasons ought not to prevent the Department from requiring female teachers to be under obligation to contribute to the Superannuation Fund equally with males. If ladies come forward to compete with men in the profession of teaching, they should surely do so under the same conditions. As a fact, the female teachers exclude a considerable number of male teachers from schools, which would otherwise have to pay a better salary and employ a male teacher. But, for physiological reasons, it would be fair that the female teacher should be eligible for superannuation, and at an earlier age than the male teacher.

—Our readers will see, by the circular of the Minister of Education in the Official Department of the *Journal*, the interpretation which he gives of the 29th clause of the Amended School Act of 1879. We have frequently pointed out the fact that the clause is directly at variance with the essential portion of the school law requiring School Boards to provide adequate accommodation for the school population of the sections or municipalities which they represent. Mr. Crooks recognizes this fact, and holds that the obligation to provide accommodation still rests with School Boards, and that Councils can, not legally refuse, even by "two-thirds majorities," to grant the money required for this purpose. We would suggest to the Minister of Education the propriety of either removing the 29th clause altogether, or remodelling it so as to make a clear distinction between providing accommodation for those pupils who have no school to attend, and the erection of a new school to take the place of an old one. In the latter case it might be wise to place a check on School Boards; in the former it is unjust to do so.

—The following is given on the authority of the *St. James's Gazette*. It may be taken by teachers generally as an example of tact:—

"A discovery of a painful nature was made on the 25th of August by the Professor of Latin and the Harp at the Wilson Female Seminary of Redfield, Massachusetts. The professor, while passing through the corridor to his room at a late hour, heard a sound of revelry in room No. 11. He also smelt the fumes of tobacco. To climb upon a chair and peep through the fanlight was the work of a moment, and the spectacle that met his eyes was sufficient to make his blood run cold. Twelve young ladies, with their back hair down, were seated round a table smoking cigarettes, drinking cold tea, and occasionally singing in subdued voices. Descending from his perch, the professor at once reported the affair to the principal, with the names of the culprits. The principal, unwilling to blight twelve young lives by so extreme a measure as expulsion, hit upon another plan after much deliberation. At prayers the next evening he made a brief speech, announcing his intention to add a new study to the ordinary curriculum, but that before doing so he desired to consult with his beloved pupils. He therefore invited the twelve young ladies named by the Professor of Latin and the Harp to meet him in his study at seven o'clock that night. The young ladies, much flattered, presented themselves at the study door at the hour mentioned, and were received with grave courtesy by the principal, who, to their surprise, locked the door and placed the key in his pocket. He also carefully closed the windows, although the atmosphere was stifling. He then addressed them, stating that he had determined to introduce the Theory and Practice of Smoking as a new study. The attempt of certain ambitious students to master the art of smoking without a teacher was, he admitted, extremely creditable; but, as he had decided to undertake the duties of a professor of smoking, he trusted that none of his dear young friends would try to smoke by the light of nature. Filling a large pipe for himself, and producing a supply of strong cigarettes for his pupils, the professor asked all to 'light up,' and the lesson began. The young ladies smoked with vigour, but the tobacco soon took effect upon them. In twenty minutes Miss Sally Smith dropped her cigarette and sank upon the sofa. Five minutes later, Miss Betty McGinnis followed her example, and at the end of forty minutes every one of the twelve, with the exception of the two on the sofa, were lying on the floor, 'mute and limp, and in their deathly agony wishing they were dead.' The professor himself smoked on until eight o'clock, when he asked with great surprise and tenderness 'if anything was the matter;' but receiving no answer beyond inarticulate groans, opened the windows, unlocked the door, and summoned the matron. It was two days before the smoking class made its appearance, and then the young ladies looked, as the washerwoman observed, as if 'they had been wrung out and drawn through a knot-hole.'"

—In the past number of a new Educational bi-monthly, the following sentence occurs in an article from the pen of Dr. McCosh:—"Education would greatly be stimulated by each State having a system of superintendence, general and local, by highly educated and well-trained superintendents." In this respect we are far ahead of our go-ahead cousins across the Lakes. What they are striving for we have attained. All our schools are under the direct supervision of well-educated, well-qualified, and, on the whole, well-remunerated Inspectors. The appointment of these inspectors rests with the County Councils, and the manner in which they have discharged this important trust augurs well for the future progress of our Educational System. The Council of Lanark has lately appointed Mr. FRANK MITCHELL, B.A., as Public School Inspector. We congratulate the County. No better appointment could have been made. Mr. Mitchell received his early training at the Whitby High School, then under the Head Mastership of Mr. Kirkland, where he greatly

distinguished himself, not only for his abilities, but also for his great industry and capacity for work. After acting as Assistant for some time in Whitby, he taught several Public Schools with great success, subsequently matriculating in the University of Toronto, attaining honour in Mathematics, and a high standing in the other departments. During his University course he also obtained honors in the Departments of Modern Languages and Metaphysics. In 1875 he was appointed Head Master of the Perth High School, then in a depressed condition, now, we understand, soon to take its place among the Collegiate Institutes. This is mainly owing to Mr. Mitchell's ability and untiring energy. That he will exemplify these qualities in a still higher degree in his new sphere, we have no doubt, and that the Public Schools of Lanark will soon be as distinguished as the Perth High School for good scholarship and good government.

The following letter to the *Mail*, referring to the questionable means adopted by certain well-known masters to advertise their Institutes is to the point, and sustains the remarks on the subject contained in an article in the last number of the *JOURNAL*. It has been sent to us for publication.

SIR,—Will you kindly allow me the use of your columns to call attention to the very objectionable practice which is indulged in by some High School Masters, of sending advertisements broadcast through the Province cranking up their own schools for the purpose of obtaining pupils from outside their own districts?

The High Schools and Collegiate Institutes of Ontario are County and not Provincial schools, and the practice above mentioned is simply "sheep stealing," to say nothing of the contemptible egotism, and, in some cases, even deception involved. Nor can it be defended on the plea that it is for the public good. I will venture to say that at the present time there is scarcely a county in the province where students may not receive as good and as thorough a training in their own High Schools as anywhere. It is a great mistake to suppose that because one school has eight or ten masters and another only three or four, better work is done in the former than in the latter. Any one acquainted with the matter knows very well that six recitations a week, when the class is very large, are not more beneficial to the individual members of the class than half that number of recitations when the class is much smaller. Very much, indeed, depends upon what is known as individual instruction. More might be said, but I do not wish to trespass too much upon your space. Let each High School Master do his work faithfully and well in a quiet and gentlemanly way, and leave all "tricks of trade" to the so-called business colleges, to pettifoggers, and quacks.

Yours, &c.,
27th August: HIGH SCHOOL MASTER.

The Artisan's Institute of London, Eng., has opened classes for the practical and scientific instruction of apprentices and workmen in the various trades, such as carpenters, joiners, bricklayers, masons, modellers and metal workers. Would it not be well for Mechanics' Institutes to devote their attention to the practical education of young mechanics, druggists, clerks, &c., and leave instruction in the school branches to night schools conducted by Public School Boards? These might become an established part of the public school system, if the Minister of Education would recognize them to the extent of giving a grant towards their maintenance, as is done for the day schools. We are glad to see that other cities and towns are disposed to follow the lead of Toronto in opening evening classes for those who long for education, but cannot attend school during the day.

We have read with pleasure the essays and discussions on this most important subject at the Convention held last month. It is not too much to say that on a right use of the hours spent at home depends much of the efficiency of the school hours. One important suggestion was put before the Teaching Profession at one of the conventions. It was that the teacher really interested in his calling will make a careful study of the best educational journals, those which represent the solidarity of the profession, not a party or a faction. A new educational magazine is about to be issued by the firm which publishes the CANADA SCHOOL JOURNAL, a leading feature of which will be a series of carefully arranged Examination Papers, partly original, partly selected, chosen by well-experienced hands with a special view to the requirements of teachers. There will also be a thorough review of the best current educational literature, and original essays by some of the best known writers in Canada on subjects connected with the Examination course and general scholastic interests. This magazine will be a *résumé* of the best contemporary literature from the teacher's point of view.

We are glad to notice, that in several of the United States the State Teachers' Associations are recognized by the education departments as important parts of the educational machinery of the State, and full reports of their proceedings, including the addresses delivered, embodied in the Annual Report of the Chief Superintendent. This is right. The Minister of Education in Ontario kindly expressed his warm interest in the proceedings of the Provincial Teachers' Association, and his high opinion concerning the judgments given by that body. We strongly recommend him to follow the example of the Superintendents of the States referred to, as well as of the Province of New Brunswick, in having the papers read, with the discussions, published by the Government. It would relieve the Association of an annual burden, and would disseminate more widely than is now done, the results of the deliberations of the foremost teachers of the country. It would also be a step towards a departmental recognition of the Association.

The *Christian Helper*, an organ of the Baptist Church, records the manly and spirited utterances of the leaders of that body in view of the probable withdrawal of State aid from denominational colleges. The Baptists neither invite nor deprecate such withdrawal. They are prepared in any event to stand by their flourishing institution of Acadia College. A similar spirit of independence, judging from the proceedings reported in our present issue, animates the directors of Queen's College, Kingston. Should University Consolidation not be carried into effect, and that soon, it is evident that in view of the increased needs of the national system of education, all State grants must be, and ought to be, withdrawn from denominational colleges. The spirit of independence shown by those to which we have referred is the best way to meet events which are surely, and not slowly, coming on.

—The system of School Savings Banks has been a great success in Switzerland and in Paris. In one *arrondissement* of Paris, 80 per cent. of the children contributed, a sum of 15,000 francs being raised. Surely the establishment of such banks would be a valuable lesson in saving and self-help to the school children of Canada. It might divert to useful purposes much that is being spent on poisonous candy and filthy gum, and lays the foundation of so much of that dyspepsia which ruins so many constitutions. If the teacher took charge of the bank, a small fee might be paid weekly for her services by the Government—it would be worth while to pay it, in order to secure such a valuable lesson in frugality and those qualities which go to make the growing generation a source of wealth to Canada.

—Mr. R. Little, Inspector of Public Schools at Halton, is one of those successful teachers whose career is one which may be well held up as an encouragement to conscientious and painstaking teachers. He taught but three schools since his first coming into Halton, and in discharge of his duties was known to be earnest, faithful and laborious. For nineteen years he held the highest grade of certificate granted in Halton. As Inspector, he has been equally efficient and equally popular. A handsome gold watch and chain was presented to him at the late meeting of the Halton Teachers' Association, accompanied by a beautifully designed address, by Mr. C. C. MacPhee.

Contributions and Correspondence.

SCHOOL DISCIPLINE.

BY FRED. B. CHANTLER, SANDHURST.

It is a common error with the general public to judge of a teacher's qualifications and success by his scholarship alone. This opinion, perhaps, is quite correct in the case of professors in Colleges and the larger seminaries, where he is the most successful whose learning is the most profound. In our elementary schools, however, the instructor's knowledge, *per se*, can occupy but a secondary place in aiding him to a proper discharge of his office. A teacher to be efficient has, as he soon learns, to depend on a very different set of abilities, peculiar and general; and not arising, artificially, from the study of mere book lore, but acquired alone by the workings of a nature moderated by experience in the ways of men and the world, so as to become the warp and woof of his character.

In the common school, *to teach* is easy and simple, while *to govern* is a work at once difficult and complicated, on the right performance of which the teacher's success will invariably rest. With these abilities inherent, success may be assured him from the outset of his career. Without them he will be a laggard, clogged and handicapped in the race, until he is relieved from his burden by his after training. As a rule, it is true, a teacher's proficiency can be gauged by the extent of his practice; for nowhere is the fact that perfection comes by practice so specially true as in the work in which he is engaged. Yet, as I said, the talent for governing may be the gift of nature, in which case neither the teacher nor the teacher's office suffers greatly by experience. But many have to begin, and do begin, with no natural fitness for the work, and there a danger lies; for, to let loose such youthful instructors into the midst of helpless children, whose natures, like their own, are yet in the mould, is to play havoc with the forming character. A young teacher, for in-

stance, is placed in charge of a school, and wholly in the dark as to his best mode of procedure or the sacredness of his trust, launches forth with an irregular and extravagant discipline, a system, in fact, short of reckless inexpediency; and with an eye for an eye and a tooth for a tooth, just as his unreasoning incapacity may dictate, he will debase his office and himself, and corrupt or destroy all that is beautiful and noble in those committed to his care, which not all the wisdom of his ripened experience may rectify. It is the duty, then, of the young teacher, from the danger in which he stands of abusing his trust, to diligently supplement his growing experience with observation and study of those principles, the knowledge of which can alone command success. To the consideration of these our subject leads us.

As anarchy and political disruption are the inevitable consequences of despotism in a state, so a domineering harshness in that miniature state, the school, is always fatal to the best interests of both teacher and taught. It is folly to suppose that children, any more than men, can long be kept down by force. A spirit of resistance to restraint is a prominent element in a child's nature, and when he imagines himself the victim of severity or intimidation, his fear gives place to defiance. All retributive, violent, or vindictive action, then, should be sedulously guarded against. The sting of injustice has caused the stab to many a tyrant. Then let the unreasonable teacher beware. To thunder out some savage threat; to brandish the ready hand round the tender ears of the helpless victim; to set him, gyrating, top-like; to shake him up or shove him down; or to send him sprawling, like the trembling sailor in the grasp of the one-eyed Polyphemus, at his full length on the mid-floor, and then to belabor him with the pitiless ferule, is the work of ferocious madness, caused, perhaps, as is often the case, by a mere childish petulance at some passing thoughtless misdemeanor, or often by nothing at all but the violence of an unruly temper. This irrational government is, it is true, gradually being driven out of the public school by the humanizing influence of modern philanthropy, and is common only in parental government, which, with the uppermost passion the only law, is like the mother of Lord Byron, whom she alternately kept whipping and kissing all day long. A truth it surely is, that he who would govern others, must first learn to control his own spirit. A man is unworthy of the name, who has not a cool and imperturbable temper, and to the teacher of youth it is an indispensable quality. Easy excitability and hasty violence are not only fatal to the teacher's influence, but lead him into constant difficulties, which, with calmness and tact, he would escape.

Next to control of the feelings, he should have control of the tongue. As in the world, so in the schools, he is the most respected who speaks seldom, but discreetly. Those modern educators who are always preaching to young teachers about earnestness and energy before the class, overstate, I think, its importance. It is not wise, I am persuaded, to distract the pupil's attention with a gymnastic fussiness, nor to mystify his understanding with a noisy prolixity; yet that is the practical outcome of this advice on many, until experience moderates their ardor. Learning cannot be got second-hand. It comes only by the student's own labor, and can not be talked into him by any efforts of his teacher, who is, or should be, rather a help by the way, or a light to guide him in his work. If the pupil is to learn a lesson, let him set to work and study it, and, when that is done, little will be left for the teacher but to examine the thoroughness of its preparation; the scholar will be an attentive listener to what he tells him only so far as he is relieved from the difficulties which are suggested by his previous enquiries. Also, in the general management of the school, a dignified reticence is the very best of policy. Everywhere it is suggestive of authority. It gives the teacher an air of quiet strength and

hidden power which goes far to establish his supremacy, and the example of quietness, too, will act on the children in making them less talkative and unruly.

A sudden breach of discipline or unexpected difficulty will often arise to embarrass his ingenuity when a rash or precipitate action might endanger his authority. The power to perceive his wisest course, and with perfect self-possession to dispose of the trouble, is a quality to be highly valued. For instance, in the case of insubordination by a senior pupil, a teacher will often sacrifice his influence, and even his situation, by the violent overflow of his righteous indignation, thereby arousing a still greater resistance, and then of course the strongest wins. On the other hand, to hesitate or betray uneasiness is equally dangerous in such a case. To show a temporizing fear of decided action is to lead the pupil to believe the teacher afraid of him, and then as a sequence open rebellion. Patience, tact, and firmness of manner will best cure such, while hardness would only aggravate the distemper. Children never like to appear before their playmates as having been conquered. Often a pupil is found whom punishment does not humble, and he will laugh at his triumph over the baffled teacher, whose influence and temper are thus sorely strained. This often leads to a course of unseemly and vindictive badgering, which, if successful, is at the cost to the pupil of a broken spirit and rising evil passions, and to the teacher of his own best interests and self-respect.

Corporal punishment is gradually, I think, becoming obsolete. Teachers are beginning to see that it is unpopular with the parents, and therefore to be avoided by him who aspires to success in his profession. They find, too, that while, as an expedient to produce an immediate effect, it is the most quick and ready; yet, when viewed in its continued effects, its tendency is to brutalize its victim and to debase the teacher inflicting it, who is thus turned into a mere jail-keeper, whose duty it is to publicly flog the refractory. But to renounce it altogether is to lose a powerful incentive to obedience, namely, fear. It should rather be kept as a force in reserve, which, like the puissant Jove, sleeping, can thunder terror forthwith by its awakened wrath. Punishment, corporally, is said by some to be occasionally a necessity, and in rare cases to exercise a beneficial influence on the culprit and the general discipline. But if its general tendency is demoralizing, its effects are the same, whether administered often or only seldom; and if it is dispensed with, except in rare cases, might not the teacher, with a little extra ingenuity and patience, be able to avoid it altogether, and thus relegate it to the confines of its own proper domain—the slave market?

In dealing with younger children, the natural awe of the teacher's person is surely enough to command obedience. If we, six feet high and wise as Gullivers in the crafts of the wily world, were placed in charge of some swarthy giant, twenty or twenty-five feet high, would not our obedience be quite a matter of course? Just such a relation does the little scholar bear to the great big teacher. His authority, then, if exercised with any reason, ought to be supreme. If they sometimes become restless and mischievous, it is because they cannot help it. It is but the protest of nature at restraint, and the working of that active young life which no healthy scholar is without. Let the teacher turn all this to account by keeping them always busy with something at once amusing and useful. Slates, pictures, drawing cards, blocks, objects, and blackboard, with a little friendly encouragement from the teacher, will keep the little folks occupied all day long.

With the larger pupils, too, it is of the first importance to have them always busy on some specific work. Idleness and mischief always go together; when they get tired of one subject, a change of study or some novel exercise will arouse their flagging energy.

No teacher can exercise an intelligent discipline until he has mastered all the mysterious windings of child nature, so complicated, so varied and so full of beauty to the appreciative observer. "The ingenious Edison, it is said, will sit all day long, brooding over nature's laws and actions, and, in his inspired moments, with magic wand, will summon those inscrutable powers, charmed at his master call, to play their fantastic tricks at his bidding. Just so in the innocent, simple child may be discovered snapes and powers divine which the skilful teacher may manipulate at will. Children are found to vary much in their capacities and sensibilities. Some are dull and sluggish; others are bright and active. Some are precocious in their studies; others are provokingly stupid. Some are bold and fearless; others are weak and timid. Some are coarse grained and corrupt; others are gentle, refined, and pure. There is no Persian code, then, that can with any justice be made to regulate such opposite natures, therefore the greatest care should be taken by the teacher to adapt his encouragements, reproofs and punishments to the exigencies of each case. Those who are gross and little affected by praise or blame require firm and rigorous measures, but it is cruelty and nothing else to be equally severe with those of a more delicate organism, to whom "a harsh word or cross look will often sadden the young face and fill the eye with tears." This is a beautiful trait from which the teacher may learn the power of gentleness and perceive how potent in youthful minds is the strength of well directed authority.

It is a common error with a teacher to show a chilly reserve in his relations with his pupils, thinking thus to inspire an awe of his majesty, but which in doing this will also alienate their sympathy. Geniality, not gross and grovelling, but quiet and friendly, tending to engender mutual good feeling and disarm hostility, brings him into closer and happier relations with their dispositions, and then by his own potent example, may inculcate into their minds his riper virtues. He should not disdain, then, to show a pleasant face at their fun and jokes, and participate in their outdoor games. By this means alone, can he discover their true habits, and check the spread of the seeds of evil sown by the vicious, the dishonest, and the untruthful.

The teacher in the discharge of his duties should not neglect to cultivate those external accomplishments which go so far to make up what is called a gentleman. The poor dominie has always been a butt for the shafts of wit as much in the days of Horace and Goldsmith as now. He knows they say that two and two make four to a demonstration, and can parse tweedle-dum and tweedle-dee as well as any Cobbett; but put him into the world and take away his logarithms and syntax and he is a helpless, lost man. This derision by the social hon-tons and town flunkies may be enjoyed by the superficial, but it is only the rough exterior they see and not the jewel within. From the circumscribed nature of the teacher's duties, he often acquires a singular and narrow manner, which, considering his general worth, associates unjustly with the name pedagogue, quite an offensive idea. But I am wandering from the subject. What I wished to say, was that children are easily influenced by appearances, and the personal authority of one with a noble bearing, with an erect and lofty carriage, a pleasing address, a graceful and unfaltering speech, and a keen penetrating glance, will be altogether different to that of the careless, awkward, sloven, with a vulgar speech, full of old mother saws, whose lounging gait, and listless manner, with no fire in his eye nor command in his tone, soon render both him and his office despicable. It is a true saying that the teacher makes the school. In it is reflected with mirror-like clearness his own true character. Not only can its system and order be determined by his own level head and strong mind, but the good feeling, honor, honesty, and virtue,

in every shape will largely be the counterpart of his own moral stamina.

There are none, not even the parents, whose influence is so potent for good or evil as that of public school teachers. They are the primal laborers in the vineyard of humanity. On the teacher's work in the aggregate largely depends the condition of the succeeding generation. To his individual duty, then, let each one devote himself, with ardor and with love. His reward, apart from mere fleeting salary and position, is as lasting as humanity itself.

Once might have been seen, in old Moscow, throng upon throng of eager people, crowding round where a bell was being made, Mothers, maidens, children, old and stalwart men were there. Mothers came with heavy plate, maidens brought their glittering jewels, children their gaudy trinkets, and men their heavy wealth, to richen the mellow tones of the great bell. Each one throws in his gift with a blessing, and soon the precious metals are a seething liquid, intermingled. When the great mass comes forth moulded, and hangs in its high tower, that mighty throng is hushed with awe and gladness. Soon is heard, by all, that bell pour forth its magic sounds, sometimes as rolling thunder in the distance; again they hear it, tinkling like the far off winter bells, and anon with sweeter symphonies, like the murmur of the gentle evening zephyrs. There they stand, entranced, when with one glad shout they rend the air in honor of the bell, till heaven's vaulted roof re-echoes back its praises. Why are they so joyful? Did they not make it? Does not each one of them feel that his own gift added sweetness to its tones? Why should they not be glad then? It is their work, and right well may they rejoice to hear it ringing out their noble bounty, for now and forever. So a band of noble hearted teachers, who have thrown their life, their love, their whole ambition, into the mould that forms the character of youth, will hear their praises ringing down the ages, just as that grand old bell rang out their deed to the happy company that day in ancient Moscow. Let the teacher then buckle to his work. His labors, like the widening circle of the pebble's, rippled on the calm waters, will act and react on humanity to come, until time is no more. His motto might well be "Pingo eternitatem," I paint for eternity.

Mathematical Department.

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

NOTE ON TEACHING HORNER'S METHOD OF DIVISION.

The following method of teaching Horner's Synthetic Division has occurred to us. It has the advantage of shewing the learner the relation the short method bears to ordinary division, what terms are omitted in the former, and that the former is merely a more compact arrangement of the work of the latter with the omission of certain terms.

Place on the board an example such as the following:

$$\begin{array}{r}
 x^2 - 8x + 2 \quad 3x^5 - 5x^4 + 4x^3 + 8x^2 - 5x + 2(8x^3 + 4x^2 + 10x + 25) \\
 \underline{3x^5 - 9x^4 + 6x^3} \\
 4x^4 - 2x^3 + 3x^2 \\
 \underline{4x^4 - 12x^3 + 8x^2} \\
 10x^3 - 5x^2 - 5x \\
 \underline{10x^3 - 30x^2 + 20x} \\
 25x^2 - 25x + 2 \\
 \underline{25x^2 - 75x + 50} \\
 50x - 48
 \end{array}$$

Then call attention to the fact that in the preceding we might have shortened the work, or made it simpler in the following ways:

(1) By converting subtraction into addition by changing the signs of the second lines in each operation. We really do make the change mentally. This change may best be effected by changing at the outset the signs of the terms of the divisor with the exception of the first, which is not altered for the reasons which appear from (8),—the results of multiplying it by the terms of the quotient do not appear, and it is desirable to keep it as it is that we may obtain the terms of the quotient. On calling attention to this point make the changes required throughout the work.

(2) By not obtaining the $-2x^3$ of the third line, the $-5x^2$ of the fifth line, &c. For evidently, the subtractions being converted into additions, we have only to add $4x^3$, $-6x^2$ & $+12x^3$ to obtain $10x^3$. On calling attention to this point, draw chalk marks through the $-2x^3$, $-5x^2$ and $-25x$,—better than erasing them altogether.

(3) By neglecting to write the first terms in each line ($4x^4$, $10x^3$, &c.), obtaining them mentally to get the next term in the quotient. Draw chalk marks through these terms also.

(4) By not bringing down the $3x^2$, $-5x$, &c., of the dividend.

Omitting then the cancelled terms, the skeleton of the work will stand as follows:

$$\begin{array}{r}
 x^2 + 3x - 2 \overline{) 8x^5 - 5x^4 + 4x^3 + 3x^2 - 5x + 2} \\
 \underline{+ 9x^4 - 6x^3} \\
 \phantom{x^2 + 3x - 2 \overline{) 8x^5 - 5x^4 + 4x^3 + 3x^2 - 5x + 2}} + 12x^2 - 8x^2 \\
 \phantom{x^2 + 3x - 2 \overline{) 8x^5 - 5x^4 + 4x^3 + 3x^2 - 5x + 2}} \underline{+ 30x^2 - 20x} \\
 \phantom{x^2 + 3x - 2 \overline{) 8x^5 - 5x^4 + 4x^3 + 3x^2 - 5x + 2}} + 75x - 50 \\
 \phantom{x^2 + 3x - 2 \overline{) 8x^5 - 5x^4 + 4x^3 + 3x^2 - 5x + 2}} \underline{50x - 48}
 \end{array}$$

Take care that terms involving the same power of x (e.g., $-5x$, $-20x$, $+75x$) stand in a vertical column.

Now then, omitting the horizontal bars except the last, lifting each line as it were into a sloping position, so that its beginning stands above the end of the preceding ($12x^3$ above $-6x^3$, $30x^2$ above $-8x^2$, &c.), and pressing the work together vertically, the whole assumes the more compact form

$$\begin{array}{r}
 x^2 \left| \begin{array}{l} 8x^5 - 5x^4 + 4x^3 + 3x^2 - 5x + 2 \\ + 9x^4 + 12x^3 + 30x^2 + 75x \\ - 2 \\ \hline 8x^3 + 4x^2 + 10x + 25 \end{array} \right. \begin{array}{l} + 50x - 48 \end{array}
 \end{array}$$

the dividend being written beneath, and the divisor vertically, to save space.

(5) By neglecting the letters, using coefficients only.

By this the above reduces to the form

$$\begin{array}{r}
 1 \left| \begin{array}{l} 8 \quad -5 \quad +4 \quad +3 \quad -5 \quad +2 \\ +9 \\ -2 \\ \hline 8 \quad +4 \quad +10 \quad +25 \end{array} \right. \begin{array}{l} 50 \quad -48 \end{array}
 \end{array}$$

SOLUTIONS OF PROBLEMS IN OCTOBER NUMBER.

INTERMEDIATE PAPER.

1. $\therefore (a+d)^2 - (b+c)^2 = (a-d)^2 - (b-c)^2$;
 $\therefore ad=bc$; $\therefore ad+bd=bc+bd$, or $(a+b)d=(c+d)b$.

2. (1) Rationalizing the denominators of the fractions they become

$$\frac{a + \sqrt{a^2 - b^2}}{b} - \frac{a - \sqrt{a^2 - b^2}}{b} = \frac{2\sqrt{a^2 - b^2}}{b}$$

$$(2) = \{a^2 - (b+c)^2\} \times \frac{a+b-c}{a+b+c} = (a-b-c)(a+b-c) = a^2 - 2ac + c^2 - b^2.$$

(3) On factoring the denominators it is seen that the common denominator is $x^4 - 1$, and entire expression equals $\frac{2x^3 + x}{x^4 - 1}$.

The second expression may be obtained from the first by putting $x = \frac{a}{b}$, and dividing by b ; \therefore second expression equals

$$\frac{1}{b} \frac{2\left(\frac{a}{b}\right)^3 + \frac{a}{b}}{\left(\frac{a}{b}\right)^4 - 1} = \frac{2a^3 + ab^2}{a^4 - b^4}$$

3. If x, y be the numbers $x+y=2a^3$, $\frac{x}{y} = \frac{a^3 - b^3}{a^3 + b^3}$, on simplifying;

Adding 1 to both sides of the latter equation

$$\frac{x+y}{y} = \frac{2a^3}{a^3 + b^3}$$

$$\therefore \frac{2a^3}{y} = \frac{2a^3}{a^3 + b^3}, \text{ since } x+y=2a^3,$$

$$\therefore y = a^3 + b^3; \text{ and } \therefore x = a^3 - b^3.$$

4. $\therefore k^2 = x^2 + x^2y^2 + y^2 + x^2y^2 + 2xy\sqrt{(1+x^2)(1+y^2)}$

$$\therefore 1+k^2 = 1 + x^2 + y^2 + x^2y^2 + 2xy\sqrt{\dots} + x^2y^2$$

$$= (1+x^2)(1+y^2) + 2xy\sqrt{\dots} + x^2y^2$$

$$\therefore \sqrt{1+k^2} = \sqrt{(1+x^2)(1+y^2)} + xy.$$

5. (1) Common denominator is $(1+2x)(7+2x)$, $x = \frac{7}{4}$.

$$(2) x^2 - 8x + 16 + 15 + \sqrt{x^2 - 8x + 81} = 5 + 15$$

$$\therefore \{\sqrt{x^2 - 8x + 81} + \frac{1}{2}\}^2 = 20 + \frac{1}{4} = 24\frac{1}{4}$$

$$\therefore \sqrt{x^2 - 8x + 81} + \frac{1}{2} = \pm 4\frac{1}{2}$$

$$x^2 - 8x + 81 = 16 \text{ or } 25$$

$$\therefore x = 5 \text{ or } 3, \text{ and } 4 \pm \sqrt{10}.$$

$$(3) \text{ From first } 8 = \frac{x+y}{xy}, \text{ or } \frac{1}{y} + \frac{1}{x} = \frac{8}{xy}$$

$$\text{also, } \frac{1}{x} + \frac{1}{z} = 1$$

$$\frac{1}{x} + \frac{1}{z} = -1$$

$$\text{Thence } \frac{1}{x} = \frac{5}{2}, \frac{1}{y} = \frac{1}{2}, \frac{1}{z} = -\frac{8}{2},$$

$$\text{or } x = \frac{2}{5}, y = 2, z = -\frac{2}{8}.$$

6. That is, solve the simultaneous equations $x^2 + xy = (a-b)^2$, $xy + y^2 = 4ab$.

$$x = \pm \frac{(a-b)^2}{a+b}, y = \pm \frac{4ab}{a+b}$$

7. $860 - x =$ alcohol in after first is taken away; and then $\frac{860-x}{880} =$ fractional part of each gallon that is alcohol. Hence

in second taking, $\frac{860-x}{860}$ of $(x+84)$ gallons of pure alcohol is withdrawn. Hence

$$x + \frac{860-x}{860}(x+84) = 180,$$

whence $x = 576$ or 60 , 60 being answer required.

8. (1) For by the theory of quadratics θ may have one or other of two values whose sum is a , and whose product is b .

(2) Subtracting $(a-a')x + (b-b') = 0$; and substituting this value of x in the first equation $(b-b')^2 - a(b-b')(a-a') + b(a-a')^2 = 0$, the expression required.

(3) Multiplying the second by x and subtracting $(a-a)x^2 + (b-\beta)x + c = 0$; also $x^2 + ax + \beta = 0$.

Thence eliminating x as in preceding,

$$\left(\frac{c}{a-\alpha}-\beta\right)^2 - \frac{b-\beta}{a-\alpha} \left(\frac{c}{a-\alpha}-\beta\right) \left(\frac{b-\beta}{a-\alpha}-\alpha\right) + \frac{c}{a-\alpha} \left(\frac{b-\beta}{a-\alpha}-\alpha\right)^2 = 0.$$

9. (1) Book-work.

$$(2) \frac{x+a}{\sqrt{x^2+a^2}} > \frac{x+b}{\sqrt{x^2+b^2}}$$

accd. as $\frac{x^2+2ax+a^2}{x^2+a^2} - 1 > \frac{x^2+2bx+b^2}{x^2+b^2} - 1$

accd: as $\frac{ax}{x^2+a^2} > \frac{bx}{x^2+b^2}$

as $ax^2+ab^2 > bx^2+a^2b$

as $(a-b)x^2 > ab(a-b)$

as $x^2 > ab$. If $a-b$ be negative, it will be according

as $ab > x^2$.

FIRST-CLASS PAPER.

1. (1) Todhunter, § 501.

(2) It may be easily shown by geometry that if a circle can be described through any four consecutive points of a polygon, any one of such circles passes through all the angular points. Hence the answer required is one circle. The question is intended as a "catch" on the geometrical problem.

2. (1) $x(1-x)^{-2} = x+2x^2+8x^3+\dots+nx^n+(n+1)x^{n+1}+\dots$
 $(1-x)^n = 1-nx+\frac{n(n-1)}{2}x^2-\dots$

∴ Multiplying these identities, coefficient of x^{n+1} on right-hand side is

$$n+1-n.n+(n-1).\frac{n(n-1)}{2}-\dots \quad (1)$$

While coefficient of x^{n+1} on left-hand side is coefficient of x^{n+1} in $x(1-x)^{n-2}$, which is zero. Hence (1) is zero.

$$(2) \frac{-\frac{3}{2}-\frac{5}{2}}{0 \ 1 \ 1} (8)(-4) + \frac{-\frac{3}{2}-\frac{5}{2}-\frac{7}{2}}{2 \ 0 \ 1} (-2)^2(-4) + \frac{-\frac{3}{2}-\frac{5}{2}-\frac{7}{2}-\frac{9}{2}}{1 \ 2 \ 0} (-2)(8)^2 + \frac{-\frac{3}{2}-\frac{5}{2}-\frac{7}{2}-\frac{9}{2}-\frac{11}{2}}{8 \ 1 \ 0} (-2)^3(8) + \frac{-\frac{3}{2}-\frac{5}{2}-\frac{7}{2}-\frac{9}{2}-\frac{11}{2}-\frac{13}{2}}{5 \ 0 \ 0} (-2)^4.$$

8. (1) In Gross's Algebra the Exponential Theorem is established, and $\log_e(1+x)$ is then deduced. In Todhunter $\log(1+x)$ arises in the course of the investigation which establishes the Exponential Theorem.

(2) In $2 \log(1-3x)$ the coeff. of x^n is $2\left(-\frac{1}{n}3^n\right) = -\frac{1}{n} \frac{6^n}{2^{n-1}}$

Also $\log\{1-6x(1-\frac{3}{2}x)\}$

$$= -\left[6x(1-\frac{3}{2}x) + \frac{1}{2}\{6x(1-\frac{3}{2}x)\}^2 + \dots + \frac{1}{n}\{6x(1-\frac{3}{2}x)\}^n + \dots\right]$$

In which the coefficient of x^n is

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

and equating these coefficients of x^n the required identity is obtained.

4. (1) Book-work.

(2) $1000 = I\{(1.04)^{-1} + (1.04)^{-2} + \dots + (1.04)^{-25}\}$

$$= I(1.04)^{-1} \cdot \frac{\{(1.04)^{-1}\}^{25} - 1}{(1.04)^{-1} - 1} = I \frac{(1.04)^{-25} - 1}{1 - (1.04)^{-1}}$$

$$\therefore I = 1000 \frac{(1.04)^{-1} - 1}{1 - (1.04)^{-1}} \text{ Ans.}$$

5. The value of the mortgage two months from this, when the first instalment is to be paid, is

$$100 + 100\{(1.04)^{-1} + (1.04)^{-2} + \dots + 25 \text{ terms.}\}$$

And the present value of this for the two months is found by multiplying it by $(1.04)^{-2}$, giving

$$\left\{100 \frac{(1.04)^{-13} - 1}{(1.04)^{-1} - 1}\right\} (1.04)^{-2}$$

6. Book-work.

7. (1) Todhunter, § § 681, 680.

(2) Let z be the number, and x and y the quotients; then $18x+7y=z=14y+2$. Thence the general value of x is $5+14t$, and the succession of values is 5, 19, ... 61, 75, ... 75 is the value of x which makes z nearest to 1000; and $z=982$.

8. (1) The scale of relation is $1-5x+4x^2$. Whence series

$$\text{equals } \frac{1}{(1-x)(1-4x)} = -\frac{1}{8} \cdot \frac{1}{1-x} + \frac{4}{8} \cdot \frac{1}{1-4x}$$

$$= -\frac{1}{8}\{1+x+x^2+\dots\} + \frac{1}{2}\{1+4x+(4x)^2+\dots\}$$

Hence general term = $\frac{1}{2}x^n(2^{2n+2}-1)$.

The rates of the $(n+2)$ th to this is $x \frac{2^{2n+4}-1}{2^{2n+2}-1} = x \frac{2^2 - \frac{1}{2^{2n+2}}}{1 - \frac{1}{2^{2n+2}}}$

= $4x$ ultimately. Hence that the series may be convergent x must be less than $\frac{1}{4}$, (Todhunter, § 559).

(2) Revert the series, i.e. assume

$$x=A+By+Cy^2+Dy^3+\dots$$

$$\therefore x=A+B(x+2x^2+8x^3)+C(x+2x^2+8x^3)^2+\dots$$

Equate coeffs. of x ;

$$A=0, B=1, 2B+C=0, 8B+4C+D=0, \&c.$$

$$\therefore A=0, B=1, C=-2, D=5, \&c., \text{ and}$$

$$x=y-2y^2+5y^3+\dots$$

9. $u_0 = \frac{1}{a+a^{-1}}, u_1 = \frac{1}{a+a^{-1}} - \frac{1}{a+a^{-1}}$, and the law may be shown

to hold for these terms, for $u_0 = \frac{a-a^{-1}}{a^2-a^{-2}}, u_1 = \frac{a^2-a^{-2}}{a^3-a^{-3}}$.

Assume that it holds for the n^{th} term, then

$$u^{n+1} = \frac{1}{a+a^{-1} - \frac{a^{n+1}-a^{-(n+1)}}{a^{n+2}-a^{-(n+2)}}} = \frac{a^{n+2}-a^{-(n+2)}}{a^{n+3}-a^{-(n+3)}}$$

Hence if the law holds for the n^{th} , it holds for the $(n+1)^{\text{th}}$; but it has been shown that it holds for the second; hence it holds for the third; hence for the fourth, &c.; and hence generally.

PROBLEMS FOR SOLUTION.

1. Three gamblers A, B, C began to play with \$6.00 altogether in their possession. They played three games and each of them had \$2.00 at the close. In the first game A and B lost and the winner doubled his money; in the second A and C lost and the winner doubled his money; in the third B and C lost and

the winner doubled his money. How much had each at first?

A. MONTGOMERY, Glengarry.

2. If *A* tells 2 truths to 3 falsehoods, *B* 7 truths to 3 falsehoods, *C* 8 truths to 3 falsehoods, and *D* 11 truths to 5 falsehoods; what will be the probability of an event being true, or false, that *A* and *B* affirm and *C* and *D* deny?

3. From *Ray's New Higher Arithmetic*:—My lot contains 135 sq. rds., and the length is to the breadth as 5 to 3; what is the width of a road which shall extend from one corner half round the lot, and occupy $\frac{1}{4}$ of the ground?

L. B. FRAKER, Fayette, O.

R. J. McLAUGHLIN, Norland, and F. T., Wicklow, have sent in correct solutions of Prob. 1 of last issue (Alligation question), obtaining for result 3 sheep, 15 lambs and 2 kids.

D. R. BOYLE, W. Arichat, C B. Several solutions of the problem you enquire concerning will be found in the CANADA SCHOOL JOURNAL of May, 1880, under the caption "A Celebrated Theorem."

Practical Department.

TEACHING HISTORY TOPICALLY.

BY JAMES L. HUGHES.

A large proportion of pupils leave school believing that history is but a means of testing their memories, in order that bad marks or other punishments may be given for failing to remember. They have been forced to regard it as a heterogeneous mixture of DATES, names, and unrelated events. There is no bond between these events, as they are usually taught, but chronology, and the miserable linking afforded by the names of rulers, alike uninteresting be they names of kings, emperors, governors, or presidents. Foreign wars, civil wars, commercial progress, the extension of the influence of the church, political intrigues, the development of the people, constitutional growth, literary culture, and educational advancement may be found side by side in the same chapter, utter strangers in everything but the accident of having occurred about the same time. The same old kings who ruled the nations have continued to rule the historians and teachers until very recently; indeed, do still govern the vast body of teachers in their teaching of history. The constitutional, intellectual, and religious development of a nation are dished up in scraps as carved by the various kings; great principles, and the mighty movements of true progress, are treated as secondary matters, and tacked on as mere ornaments for the coats of successive sovereigns. The rulers with their whims, their physical, mental and moral peculiarities, and their dates, are allowed to occupy the first place in school histories, and the genuine work of the world is seen through the crevices between the kings. Events are fitted to the sovereigns, who should appear in history merely as they influence events.

This is a fundamental error in writing or teaching history. Dr. Arnold held that the record of the development of the "race, institutions and religion" of a country constituted its real history, and modern writers and thoughtful teachers are acting on this rule.

The most reasonable method of teaching this subject is to select the leading factors of the life and development of a nation, and to carry on the history of each factor consecutively, without reference to either of the others, except in so far as it has a direct influence upon the one under consideration. In order to do this more effectively, the teacher should, first, in a single lesson, give his pupils a "bird's-eye view" of the whole history to be studied, that they may have a general idea of the subject in its leading features. In this lesson he should fix in the minds of his pupils the great central points of the subject, so as to divide it into periods. These periods may

be marked out according to the views of the teacher, but for practical purposes it will be found best to make the dividing lines correspond with the formation periods in the growth of the country. In Canadian history, for instance, these periods might be

1. Indian
2. Discovery..... 1001 ... to ... 1534.
3. French 1535 ... to ... 1763.
4. English..... ... 1768 ... till present.

The English period should be again subdivided as follows .

1. From the *Conquest* ... 1760... to the *Separation* 1791.
2. " *Separation* ...1791... " *Union* 1841.
3. " *Union*1841... " *Confederation* ... 1867.
4. " *Confederation* 1867.. till the present time.

The dates given are *essential*, and when learned they serve as guideposts for the location of the events to be learned afterwards. These periods will then become "pigeon holes," into which the facts of history may be arranged as documents are in a well-ordered office.

Having given a general idea of the history of any country, and its natural division into periods, the teacher is ready to proceed with the filling in of the necessary details. These should be many or few according to the age of the pupils. Whether many or few, however, they should be taught *topically*. Instead of presenting facts relating to all kinds of events promiscuously, as they occurred, and would be recorded in a diary, they should be classified under a few leading heads, and the consecutive history of each class given during the period under consideration. This method is recommended for the following reasons:

1. *Events are more easily learned and remembered than if taught by any other method.* A merchant who wishes to learn the results of his business transactions, and the progress of his various trade relationships at the close of a year, might possibly do so by examining his Day-book alone; but it would require the labor of months to accomplish what he could do in a few hours by consulting his Ledger. Histories are usually merely the Day-books of the business of nations, and so students read them through and through without either remembering clearly the events related, their causes, or their immediate or ultimate bearing upon any of the departments of national life and progress. The events of history should be grouped in Ledger form, or, in other words, taught *topically*; and as with the merchant, so with the student much time will be saved, and much better results obtained. The historical topics, or "Ledger headings," would vary slightly with different periods and nations, but the following will generally include all that are necessary: 1. External History or foreign relationships, wars, &c.; 2. Constitutional Growth; 3. Religion; 4. Literature; 5. Commerce; 6. General Progress.

2. *The teaching of one department of the history of the world facilitates that of every other department.* The events immediately connected with any one of the topics named will have a bearing more or less direct on some, if not all, of the others; so that when the External History has been taught, the Constitutional or Religious History of the same period may readily be fitted to it. Each additional topic taken up paves the way for the more easy learning of those which are to follow.

3. *When one department of the history has been taught, the teaching of each successive department reviews the work that has been done.* The connection already pointed out between the several topics necessitates this reviewing. It is done, too, in accordance with one of the most essential though most neglected principles of the science of education; it is done *incidentally*. The reviewing is done not as a formal lesson, but in natural connection with the teaching of new work, as an essential part of that work. The importance of this fact will be clearly seen by those who have given due attention to the philosophy of education.

4. By teaching topically, the teacher develops the reasoning powers of his pupils, and trains them to read history intelligently after they leave school. It is most desirable that students of history should be led to trace causes to effects. The facts of history are of little value as information merely; the lessons to be drawn from them are of great value. When teaching topically, events are not presented as of value in themselves, but as elements which together produce certain results. The attention of the pupils is also confined to one leading topic at a time, instead of being distracted by the consideration of several unconnected matters, and they are therefore enabled more clearly to see the intimate relation of cause and effect. They will thus soon recognize it to be a study of great utility, and will cease to regard it as a mere test of memory.

The following lesson is given as an example of topical teaching. It may also be of service to teachers, as most text-books on Canadian history omit to deal with the subject:

CONSTITUTIONAL CHANGES IN CANADA DURING THE BRITISH PERIOD.

The following is a summary of the changes and advances made under the British:

1. Military Government, 1760 to 1764.
2. Government by English Law, 1764 to 1774.
3. Government under the Quebec Act 1774 to 1791.
4. Government under the Constitutional Act, 1791 to 1841.
5. Government under the Union Act, 1841 to 1867.
6. Government under the British North America Act, 1867—present.

1. **Military Government, 1760—1764.** During most of this period Canada was an English province only by right of conquest, so that *French* laws were administered by Gen. Murray, commander-in-chief of the British forces.

2. **Government under English Law, 1764—1774.** When the King of England assumed possession of Canada formally, he appointed a Governor and Council to administer *English* laws in it. The people had nothing to do with framing or amending these laws. Their duty was merely to submit to them. The enforcement of English laws on a French population naturally caused much irritation. Some remedy had to be provided, and after securing careful reports, the British Parliament generously passed the *Quebec Act*.

3. **Government under the Quebec Act, 1774—1791.** This substituted *French* for English law in all but criminal cases, and removed the prohibitions against the holding of State offices by Roman Catholics. It gave great satisfaction to the French, and equal dissatisfaction to most of the English in Canada. The number of the latter was soon augmented by the coming of the *United Empire Loyalists*. The agitations of the British settlers for a change led to the passage of the *Constitutional Act*.

4. **Government under the Constitutional Act, 1791—1841.** This Act divided Quebec into *Upper* and *Lower* Canada, for the *English* and *French* respectively, and recognized to a certain extent the right of self-government. Each province had a Lieutenant-Governor, a Legislative Council, and an Assembly. The Governor appointed the Council, the people elected the Assembly. No Act of Canadian Parliaments became law until it received the approval of the King of England. Of course the Lieutenant-Governor and the appointed Council were the disallowing parties in reality. They had it in their power to neutralize the decisions of the representatives of the people. This gave rise to serious abuses, and a large section of the people in both provinces strongly opposed the exercise of controlling power by irresponsible advisers of the Crown. The struggle for Responsible Government led to rebellion in both Upper and Lower Canada, and brought about the union of the provinces. The British Govern-

ment sent out Lord Durham as Governor-General and Lord High Commissioner, in 1838, to enquire into the condition of affairs in Canada. He did not remain long in the country, but his report to the Imperial Parliament recommended the confederation of the provinces, and the introduction of the principle of Responsible Government. This report led to the union of Upper and Lower Canada in 1841.

5. **Government under the Union Act.** This lasted 26 years, from 1841 to 1867. The Union Act granted the advantages of Responsible Government. The advisers of the Crown must now have the support of the majority of the representatives of the people. Race jealousies, however, and other local causes, ultimately rendered the harmonious working of the two provinces impossible, so the wider scheme of Confederation was brought about.

6. **Government under the British North America Act.** This came into force on Dominion Day, July 1, 1867, and continues in force till the present time. It gave a Governor-General and Parliament for the Dominion, and a Lieutenant-Governor and Local Legislature for each province. The Dominion Parliament consists of two Houses—the *Senate* and the *House of Commons*. The members of the former are appointed by the Governor-General, on the recommendation of the *Ministry*; those of the latter are elected. The Ministry is responsible to the House of Commons, and must have the support of a majority of its members.

ORAL LESSONS IN LANGUAGE.

FIRST YEAR IN SCHOOL.

For language lessons for the first year in school, the objects with which children are already partially familiar furnish abundant material. A few conversational lessons, similar to that outlined above, to enable the teacher to study the children while the children learn how to go to school, may be followed by familiar talks about the objects in the school-room. As the chief use of these early lessons is to get the children to express what they know, the objects chosen should be such as they have seen elsewhere; as the table, the chair, the door, the windows, or the clock, rather than the blackboard, the crayons, or the desks. To name the object, to speak the name plainly, to tell where they have seen something like it before, to tell what it is for, to tell the color of it, and anything else they can about it, may be quite enough for one lesson. In general, without limiting freedom of expression, it is better to have a plan for the lesson: as,—

1. The name of the object. Drill on the pronunciation of the name.
2. How many have seen any other or others like this. Where? A question which will elicit in answer the name (if not too difficult) of more than one.
3. What people have them for, or do with them, or of what use they are.
4. Color, very large or small, like or unlike others which they have seen; why others did not look like this.
5. Questions which elicit in answer the words of the lesson upon which they need to be drilled.
6. A simple home-task to cultivate perception and comparison, as, if the lesson has been about a chair, to look at the chair in which baby is rocked to sleep, or the chair in which the little brother or sister sits at table, and tell about it to-morrow.

Cautions. 1. Avoid objects whose names the children could not articulate.

2. Avoid teaching or using many new words.

3. Use very simple and pure English. If a child errs in speech, either restate his fact without remark, or say, "Yes, that is true." I would say, ".....," putting it in better form. Or, agree with

him as to the fact, and ask him or another to "tell it in a different way," or "in a better way." Let the child who made the error repeat what he said in the better form. Cordially approve the new statement. *Not merely to see that a thing is done, but to see that it is done in the best way,* is the indispensable office of the teacher. The child is not to be interrupted or contradicted. Without any spirit of censure, with tact, politeness, and gentleness, he is simply to be shown the right way.

4. The lessons should be brief. Twenty minutes would be too long, even for a class of forty children.

5. Choose unlike objects for consecutive lessons. Vary the plan pursued.

Two or three talks about objects with which the children are comparatively familiar may be followed by a few picture lessons on domestic animals, or two or three lessons in distinguishing sounds, recognizing colors, and testing weights. The following scheme of lessons will be suggestive to the teacher, and may be modified in any way which will adapt it to the needs of individual classes, provided it be remembered always that,—

To educate the senses and cultivate perception is as great a service as to train the lips to speak. That—

To help the child acquire ideas is more valuable than to teach him to use words. That—

Pictures appeal to but one sense, and cultivate imagination rather than perception, give erroneous ideas of relative size, and give no ideas of sound, weight, and other sensible qualities; and that picture lessons must therefore alternate constantly with lessons on Sound, Color, Size, Weight, Form, Drawing, Minerals, Plants, and manufactured objects.

To keep in view that in all these things *the child is a discoverer; that the eye, the ear, the hand, and the tongue are to be impartially trained; it would be better not to think or to speak of these early lessons as Language Lessons, but as exercises in getting acquainted with things.*

Color. Make a collection of bright-colored crewels, knots of silk, samples of ribbon, straws, bits of tissue-paper, beads, feathers, and whatever will add interest, or variety of application, to the lessons. During the first year, teach the children to recognize and name the prominent colors; as,—

RED,	YELLOW,	BLUE,
GREEN,	VIOLET,	ORANGE,
BROWN,	WHITE,	BLACK.

Plan. 1. Place the materials of various colors before the class. Select two objects, as two blocks, straws, or feathers, which differ in color but are alike in every other respect. Have the two objects named.

2. Hold up one of them, and ask who will come to the table and find one just like it. Another. Another. In each case have the class agree that they are alike.

3. When all have been found, still ask them to find another. If they say there are no others, select one which differs in color only, and ask why that would not do. What color are these?

4. Who can find anything else on the table that is red? Repeat this until all the things that are red have been found. In each case have the child show the object to the class, and tell what he has found, and what color it is; as, "I have found a bead," "This feather is red."

5. Find something elsewhere in the room that is red; or, Bring something to school to-morrow that is red.

Cautions. 1. When the objects are not in use, it is better to keep them out of sight. *Novelty* furnishes half the interest of the lesson.

2. Each color should be represented in different material, and in various tints and shades.

3. If the children say "light blue," "dark green," etc., accept and use the terms; but do not attempt to teach them to distinguish or name the different tints, hues, and shades.

4. Take care to place together the colors which harmonize; as red with green; yellow with violet; and blue with orange.

5. Test every child in the class to discover if any be color-blind. When one color has been learned, make on the blackboard a small square or other design in crayon of that color, and let it

remain. After red, teach the class to recognize green. Review red and green together, and add the design in green crayon. Place elsewhere on the board the design in orange and blue, and in yellow and violet, when those colors have been learned.

After several colors have been taught, call upon the children to name a flower, a fruit, a bird, or other absent object, and tell what color it is. To be sure that all in the class are thinking of the same color, have the child who names the object point out something in the room that is of that color. If only a part of the object be of that color, as the breast or neck of the bird, or the centre of the flower, have the child state what part is of the color chosen. If the thing named varies in color—as, roses red, white, yellow—lead the class to state that. When the children differ about the color of any object, let them look at it before the next lesson, and report what color it is. The colors in a bouquet, in a picture, in the plumage of a duck or peacock, in the rainbow, or in the landscape seen from the school-room window, may be used as a lesson in review. The name of each color written over the color-square on the blackboard will be learned by the word-method before the close of the year.

Size. By the comparison of sticks, strings, lines, strips of paper, pieces of tape, and various other objects, lead the children to pronounce and use correctly:

1. Long and short,
2. Long and longer,
3. Long, longer, and longest,
4. Short and shorter,
5. Short, shorter, and shortest.

Plan. 1. To develop the new idea and teach the word, present two objects, as two strings, which differ in length and are alike in every other particular. Have the class say what you have; how many you have; how many you put on the table; which string you put down, and how they can tell which it was when the two are together.

2. Apply the new word, or words, to lines on the blackboard and to the objects in the school-room.

3. Have them name things seen out of school that are short; long. Name two that are long, and tell which is the longer, etc.

Cautions. 1. Teach the children to measure, and not to guess, to find out which is longer or shorter.

2. Present new objects, and vary the tests given and the applications required, in order to promote interest and to secure variety in the language used.

Take a few lessons on some other subject; as *Weight*, or *Sound*. Then review the above, and teach:—

6. Broad and narrow,
7. Broad and broader,
8. Broad, broader, and broadest.

Caution. If a child use a correct word, as *wide*, accredit it, and commend him. Ask who knows another word that means the same, and accept, or teach *broad*.

9. Two words to describe the same thing; as, "a long, narrow brook," "a long, broad street," "a short, narrow lane," "a broad, short aisle."

10. Thick and thin.

11. Thick, thicker, and thickest.

12. Thin, thinner, and thinnest.

13. Two words to describe the same thing; as, "a short, thick pencil," "a long, thin board," "a broad, thin ribbon."

Caution. Aid the children to express themselves in full statements; as, *The stove-pipe is long. A piece of paper was wrapped around it. I have the thickest coat.*

NOTE.—If there be time, the teacher may add lessons on things that are large, small, deep, high, tall, low. *Shallow, slender*, and words as difficult as these should be deferred till much later.

Weight. Furnish, in addition to the objects which the class see and handle, a few packages which look alike, but differ in weight.

Develop the correct ideas, and teach the pronunciation and use of—

1. *Light* and *heavy*,
2. *Heavy*, *heavier*, and *heaviest*,
3. *Light*, *lighter*, and *lightest*,
4. Large (in size) and light (in weight),
5. Small (in size) and heavy (in weight).

Plan. 1. Have the objects distinctly named; as, *cork, iron, a sponge, a book, a feather*, some *packages* (bundles or parcels). Let the children talk freely about them,—tell the use of cork, iron, or sponge, where the feather grew, and what color it is, etc.

2. Have a pupil stand with arms outstretched at the sides. Place a light object on the tips of the fingers of one hand, and a very heavy object on the other. Lead the class to state that the stone made the arm drop, and the sponge did not. Repeat with various objects and several children.

3. Obtain or teach *light* and *heavy*.

4. Ask the class to find things in the room that are *light*; that are *heavy*.

5. Apply to the paper parcels, and lead them to state what we must do to find out if anything be light or heavy.

6. In review, have the pupils apply two or more terms to the objects found; as, The poker is *short, thick, heavy*; the *long, light* pointer, etc.

Place. By proper questioning and by a suitable arrangement of objects, lead the class to pronounce and use correctly the ordinary prepositions; as,—

The box is *on* the table.
The pencils are *in* the box.
The stool is *under* the table.
The stove is *by* the window.
Mary is *near* the fire.
The bell is *between* the box and the book.
They knocked *at* the door.
We rode *down* the hill.
We walked *up* the hill.
They ran *from* the dog.

Caution. 1. Do not allow the use of "from" for *from*; "up" for *up*; "down" for *down*.

Form. During the latter half of the year the class may be taught objectively a few words which express *form*; as,—

1. All that we can see or touch of the ball (the box, the block, etc.) is its *surface*.

Plan. 1. Have the objects named.
2. Hold up a ball, and ask what it is. How do you know?
3. Take the ball and show me all of it that you can see. Touch all of the ball that you can see.
4. Repeat with various objects and several children.
5. Who knows what to call all that we can see or touch of the ball? Children, or teacher, give term *surface*.
6. Drill on the pronunciation of the word. Application: as, Take something from your desk and show me its *surface*. Show me all of the surface. What is the *surface* of the box? What (of this block, &c.) am I touching? What (of the ball, etc.) do you see?

2. The ball (egg, apple, etc.) has a *curved* surface.

Plan. Push a ball, and then a box. Lead the class to say that the ball rolled; that it rolled on its surface; that the egg (apple, etc.) rolls on its surface; that the box, book, etc., will not roll. Teach "*curved surface*," and apply to objects in and out of school; or which may be brought to school; as a lemon, marbles, a grape, an orange, etc.

3. The box (block, book, etc.) has a *plane* surface.

Plan. Review *curved surface*. Teach *plane surface* by a similar plan.

4. This is a *face*. These are *faces*.

5. The face on which the block will roll is a *curved face*. A face on which the box will stand is a *plane face*.

Plan. 1. Hasty review of *surface, curved surface, and plane surface*, with application to the objects to be used in the lesson.

2. Call attention to something shaped like a hemisphere (or cylinder). Show all the surface. Show that it will both roll and stand.

3. Have a child put his hand over the part of the surface on which it will stand; touch every bit of the part; say that he is touching a *part of the surface*; that the box will stand on this part of the surface. Repeat with other objects and different pupils.

4. Find a part of the surface on which this will roll; show all of that part; tell what you are touching. Repeat with objects which have plane surfaces.

5. Teach *face* and *faces*. Apply to many objects. Lead the children to use the terms *curved* and *plane*; to tell what a *curved face* is; what a *plane face* is; and that a *face* is a part of the surface.

6. Review with varied application.

6. This is an *edge*. These are *edges*.

7. This is a *straight edge*. This is a *curved edge*.

Plan. 1. Take a block or box. Call attention to an edge. Who can take another block and find something on it like this? Apply to the desks, table, etc.

2. Who knows what this is? Drill on *edge*.

3. Find another. Another. What shall we call all of these? Drill on *edges*. Find three edges that are alike.

4. By moving the fingers towards each other on two adjoining faces till they meet on the edge, lead the children to state, "Where two plane faces meet is a *straight edge*." "The edge between a plane face and a curved face is a *curved edge*."

5. Application. Find a face and tell us about it. Say something about this edge. What is a plane face? On what kind of a face will the box roll? Show me all that you can see or touch of the orange. What is it? What kind of a surface has the orange? See if it will roll on its surface. Pick out a block that has one curved face, one plane face, and one curved edge. Take something from the table and tell us all you can about it.

6. Bring something to school that has a plane surface.

8. A picture of a straight edge is a *straight line*. A picture of a curved edge is a *curved line*.

9. This straight line is *vertical*. This line is *horizontal*. This is an *oblique* line.

Note.—The review of the words taught should be by means of application to new objects. If the pupils were six when they entered school, they will be able to take in connection with the review.

10. This is a *sphere*. This is a (half-sphere) *hemisphere*.

11. This has two curved edges; it has two plane faces, and a curved face between them; it is a *cylinder*.

12. This has six plane faces *just alike*; it has eight corners; it has twelve straight edges; it is a *cube*.

13. This has one curved edge; it has one plane face; it has a curved face that ends in (tapers to) a point called the *apex*; this is a *cone*.

In application of the words which describe lines, the teacher may make a drawing on the blackboard, and have the class point to the various lines and tell what kind of a line each is. Or, the teacher may dictate: "Draw a vertical line. Draw a straight line. Draw a curved line. Draw a horizontal line. Draw a straight line that is neither vertical nor horizontal; what kind of a line is it?" Or, each child may be allowed to make a picture, using a limited number of lines, and describe his picture to the class.

Minerals. The list of words to be taught by these lessons must vary in various localities. In every school the children may be taught to distinguish and name,—

MARBLE,	SLATE,	COAL,
GOLD,	SILVER,	IRON,
COPPER,	LEAD,	TIN,
ZINC,	PEBBLES,	SAND,

and the minerals common in their own locality. They should be able not only to name but to say something about each; as, The pebble is *smooth* and *white*. It is *small*, and has a *curved surface*. Iron is *heavy*. This piece of marble is *cold* and *heavy*. Gold is *yellow*, but the coal is *black*. This stone is *large* and *rough*. The sand *sparkles*. The tin is *bright*.

Sound. The lessons on sounds may be given in five or ten minutes, as a relief to any slate exercise, or attention to a book or chart. Of course, the eyes must be closed, or the face averted.

Plan. 1. With all eyes closed, touch a bell and ask, "What did I do? How do you know? With what did you hear? Show me your ears. How many ears have you? Touch one of them, and say *ear*. Drill. Touch both, and say *ears*. Drill.

2. "All look and listen." Touch two bells, or a glass and a piece of wood. "Close your eyes." Touch one only, and ask, "What did I touch?" Have the class agree. "How could you tell?" Children.

"By the sound." Apply to an empty glass, and a glass full of water, and to many various objects.

3. Touch an object gently, then sharply. Lead the class to say that it was the same thing, but one sound was *loud* and the other *low*, or *soft*, or *faint*.

Have the class name sounds they like, and sounds they do not like; imitate sounds; tell why people keep a canary bird in a cage instead of a goose or a peacock; recognize each other's voices and footsteps; and use words that *tell sounds*: as,—

The bell rings.	Birds sing.
Boys whistle.	Parrots talk.
A bee buzzes.	The cat meows.
Geese hiss.	Horses neigh.
Peacocks scream.	The crows caw.
A robin chirps.	Larks warble.
A rooster crows.	A hen cackles.
The dove coos.	Lambs bleat.
The duck says "Quack, quack."	
The bob-'o-link says, "Bob-'o-link."	
We whisper, laugh, talk, sing, shout, whistle.	

Animals. No attempt should be made to give these lessons the formality of scientific study. They are to be simply *talks* about familiar animals, to lead the children to observe closely, and to state what they know in good language. When it is necessary to use a picture, as for a lesson about the cow or horse, have the class see the animal out of school, and verify, or add to, the statements made. Whenever possible, have the living creature or a stuffed specimen before the class during the lesson. Any bird in a cage, or stuffed bird, a globe of gold-fish, or a specimen from the fish-market, will furnish the class with something to say. If a picture be used, choose one large enough for all in the class to see; and when the animal is named, have different children show on the wall *about how high* it is, or name some other animal *about as large*. Not all the points indicated in the general plan, given below, can be taken in one lesson. The character of the previous lessons must determine which may be omitted.

The names of parts common to all, as *head, body*, may be written upon the blackboard, and will soon be learned by the word-method.

General Plan. 1. Name of animal.

2. What it does.
3. Parts named and counted.
4. Description of parts.
5. Use of characteristic part; as, wings to the bird, fins to the fish, horns to the cow.
6. Uses of the animal to us.
7. Parts useful after death.
8. Name of parts used after death; as, *meat, hide or leather, mutton, pork*.
9. Treatment.
10. Name of young; as, *calf, chicken, colt, lamb, kid, gosling, kitten*.

In considering *treatment*, the teacher has an opportunity to appeal to the moral nature of the child; to call attention to the creature's mode of defence; as, The cow *hooks*, The horse *kicks*, The dog *bites*, The rabbit *runs*, The cat *scratches*, The bee *stings*, The bird *flies*; to teach two or three words which tell about the disposition; as, The lamb is *gentle*, The rabbit is *timid*, The dog may be *cross*; and two or three others; as, *shelter, protect, or defend*. It need not be feared that the word is too long, if the *idea* be clearly apprehended. A child says *wheelbarrow* as quickly as *saw* when he has a lively interest in the object.

It will be seen that there is no lack of material for Language Lessons in the most elementary schools. And there is no excuse for neglecting English in any schools. Children like to see things, and to talk about them. Grant them this right, enter into their spirit, and the path will be clear.

TEACHERS' CERTIFICATE EXAMINATIONS.

UNIVERSITY OF CAMBRIDGE, ENGLAND, JUNE, 1880.

The following questions are so important that we think it will interest our readers to insert them in our columns:—

THE PRACTICE OF EDUCATION.

1. Describe in detail the dimensions, structure, and furniture appropriate to a well-equipped secondary school for 200 scholars.
 2. What main principles have to be kept in view in framing a time-table, and in distributing the work of assistants? Given a school of 100 scholars of ages varying from 9 to 17, how many classes would you form, and how would you divide the work of a week?
 3. In what subjects of instruction can you most safely rely on book-work; and in what others is oral teaching most needful and efficacious? Give reasons for your answer.
 4. School studies are sometimes divided into the "formative" and the "real." Explain this classification in detail, and show generally what proportion of importance you would attribute to each class of subjects (1) in the whole course, and (2) in the work of a given day.
 5. In what order would you teach the facts of geography? What position among other studies do you assign this subject in relation (1) to the mental training it may afford, and (2) to its practical usefulness?
 6. Discuss the use which should be made of home and evening lessons in connection with school work. Give your reasons for preferring that they should be either (1) supplementary to the class teaching of the previous day, or (2) preparatory to that of the following day.
 7. To what extent do you think it useful or desirable to teach the principles or reasons of the rules of arithmetic and of algebra to beginners? Give the reasons, if any, for requiring some problems to be solved, empirically by the use of rules, before those rules are thoroughly understood.
 8. Explain fully the method of registration both for attendance and progress which would you think it best to adopt. Say also in what form records of this kind should be communicated to parents.
 9. Give some rules for the skilful and effective use of oral questioning. Explain also in what circumstances, and for what reasons, written questions and answers are of special value.
 10. When is it expedient, and when is it inexpedient, to set the exact words of a book to be learned by heart? Give your reasons.
 11. What is meant by the "crude-form" system of teaching Latin? Discuss its advantages and disadvantages.
 12. Describe in detail the structure and contents of either a physical or a chemical laboratory for a higher school. Say also to what extent you think it wise or practicable to enlist the services of the scholars themselves, in preparing apparatus or furnishing illustrations.
- HISTORY OF EDUCATION FROM THE REVIVAL OF LEARNING.
(Special subjects: Locke and Arnold.)
1. What are the chief recommendations Luther gives the town councillors of Germany in his celebrated "Letter" of 1524?
 2. "Savoir par cœur n'est pas savoir" (knowing by heart is not knowing.) From the principles laid down in the rest of the essay, show what Montaigne meant by these words.
 3. To what distinctive features would you attribute the success of the Jesuit schools for boys in the sixteenth and seventeenth centuries?
 4. Take any one English writer on education before 1642, and mention the chief reforms recommended by him.
 5. What was the *Orbis Pictus* of Comenius? What objects did he seek to secure by means of it?
 6. Locke is said to hold "utilitarian" views of education. What is meant by this? How far is it true?
 7. What is Locke's advice about studying "the natures and aptitudes of children"? Compare his advice with that of some writer before his time, and of some writer since his time.
 8. Contrast a boy of twelve years old, according to Rousseau's ideal and according to the ideal of the schoolmasters of his time.
 9. What did Pestalozzi do at Stanz? What were the main lessons he learned from his experience there?
 10. State some of Jacotot's aphorisms.
 11. What are the special advantages Froebel sought to gain for children by means of the kindergarten?

1. Mention some points of agreement, and also of disagreement, which you see when you compare Locke's theory of education with Arnold's.

13. What were Arnold's views on corporal punishment? What was his practice?

14. On what ground did Arnold advocate natural-science teaching into the school-course?

15. In speaking of the education of his own daughter, what does Arnold say about the intellectual education of girls?

THE THEORY OF EDUCATION.

1. What different views of mind are implied in the words "education" and "instruction" respectively? In what sense may we speak of the mind as having faculties?

2. Perception has been called "*Presentative-Representative Cognition*." Explain this by analysing your perception of the table at which you are writing. (In the analysis, bring out carefully the whole part played by muscular activity.)

3. What do you understand by "object-lessons"? What is their psychological reason, and under what conditions may they be made effective?

4. State the laws of contiguity and similarity. Show how association by similarity is implied in the recall of any train of images by contiguous association.

5. Analyse the aptitudes for language and for natural science respectively?

6. How would you set about proving to a class of children that they will all be dead a hundred years hence? Bring out in your answer the precise difference between inductive and deductive reasoning.

7. What do you understand by instinct, and what is its range in man? Explain how it comes to pass that we can say to any act, "I did it mechanically."

8. How is mental acquisition promoted by teaching a number of children together?

9. What is to be said for or against the "Discipline of consequences" as applied to the young?

ADVANCED QUESTIONS.

(Not more than one question to be answered out of each group.)

I.

1. "Education should always be according to nature." Which reformers have especially insisted on this? Explain in each case what you understand to be meant by "nature."

2. When Arnold was a candidate for Rugby, one of his testimonials said that "if appointed he would change the face of education all through the public schools of England." What changes that have since taken place should you connect with Arnold's influence?

II.

1. Distinguish the notions of development and growth; and upon what grounds and with what effect they are applicable to the mind.

2. What reason is there, if any, for distinguishing various kinds of memory? Suppose a man has "no memory for places," might he cultivate one, and how?

III.

1. What is meant by "synthesis" and "analysis," in their relation to modes of teaching? Illustrate your answer, and say in what cases, if any, the logical order in which truths and facts are related is not the order in which they can be most effectively taught.

2. Write an essay on Rewards and Punishments, and the principles on which they should be administered.

ENTRANCE EXAMINATIONS.

FOURTH BOOK AND SPELLING.

TIME—ONE HOUR AND A HALF.

Examiner—J. M. BUCHAN, M.A.

Values.

- 18 1. Tell what you know about the battle of Thermopylae.
2. "Impoverished by these disasters, it was not till the

patent had nearly expired that Sir Humphrey procured the means to equip another expedition. With the assistance of Raleigh, now in high favour with the Queen, he collected a fleet of five ships. 'We were in all,' says the chronicler of the voyage, 'two hundred and sixty men, among whom we had of every faculty good choice; as shipwrights, masons, carpenters, smiths, and such like requisite to such an action, also mineral men, and refiners. Besides, for solace of our own people, and allure-ment of the savages, we were provided with music in good variety; not omitting the best toys for mo: is-dancers, hobby-horses, and many like conceits.'"
—*Fourth Reader*, pp. 34 and 35.

2+2+ (i.) Give Sir Humphrey's surname; quote the celebrated saying he uttered before he was lost, and tell what you know about the expedition.

2 (ii.) Name the queen referred to.

3 (iii.) Tell what you know about Raleigh.

11 (iv.) Explain the meaning of 'impoverished,' 'disaster,' 'patent,' 'chronicler,' 'voyage,' 'mason,' 'mineral,' 'refiner,' 'solace,' 'allurement,' 'savage.'

2. "Speed on the ship! but let her bear
No merchandise of sin,
No groaning cargo of despair
Her roomy hold within,
No Lethean drug for Eastern lands,
Nor poison-draught for ours;
But honest fruits of toiling hands,
And nature's sun and showers!

—*Fourth Reader*, p. 69.

7 (i.) Explain the meaning of 'merchandise,' 'cargo,' 'despair,' 'hold,' 'Lethean,' 'drug,' 'draught.'

6 (ii.) To what kind of business does the poet refer in lines 8 and 4? In line 5? and in line 6?

2 (iii.) Parse 'sun,' line 8.

2+2 (iv.) What is meant by 'fruits' in line 7? Why are they called 'honest'?

10 4. Distinguish 'pane' from 'pain,'
'rain' " 'rein' and 'reign,'
'main' " 'mane,'
'fane' " 'feign,'
'lain' " 'lane.'

1+1+ 5. Name the vowels. What is a diphthong? Point out the diphthongs in lines 3, 5 and 6 of the stanza quoted in question 8.

The lessons in the 4th Book selected for special critical study are:

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

ENGLISH HISTORY.

TIME—ONE HOUR AND A HALF.

Examiner—S. ARTHUR MARLING, M.A.

Values.

2½×6 1. Explain what is meant by the following terms:—
=15 Feudalism, Crusade, the Invincible Armada, Cabinet Minister, the Pretender, the Premier.

12 2. Name, in order, the sovereigns of Great Britain from James I. to Victoria, showing how each was related to his or her predecessor.

8×8 3. What were the wars of the Roses? When were

- =9 they waged? Why are they important events in English history?
- 8×8 4. In whose reign did those eminent persons live, and =9 for what is each of them distinguished: Thomas à Becket, Sir Walter Raleigh, William Pitt?
- 5×8 5. What was the cause of the Great Civil War in Eng- =15 land? Who were the principal persons engaged in it? What were its results?
- 12 6 What are the principal differences between the British Parliament and that of the Dominion?

DICTIONATION.

TIME—TWENTY MINUTES.

Examiner—J. C. GLASHAN.

Value—22. Fourth Reader, page 217, from 18th to 28th line. Two marks to be deducted for every misspelled word.

Notes and News.

ONTARIO.

W. J. Summerby, formerly Head Master of Kingston Model School, has been appointed Inspector of the Counties of Prescott and Russell.

Record of Farmersville High School, as changed by appeals—1 A, 10 B, 5 Intermediate, total 16, none of whom had ever passed Intermediate before. In addition to these, 28 others passed Third Class Examination. In the last four years this school has sent out 91 Third Class teachers, in addition to Second Class and Intermediate.

Oakville High School is steadily advancing under the able management of Mr. Wellwood, the head master. Six candidates were successful in passing the last Intermediate examination, two at the preceding.

At the South Hastings Model School, successful work has been done under Mr. Irwin, twenty-six pupils having passed at the late examination at Belleville.

The Model School for the County of Wellington held its first session for the current year with commendable success, at Mount Forest. All the candidates, twenty-four in number, obtained their certificates. At the close of the examination, the teachers presented the principal, Mr. Westervelt, and Dr. Yeomans, each with a piece of plate as an expression of esteem.

Mr. J. M. H. Harrison, elocutionist, Woodstock, writes to say that he leaves next Saturday "for a trip to the Holy Land, but will be back in time to make arrangements with the spring Teachers' Associations."

Cortez Fessenden, Esq., M.A., Principal of Brampton High School, has accepted a similar appointment at Napanee, at a salary of \$1200, Brampton only giving \$1000. The Brampton High School has attained a high record of success under Mr. Fessenden, and the trustees of so large a town and so flourishing a county ought not to be behind smaller towns in the payment of their teachers.

Smithville High School has organized a literary and debating society, to be known as the Clonian Society. President and Critic, A. C. Crossley, B.A.; Vice-President, S. A. Morgan; Secretary-Treasurer, Thos. Scales, B.A.; Assistant Secretary-Treasurer, Miss Minnie Collier.

Mr. Michele, late head master of the Perth High School, has been appointed by the County Council inspector of schools—a good appointment, as Mr. Michele's practical fitness for the office has been so well tested in his own locality.

The Listowel High School Board have resolved to petition the Minister of Education in favor of abolishing the distinction between High Schools and Collegiate Institutes.

The township of Euphemia has this year expended an aggregate sum of about \$5,000 in new school-houses.

A Hastings journal publishes a list of pupils on the roll of the Stirling Public School whose attendance has fallen under the four months required by law.

The Brockville High School Board have resolved to cut down their staff to a head-master, at a salary of \$1,200, and an assistant, at a salary of \$1,000.

D. A. McMichael, B.A. (Tor.), has been appointed head master of the Strathroy High School, with Messrs. H. D. Johnston and D. L. Leitch as his assistants, the salaries being \$1,000, \$800 and \$650 respectively.

At a recent meeting of the Ottawa School Board, one of the trustees called attention to the falling off in the attendance of pupils, and spoke in favor of a corresponding reduction in the teaching staff of the city.

A correspondent of the *Seaforth Expositor* complains of the practice, still too extensively indulged in by inspectors, of granting permits. When holders of regular certificates are so numerous it should not be necessary to grant a single permit.

The Secretary of the Listowel Public School Board has been instructed to notify parents who neglect to send their children to school that proceedings will be taken against them for such neglect unless they at once comply with the law.

PRESENTATION.—A magnificent gold-headed cane was presented on a late occasion to Mr. J. Hyttenrauch by his music pupils of the East Middlesex Model School, London, Ont.

Mr. R. Pickard, the winner this year of the Gilchrist scholarship, is an alumnus of the University of New Brunswick. Mr. Pickard had his right arm disabled while preparing for the examination. He was compelled to write for the scholarship by an amanuensis. A full statement of the case was transmitted to the Senate of the London University, and no exception was taken to this mode of examination.

The Public Schools in Guelph opened on the 1st of September. Upwards of 1200 names are on the registers, and of these there is an actual attendance of about 1,000. Twenty-four teachers have been employed for some time, but by a re-arrangement of the boys, classes, one has been dispensed with, so that there are now twenty-three. The schools are all graded, there being two teachers of First Book, two of Second, seven of First and Second, in the Ward Schools, six of Third and six of Fourth, three males and three females. Sixteen of these are engaged in the Central School Building, and the others in the Ward Schools. These last have been repaired, whitewashed, repainted, and furnished with new furniture during the holidays. Guelph can now point with some degree of satisfaction to its Public Schools, and will compare favorably with any town or city in Ontario. All the schools are supplied with water from the water works.

The average attendance of pupils at the Goderich High School, of which Mr. H. J. Strang, M.A., is head master, has been 125 during the half-year ending last July.

On visiting the public school at Clifton, we were greatly taken with the neatly drawn maps in colored crayons on the blackboard in the 3rd class apartment. In the 4th class room, various designs consisting of ornamental writing, graceful outlines of birds and flowers, Egyptian figures, &c., were most tastefully drawn. The idea is a good one, as it tends to cultivate neatness, elegance, and grace, besides adding considerably to the pupils' improvement in penmanship and geography. We were informed by Mr. Dobbie, principal, that at last entrance examination for high schools, 30 pupils from this school passed.

A literary society has been formed in the High School, Goderich, and the subscriptions are expended in purchasing a library containing many valuable books of reference in science, literature, and art. The library is at present well stocked, and additional volumes are added as funds permit.

In Oakville High School, six candidates passed at the last Intermediate examination, namely, one A, three B's, and two in Intermediate standing.

NOVA SCOTIA.

Prof. Schurman, M. A., Ph. D. has entered upon his duties as Professor of Logic and Political Economy at Acadia College. In 1875, Mr. Schurman won the Gilchrist Scholarship for the Dominion. He graduated B. A. at the University of London in 1877. He has subsequently secured the degree of Doctor of Science from the University of Edinburgh, and spent two years in attendance at the German Universities of Heidelberg, Göttingen and Leipzig. The Professor is justly deemed an important addition to the already distinguished faculty of Acadia.

The next school year bids fair to be one of great activity, as regards the erection and improvement of school buildings. The ratepayers of the town of Sydney, C.B., have "voted supplies" for erecting a new County Academy on a scale worthy of that important Centre of population and influences. The Section of Cow Bay, C. B., is building a School House said to be the finest Public

School edifice on the Island, though it will of course be surpassed by the projected Academy at Sydney. Sydney Mines, the most populous section in Cape Breton, has also taken steps to erect a commodious School House. Heretofore there has been overcrowding. Digby has voted a handsome sum to repair the County Academy. Parrsboro, by vote of the annual meeting, has determined to wipe out the disgrace of insufficient school accommodation. We trust that the proportions of the new edifice will be determined by an intelligent faith in the future of this flourishing village. In addition to the foregoing, which are new enterprises, we might refer to the handsome building just erected by the Linen Town Section, Yarmouth, which will be opened at the beginning of the ensuing term, and to the noble Pictou Academy rapidly approaching completion.

W. E. Butler, Esq., B.A., has been appointed Professor of Mathematics and Civil Engineering in King's College. The vacancy occurred through the resignation of Prof. Oram. Professor Butler leaves a good Educational position in England.

F. C. Sumichrast, Esq., Registrar of the University of Halifax, has opened a select school, called the Fort Massey Academy. Messrs. Creighton and McKenzie are associated with him as masters.

Miss C. Emma Lewis, winner of the Governor General's Gold Medal at the Provincial Normal School, and heading the list of first class candidates at the recent annual examination for teachers' licenses, has been appointed to an important position in the Protestant Academy, St. John's, Newfoundland.

At the recent examination for license to teach in the Public School, licenses were obtained, as we learn from the October number of the *Provincial Journal of Education*, as follows:—Academic License (Grade A.) 1; First Class (Grade B.) 41; Second Class (Grade C.) 92; Third Class (Grade D.) 171.

Mr. Chisholm, second master of the Dartmouth High School, has resigned to enter upon the study of medicine, and Mr. L. D. Robinson, of Aylesford, has been appointed in his place. Mr. Mooney, of St. Patrick's School, has tendered his resignation, to take effect shortly. St. Patrick's has the largest registered attendance of schools of Nova Scotia. N. Smith, Esq., has exchanged the principalship of the County Academy at Amherst for that of the Queen's County Academy at Liverpool.

QUEBEC.

At the recent McGill College Competitive Examinations, the following scholarships and exhibitions were awarded to students and candidates for entrance:—*Scholarships* tenable for two years. Third year,—Classical and Modern Languages. Scholarships: Haguo, H. I.; Gregor, L. R.; each \$125 yearly, the gift of W. C. McDonald, Esq. Third year,—Natural Science. Scholarship: Lafleur, H. A.; \$125 yearly, the gift of W. C. McDonald Esq., Exhibitions tenable for one year. Third year,—Natural Science Exhibition: Jones, J. E.; \$100, the gift of Principal Dawson. Second year,—Lee, A.; (private tuition) \$125, the gift of W. C. McDonald, Esq., Bland, C. E. (High School, Montreal) \$100, founder, Mrs. Redpath. First year,—MacKay, A. A. (Pictou Academy, N. S.) \$125, the gift of W. C. McDonald, Esq.; Unsworth, J. K., (Brampton High School, Ont., and private-tuition) \$125, the gift of W. C. McDonald, Esq.; Blackader, E. H., (High School, Montreal) \$100, the gift of the Governors.

A meeting of the Protestant Committee of the Council of Public Instruction was held in the Education Office, Quebec, on the 6th October, at which there were present the Lord Bishop of Quebec, Chairman, Dr. Dawson; the Hon. L. R. Church, R. W. Heneker, Esq., the Lord Bishop of Montreal, Dr. Cook, Dr. Cameron, M. P. P., the Hon. W. W. Lynch and the Hon. G. Ouimet, Superintendent of Public Instruction.

The committee agreed to accept the resignation of John McCormick, Esq., as a member of the Board of Examiners, Carleton, County Bonaventure, and to recommend that the Rev. Peter Lindsay, New Richmond, be appointed in his stead.

Letters were read from Mr. D. McGuigan, Secretary-Treasurer, Protestant School, Metis, and from Mr. Ferguson, of the same place, in regard to the collection and appropriation of school assessments as between Roman Catholics and Protestants in the case of the Messrs. Price's Mills in Metis. The letters were handed to the Hon. the Superintendent of Public Instruction with the request that he would inquire into the matters complained of, and report to next meeting of the committee.

Applications from Grenville Academy, Eaton Academy, St.

Sylvestre Model School, and Shigawako Model School, for grants from the Superior Education Fund, as well as a document laid before the meeting by the principal of Stanstead Ladies' Collego, setting forth the claims of the collego to an increase of grant from the Superior Education Fund. The committee agreed to consider in connection with appropriation of grants about to be made from the Superior Education Fund.

A letter was read from Dr. Webber, President, Board of Examiners, Richmond, representing that the Protestant section of said Board of Examiners has been reduced by resignation, and removal of one or two members, and recommending that the Rev. James Boydell, M. A., Kingsoy, John Ewing, Esq., Richmond, Sam'l. H. Chagnon, Esq., M. A., Melbourne, be appointed members of said Board. The committee agreed to recommend to the Lieutenant Governor in Council the appointment of the above named gentlemen as members of the Board of Examiners, Richmond.

On the suggestion of G. A. Purvis, Esq., President, Board of Examiners, Pontiac, the committee agreed to recommend to the Lieutenant Governor in Council the appointment of the Rev. Antoine Brunet, and the Rev. Thomas Motherwell, both of Portage du Fort, as members of the said Board of Examiners, Pontiac. It was moved by the Hon. L. R. Church and unanimously resolved:—"That in the opinion of this committee, the reduction or stoppage ordered to be made out of the Common School Fund and Superior Education Fund by 42 and 43 Vic., Cap. 22, sec. 12, does not apply to any payments to be made of moneys voted by the Legislature, or authorized by statute prior to the coming into force of the above recited act, and that a copy of this resolution be transmitted to the Superintendent of Education, with the request that he will lay the same before the Catholic Committee of the Council of Public Instruction, with the view of inviting joint action and representation to the Government respecting the same if it shall be found necessary so to do."

It was moved by Dr. Dawson and resolved:—"That the Chairman and Dr. Cook be a Sub-Committee to prepare a By-Law on Re-examination of Teachers under the Education Act, and report at November meeting."

The reports of Messrs. Allnutt & Weir, Inspectors of Academies and Model School, together with the tabulated Returns of Examinations were laid before the meeting, and considered in connection with the appropriations to said institutions from the Superior Education Fund. The committee divided among the Universities, Colleges, Academies and Model Schools \$15,475.

MEMORANDUM

submitted as a report of progress of the committee on the proposed Education Bill:

"That, inasmuch as it is feared the effect of the proposed bill, according to the opinion of this committee, will be to destroy the principle of the Common School system established by law, and that in the opinion of this committee such common school system should be maintained intact,—nevertheless in the present divided state of education in this Province, and in view of the great disadvantages under which a ministry scattered throughout the Province must labour, and more especially in view of the recognition under the proposed new education law of a more complete separation of the Roman Catholic and Protestant Schools, the following provisions seem absolutely necessary:—

1st. All persons not Roman Catholics shall for the purposes of the Education Act be regarded as Protestants.

2nd. For the special administration of Protestant Schools, there shall be a Superintending Officer appointed by the Government on recommendation of the Protestant Committee of the Council of Public Instruction, who shall, under regulations of said Committee, approved by the Governor in Council, have supervision of Government Schools, and shall be Secretary of the Committee, the Inspector of Academies and Chief Inspector of Protestant Schools.

3rd. The sum granted by the Legislature for the Inspection of Schools shall be divided, and that portion appropriated to Protestant Schools shall be expended under the regulations of the Protestant Committee, approved as above.

4th. The aid granted to poor municipalities shall also be divided, and the portion allotted to Protestant Schools shall be administered by the committee.

5th. The school-tax of scattered families of Protestants, unable to sustain dissenting schools, shall be collected and paid over to the committee, to be expended in aid of schools for such families.

6th. Joint-stock companies or corporations, whether incorporated

in Canada, or acting under an English charter, and represented by an Officer in Canada, may by vote at a legally convened meeting of their shareholders annually decide, having regard as far as possible to the religious faith of the several shareholders, as to the disposal of their school taxes, whether to Catholic or Protestant Schools, or in part to each; and failing such vote they shall be divided according to population.

7th. For the examination of Protestant Teachers, there shall be a central examining Board, appointed by the Government, on recommendation of the committee, of which the Protestant Superintendent shall be chairman, which shall issue examination papers, and examine and decide on the answers returned from the Local Boards.

8th. The grades of Protestant Educational Institutions recognized by law shall be as follows:—

A.—SUPERIOR EDUCATION.

1st. Chartered Universities, and incorporated colleges affiliated to them.

2nd. The McGill Normal School.

3rd. Academies or High Schools, providing instruction in classics, mathematics, the English branches, adequate to the standard of matriculation in the Universities or for the Diploma of Associate in Arts.

B.—ELEMENTARY EDUCATION

1st. Model Schools or first-class elementary Schools having teachers holding Model School Diplomas, and teaching in addition to subjects of elementary schools, Geometry, Algebra, or other branches prescribed by regulation of the Committee as equivalent, and receiving at least \$—— from the municipality, such schools shall be entitled to receive from the Common School Fund special aid amounting to——per cent. in addition to their allowance as common schools.

2nd. Elementary schools having teachers holding the Elementary Diploma, and teaching the ordinary English branches, with Arithmetic, Geography, and Grammar.

The localities in which Academies or High Schools shall be established shall be determined by the Committee, which may establish one such Academy in each county, or for a district of two or more counties, or a second in any county where there may be a sufficient Protestant population.

It was moved by Dr. Dawson, seconded by Mr. Heneker and resolved, "That these suggestions be placed in the hands of the Superintendent of Education, with the request that the same be communicated to the Catholic Committee and to the Government, and that the sub-committee on the Education Bill be continued, to report further in November."

The committee unanimously resolved, "That in the case of those schools which have sent in no returns, the grants be withheld until after the November meeting to enable the committee to form a judgment as to whether the explanations asked for are satisfactory."

It was moved by Dr. Church, seconded by Mr. Heneker, and unanimously resolved, "That, whereas it was found by experience in 1876, that the sum of \$25,500 appropriated by the Legislature for the purpose of the Inspector of Schools was inadequate, and whereas in the year 1877 the Legislature augmented the grant theretofore allowed by the sum of \$4,000, and whereas the Roman Catholic Committee took occasion in consequence thereof to increase the number of salaried Inspectors, and whereas the Protestant Committee instead of increasing the number of the school Inspectors determined upon applying the portion of such increased grant as came to it for disposal, to the more efficient inspection of Academies and Model Schools, and whereas the reduction in the grant by the Legislature from \$30,000 to \$28,625 practically falls most severely upon the Protestant Committee inasmuch as the increase in salaried Inspectors which was made in 1878 was so made amongst the Roman Catholic Inspectors, (and hence the Legislative appropriation must be first applied to the payment of their salaries before any part can be distributed to the Protestant Committee,) and whereas at the end of the fiscal year 1878-79 there remained an unexpended balance of \$1,375, or thereabouts, and whereas by the provisions of sec. 19 of 39 Vic., Cap. 15, it was enacted that all sums of money which shall have been granted by the Legislature either to Roman Catholics or Protestants for Educational purposes, and all unexpended balances of such sums shall remain to the credit and disposal of the Committee which had the control thereof, and whereas the reduction in the grant for inspection this year leaves this Committee without means to provide for the inspection of

Academies and Model Schools, and it has become necessary to use the aforesaid balance or portion thereof as by right belongs to this Committee, the Superintendent be requested to confer with the Treasurer of the Province, and to ask that such portion of the said balance as of right (division being made thereof on the basis of population as heretofore) belongs to this Committee, be applied towards meeting the expense of the inspections made by Messrs. Weir and Allnutt."

There being no further business, the meeting was adjourned to Wednesday, the 24th November next.

The Provincial Teachers' Association is at present in session in Montreal. An account of the proceedings will appear in the next issue of the JOURNAL.

Official Department.

CIRCULAR TO PUBLIC SCHOOL INSPECTORS, PUBLIC SCHOOL BOARDS, AND TRUSTEES AND MUNICIPAL CORPORATIONS.

I beg to submit for your information the following, respecting School Accommodation:

The checks introduced by the School Act of 1879, upon the demands of Public School Boards and Trustees for expenditure of money for school accommodation, were imposed with the object of giving the ratepayers an opportunity of being consulted, and thus making School Boards and Trustees more strictly responsible to their constituents than they had been heretofore.

Under the law, as it existed, Public as well as High School Boards and Trustees could demand from the Municipal Council any sum they thought fit, and, on refusal, compel the levying of the amount by legal process, to which no answer or remonstrance was effectual.

In the exercise of this power it was generally found that neither ratepayers nor Municipal Councils were consulted by the School Boards and Trustees, although in most instances the true interests of all would have been promoted by conference and consultation before large expenditures were entered upon, and much irritation would have thus been prevented.

The provisions of the Act of 1879 have not altered the duty incumbent upon Public School Boards and Trustees to furnish adequate accommodation in their schools, as required by sub-section 18 of section 104 and sub-section 8 of section 102 of the Public Schools Act. I have had occasion to point out to the Public School Board of the City of Toronto that this obligation of appointing adequate school accommodation is incumbent upon all Municipalities, and in case of refusal can be enforced by legal means, while this department has also the power, in case of any default in this respect, of withholding the share of the Legislative Grant otherwise payable to the School Board or Trustees concerned.

The Public School Boards and Trustees, and the Municipal Councils, owe a common duty to the ratepayers in providing adequate school accommodation, with due regard to the resources of the ratepayers; and when the subject is approached in a friendly spirit there shall be no difficulty in all agreeing to supply satisfactory school accommodation.

Education Department (Ontario),
Toronto, 15th October, 1880.

ADAM CROOKS,
Minister of Education.

THIRD CLASS CERTIFICATES.

CIRCULAR TO COUNTY BOARDS OF EXAMINERS, PUBLIC SCHOOL INSPECTORS AND CORPORATIONS.

The following circular has just emanated from the Education Department:—

1. Third-class certificates are granted by County Boards of Examiners, under the authority of sub-section 3 of section 201 of the Public Schools Act, to candidates who become entitled after compliance with the regulations of the Education Department, such certificate continue in force for three years.

2. The conditions now required to be fulfilled, under the regulations, by each candidate are:—

1. Proof of age—if a male, of being at least 18 years; and if a female, 17 years.

2. Having passed the intermediate examination in a High School, obtaining thereat 20 per cent. on each subject and 40 per cent. on the group.

3. Having subsequently attended for one session a County Model School, and having received the certificate of the Head Master thereof that he has paid satisfactory attention to his duties therein, and that he is fit to present himself to the County Board for his professional examination.

4. Having successfully passed such examination; and

5. Having produced evidence of good character.

3 Inspectors, trustees, and others concerned, will understand from the foregoing that a certificate of having passed the Intermediate Examination, and having obtained the number of marks required as equivalent for the Third class Non-Professional Examination, (or for the second-class) does not confer upon the holder thereof any legal status as a third class teacher, or any right whatever to be considered as legally qualified to teach in any public school. County Boards can only lawfully grant third-class certificates after the candidate has attended a county model school and successfully passed his professional examination.

4. The amended regulations of the 19th of August, 1880, for the examination of candidates for Public School teachers, and for the Intermediate examinations at the High Schools, clearly set forth the time, place, notices, testimonials, identification, and other particulars connected with the examinations of candidates for third-class certificates, as well as for second-class.

5. The regulations are also express in prohibiting any person being appointed or taking part as an examiner or substitute when any candidate has been instructed by him, or in any school with which he is connected. Inspectors and other presiding examiners are requested to see that this regulation is strictly observed, and in case of non-observance, the whole examination is liable to be made void.

6. Renewals of third-class certificates may be granted by County Boards of Examiners, subject to the regulations of the Education Department. These provide that no candidate shall be permitted to enter the second time for an examination for a third-class certificate, except by special permission of the Minister, on the recommendation of the County Inspector, which should state the several grounds on which he bases this, and amongst others the age of the applicant, his fitness and usefulness; reasons for desiring this permission; probability of continuing in the profession, and of obtaining a second-class certificate; also as to whether there is any scarcity of teachers in his district. The County Board may also require any candidate to attend at the County Model School before granting such renewal certificate.

7. In the case of holders of third-class certificates, having passed the Intermediate Examination, who apply for renewal of such certificates, any further non-professional examination shall not be required, and County Boards of Examiners are empowered to exempt the holders of third-class certificates passing the Intermediate examination from attendance at the County Model School, in all cases where the County Board considers the teaching experience of the candidate for such renewal is equivalent to that of attendance for one term at a County Model School.

8. Inspectors and County Boards will understand that attendance at a County Model School cannot be dispensed with in any case as one of the conditions for an original third-class certificate, but only in cases of renewals of such certificates.

9. Temporary certificates can only be granted by Inspectors after the permission of the Minister has been obtained, and upon special grounds. Owing to the full supply of regular certificates now found in nearly every Inspector's district the cases which would justify an Inspector in making such an application to the Minister will now be few, and can only be sanctioned when the particular case strictly comes within the requirements of the regulations.

Education Department (Ontario),
Toronto, Oct. 26, 1880.

ADAM CROOKS,
Minister of Education

Readings and Recitations.

THE OLD BIRCHEN SWITCH THAT HUNG ON THE WALL.

How dear to my heart are the school-days of childhood,
When no care nor contrition my wild spirits knew,—
The games that I played, our larks in the wildwood,
The school-house and grove where the birch-switches grew;
The rows of mud-pies with toe-marks imprinted,
How they rush to my sight at fond memory's call;
The old cider-mill with draughts never stinted,
And the old switch that hung high on the old school-house wall,
How the youngsters assembled in terror oft trembled,
As that woe-dealing switch came down from the wall.

That knotty old switch in my mind is abiding,
For oft, when returned with some wild truant band,
I received, with that switch, a most merciless hiding,
The toughest and sorest boy-nature could stand.
Unlike the old bucket no moss was adhering,
No white-pebbled bottom was touched when it fell,
No pure sense of coolness ere marked its appearing,
But I marked each descent with a jump and a yell:
Oh the anguish that filled me, the terror that thrilled me,
When that switch was applied, no language can tell.

I remember with trembling one grim little madam
Who taught me the rudiments, pot-hooks and all,
And who thought to expel all the sin left by Adam,

By thrashing it out with that switch on the wall;
I've been horsed o'er the knees of that maiden so human,
With my back to the foe and my face to the floor,
And I thought how men prate of the soft touch of woman,
For each touch drew a blister, each stroke woke a roar,
In that day of tough switches and very thin breeches,
When correction was pressed both behind and before.

I survived all the blows, and married the daughter
Of that muscular schoolmarm whose blows fell like rain;
Now her roguish grandchildren defy her with laughter;
Their tricks she approves,—mine she punished with pain.
And though I remember of no interceding,
When she put in the blows with a switch or a rule,
If a grandchild I whip there's a grandmother pleading,—
'Tis the granny who flogged me of old in the school,
With the toughest of switches, her sharpest of switches,
'That started a boy like the kick of a mule.

How we boast of advance in the secrets of learning,
How to cram the young heads we take infinite pains,
And forget inward pangs yield to blisters and burning,
That the switch hath oft quickened both conscience and brains.
To four minor senses we're often appealing;
Each one to our aid, in correction we call,
But that old-fashioned sense, the keen sense of feeling,
No longer the rogue doth persuade or appal!
Yet to quiet confusion, or force a conclusion,
'There's a mission to-day for that switch from the wall.

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.

HALTON.—The Halton County Teachers' Association met at Oakville on October 28th and following days, when papers were read on the subjects: "Reading," "Curiosities of English Spelling," "How and when to teach Fractions," "Grammatical Definitions," "Entrance Examinations," "How to teach History," &c. The papers were prepared with care, and brought very fair discussions. A paper on Arithmetic, by Mr. Bruce, of Waterdown H. S., was worthy of special notice. It showed much research and careful study of the subject by the essayist. Rev. Mr. Meikle, M.A., of Oakville, delivered a very good address to the teachers. Dr. C. Freeman, of Milton, read a very practical and pithy paper on School Hygiene, which was well received by all who heard it. A committee was appointed to report on the Adornment of School grounds and general tidiness of school premises. A committee on School Teachers' residences reported in favor of having residences provided for all teachers. The Superannuation Fund was considered, and steps taken to place the views of the teachers of this county before the Legislative Committee in as good a form as possible. Our worthy Inspector, Mr. R. Little, was pleasantly surprised on Friday evening by the presentation of a gold watch and chain.

Novral, Nov. 1, 1880.

R. COATES, Secy.

EAST GREY TEACHERS' ASSOCIATION.—The semi-annual meeting of this Association was held in Andrew's Hall, Thornbury, on Thursday and Friday 14th and 15th ult. The attendance was not large, but those present seemed to take a deep interest in the subjects brought forward, which were generally of an interesting and suggestive nature. The forenoon session of the first day was occupied chiefly in arranging routine matters. In the afternoon, the President, Mr. A. Grier, I. P. S., gave his address on "Education." In it he said he was sorry to say that a system of cramming is adopted in public schools, high schools and collegiate institutes, which has the effect of cultivating the superficial powers of memory. Any teacher who adopts that plan, does it simply to secure his own position in the eyes of the trustees, or to gain a reputation by having his pupils pass the intermediate examination. He was not surprised at the public school trustees blaming teachers so much for the failure of pupils in not passing the entrance examinations to high schools, or any other examination, when the high school trustees are now in the habit of dismissing the head master if his pupils are not successful in passing the Intermediate. He advised the teachers to study continuously if they desired to excel in their work, for their minds would become deserts if they did not draw daily from the fountains of their calling.

Mr. Robert Hamilton read an admirable paper on the Art of Teaching, clearly showing when the analytical and synthetical processes may be employed separately, and when combined. He gave many useful hints drawn from his own practical experience, applicable to the management of pupils and to the bearing of the teacher.

The subject gave rise to an animated discussion, which was maintained chiefly by Messrs. J. Farewell (Sec.), M. McKinnon, J. Tai, Dr. Donaldson and the President. Mr. George Lindsay, V.P., delegate to the Provincial

Association, gave a very interesting account of the proceedings of that body, after which the session was adjourned.

At 8 p.m. a public entertainment was given in the same hall, which was well filled with a very respectable audience. The Clarksburg brass band, under the efficient leadership of Mr. Henderson, performed some choice music, and the Local Glee Club sang several well-rendered pieces. The Misses Lindsay and Gray gave each a select reading; the Misses Armstrong sang a duet; Mr. Tait addressed the meeting and contributed a humorous reading; Messrs Treadgold and Rorke gave readings, and Mr. Fawcett a recitation. The repeated commendations of the audience testified to the satisfactory nature of the efforts made to please them. Mr. George Lindsay, Vice-President, occupied the chair and received a cordial vote of thanks, after which the entertainment was concluded with the National Anthem by the band.

The first business transacted on the morning of the 15th was the election of officers, resulting as follows:—President, Mr. A. Grier; Vice-President, Mr. George Lindsay; Secretary Mr. J. Farewell; Treasurer, Mr. R. Hamilton, Auditors, Messrs. McKinnon, Boyd, Hamilton, Smith, Honeywell, Mills, Treadgold, and Dr. Donaldson.

Mr. Treadgold then took up "Factoring," which he handled in a very expert manner. He recommended the teachers to study Dr. McLellan's Teacher's Hand Book on the subject. Mr. J. Whyte introduced a project of Mutual Life Insurance for the teachers, which he thought was very needful under existing circumstances, but as the matter was yet only in embryo, he thought it wise to hand it over to a committee to report at next semi-annual meeting, which was agreed to. Mr. J. H. W. York read an excellent paper on "Penmanship," advocating more attention to the subject in schools, and a style in accordance with the future business requirements of the pupils. This style he said was to be found in Beatty's copy books, which ought to be in general use. He recommended slate pencils set in wood for younger children, as less liable than the others to spoil the method of holding the pen.

The Rev. Mr. Elliott next read an essay on "Good Reading," which was very much appreciated. On the motion of Mr. Farewell, seconded by Mr. Lindsay, he was accorded a hearty vote of thanks and made an honorary member of the Association.

Mr. John Tait gave a very practical and useful elucidation of the mystery of Fractions, showing their applicability in solving some abstruse problems.

A club was formed in the Association to subscribe to the CANADA SCHOOL JOURNAL, many of the members testifying to its merits, and the valuable aid it has been to them in their professional work.

The next meeting of the Association will be held in Thornbury next May.

NORTH HASTINGS.—At Madoc on Sep. 30th and Oct. 1st. In the afternoon session of Sep. 30 an essay on "Writing" was read by Mr. Sutherland, H. M. Stirling, P. S. He recommended month head lines, as the use of the black board. A discussion of the subject followed, in which Messrs Johnston of South Hastings, Horton Mackintosh Mulloy and Williamson took part. Mr. Riddell read an essay on "How to teach School Arithmetic," a subject on which comment was made by Mr. Johnson. Mr. Mackintosh read a paper on "Multiples, Fractions and Reduction." Mr. Buchan, M.A., then arrived and was welcomed with applause. In the evening Mr. Buchan delivered his lecture on "Poetry and Politics."

Friday, Mr. Kirk, H. M. Madoc M.S. took up some difficulties in Algebra. Mr. Buchan discussed the subject of Literature in Public Schools, and gave a thorough analysis of a lesson in the 4th book explaining his method.

Afternoon session Mr. Buchan addressed the teachers on "Grammar." Mr. Wood, Madoc, read an essay on "Morals and Manners." Mr. Buchan on the subject of reading in the fourth and fifth classes. A unanimous vote of thanks was given to Mr. Buchan for his valuable assistance. This convention, which was a most successful one, was varied by the occasional introduction of music by some leading vocalists of Madoc and vicinity.

RESTIGOUCHE COUNTY TEACHERS' INSTITUTE.—The fourth annual meeting of the Restigouche County Teacher's Institute was held at Charlo on the 2nd and 3rd of Sept., 28 members present. President Nicholson introduced Mr. Cox, the new Inspector, who spoke at some length. The first day's work consisted of:—A first lesson on "The Table of Linear Measure" by Miss Nancy Robinson; an essay on "Momentum" by Mr. John Lawson; and an essay on "School Discipline" by Miss McCormack. In the evening Mr. Cox delivered a public lecture on "Education." Friday forenoon was occupied by a first lesson on Grammar, by Miss Ferguson, and a general discussion of the "Conditions of Successful Teaching." In the afternoon Mr. A. Ross, A.B., addressed the Institute on "Light and Color," after which he gave a popular description of the formation of the coal measure. At the request of the President, Mr. Lawson gave a lesson on the "Unitary Method in Arithmetic." The next meeting is to be held at Dalhousie on Thursday and Friday, the 9th and 10th of July, 1881. The officers:—Rev. T. Nicholson, President; Inspector Cox, Vice-President; Geo. T. Dawson, Secretary; Treasurer, A. Ross, A.B., and Donald McLean additional members of committee.

LANARK COUNTY.—At Perth, on 15th and 16th Oct., the President, Mr. N. L. Slack, in the chair. After the President's address, Mr. J. P. Anderson, of Balderson's Corners, read an essay on "Dull Boys," Mr. B. Lawe, of Almonte, on "Geography," Mr. A. W. Bart, of Perth, on "Drawing," Mr. Bowerman on "Reading," Mr. Beer, on "Vulgar Fractions," in concert with a number of the Perth High School pupils who volunteered for the purpose. Mr. A. Gutridge furnished an excellent paper on "Grammar."

RESPELL COUNTY.—At Benbrook, on 1st and 2nd inst., Rev. John May, M.A., of Ottawa, gave an excellent lecture on "What shall my calling be?"

EAST MIDDLESEX.—On 23rd ult. Mr. W. J. Eddy gave an address on "The Teacher's work out of school hours;" Mr. J. D. Hunt, of Putnam, on "How to make the School Attractive," the President, Mr. Dearness, on "Primary Teaching." "School Discipline" was then discussed by Mr. Donaldson, Mr. W. D. Lockett and others continued the work of examination at the High School entrance examinations, and a motion was carried to petition the Minister of Education that such examinations be in future conducted by the Board of County Examiners.

EAST LAMBTON.—Met at Forest on 14th and 15th Oct. Papers were read on "Circulating Decimals" by Mr. J. McKeown, "Geography of Dominion" by Mr. R. C. Whittel, "Case" by Mr. Buchan, M.A., "Second class Spelling" Miss Seager, "Infinitive Mood" Mr. Buchan. On Friday Mr. D. N. Sinclair discussed "Writing," and Mr. I. Brebner, P. S. I., "Object Lessons," a lecture on the "Origin of the English Nation" was then given by Mr. Buchan, High School Inspector.

HALLIBRAND.—Met on 8th and 9th instant. Mr. Moses, Chairman, invited an expression of opinion from teachers as to the best book on each subject, with a view to uniformity. It was moved by Mr. Telford, seconded by Mr. McNevin, and resolved, That in the opinion of this Convention, the Canadian edition of H. Smith's Arithmetic for senior classes, and Kirkland and Scott's for junior classes, are preferable to any other. A report of committee appointed on the subject also unanimously decided that Gage's editions of Swinton's Language Lessons, owing to the uniformity of its definitions, with Mason's Grammar, is preferable to Campbell's as an introductory text-book on Grammar. An address on "The Education System of Canada" was then delivered by the President, R. P. Echlin, B.A. The address condemned the undue prominence given to mathematics in the schools and at the examination, the speaker holding that more practical benefits and a higher tone of education arise from a thorough knowledge of the history and literature of our own race than from mathematics. He criticized the neglect of reading and writing in High Schools.

WEST KENT.—The semi-annual meeting of this association was held at Chatham on the 7th and 8th October. Over a hundred persons were present, including the Rev. C. McColl, P. S. Inspector for Chatham, and Mr. W. Nichols, M.A., P. S. Inspector for West Kent. Miss Dawson of the Central School read an essay on Composition, which a vote of those present requested her to publish. The proceedings seem to have been conducted in a liberal and harmonious spirit.

NORTH RIDING OF ESSEX.—The teachers' association met, with the French Division, in the Windsor Model School on October 7th. Mr. Buchan, H. S. Inspector, was warmly welcomed. The importance of keeping up the study of French, especially in that part of Canada, was discussed with much spirit and thoroughness by MM. Rocheleau, Curran, Meloche, Bourret and Reaume, Mr. Ross, M.P., joining in the debate. The president then delivered his annual address, on the connection between Education and Patriotism. Mr. Standish read a paper on "Time Tables," which was discussed by Messrs. McHugh, Morrison, and Ross, M. P. Mr. McNeil furnished an essay on Etymology, a subject also commented on by Messrs. Chenay, Sansburne and Buchan. The latter said he thought such studies must be particularly interesting to the teachers of Essex who had to teach two languages. He recommended the use of the highest authorities, such as Max Müller. Mr. Ross, M.P., then gave an excellent practical lecture on Mistakes in Reading, and Mr. Buchan an interesting account of the facts with regard to Primeval Man. A paper on Penmanship was read by Mr. A. J. Henson. On Saturday, a committee was appointed to determine the principal epochs of English history as a guide to teachers. Mr. Garragher then read an interesting paper on the subject of Discipline, and Mr. Henson one on Child Life. Mr. McNevin read a paper on "The Best Way of Teaching Interest to a Junior Class." This is said to have been one of the most successful conventions ever held in this county.

DURHAM.—Met at Bowmanville on the 9th October. Mr. W. C. Tilley, M.A., and Mr. W. W. Tamblin, M.A. had a discussion as to the marking system at entrance of High Schools. A discussion also took place on the Superannuation question, in which Messrs. J. Crawford, Tilley, Barber, Ellis, and others, took part. The following resolutions were carried:—
1st. That no portion of contributions to the fund be returned to teachers who leave the profession before spending ten years in service.

2nd. That all High and Public School teachers and inspectors be required to contribute to the fund, and

3rd. That the annual fee be \$4, also an additional \$1 for every \$100 salary received above \$400.

Mr. J. Hughes then read an interesting paper on the Phonic Method of teaching reading.

NORTH RIDING OF ESSEX. Met at Windsor on Oct. 7th. Mr. Buchan, H. S.P., was warmly welcomed. After the President's lecture on the "Connection between Education and Patriotism," papers were read by Mr. Standish on "Time Tables," by Mr. McNeil on "Etymology." Mr. Ross, M.P., gave an excellent practical lecture on "Mistakes in Reading," and Mr. Buchan an essay on "Primeval Man."

On Friday morning Mr. W. J. Gago addressed the teachers in the interest of the CANADA SCHOOL JOURNAL. A committee appointed to consider Mr. Gago's proposals reported that a club of 80 would have the SCHOOL JOURNAL at .65 per copy.

NORTH RIDING OF ESSEX.—Mr. J. R. Brown addressed the Convention on "How a teacher should spend his time." Various suggestions were made, Mr. Brown advocating and Mr. C. N. Ashdown deprecating a good deal of attention being given to visiting the parents of children. Mr. Thomas urged that, above all else, teachers who wished to be in advance of the times should read the best educational journals. As to superannuation, the following was carried: That twenty-five years' service in the profession, or having attained the age of fifty years, entitle teachers to superannuation; that no part of the annual dues be returned to any teacher; that the allowance be increased, and the annual fees also; that provision be made for the widows of deceased superannuated teachers. A motion was also carried, asking Parliament to repeal the Act shortening the summer vacation.

WEST HURON.—The semi-annual meeting of this Association was held in the Goderich High School at 10 a.m. on the 8th ult. At this session about 50 teachers were present, and during the day the number was augmented to about 130, besides several of the model school teachers in training and some friends of the teachers. Mr. H. J. Strang, B.A., President, gave his opening address. The minutes of previous meeting were read by Mr. W. R. Miller (Sec.-Treas.) and confirmed. On motion, Miss Bond, with Messrs. Cantellon and Halls, were appointed a committee to arrange order of business and subsequent sessions. Mr. Elliott was substituted for Mr. Strang on Promotion Committee; and the following were appointed: Resolution Committee—Messrs. Huston, Brown, Caverhill, McGillivray and Cresswall; Audit—Messrs. McAndrews and Orr; Question Drawer—Messrs. Strang, J. R. Miller, and Halls. The president, in the absence of the regular delegate, gave a summary of the subjects brought up at the Provincial Association. He said that the prevailing opinion held there was that recent measures were retrogressive rather than progressive, but he was glad to see the teachers from the Huron District spoke out manfully. It was thought advisable to have a committee to watch the legislature, and three from each section were appointed to resist any change that may be made adverse to the interests of the teachers. He felt with others that the claims of English over Mathematical subjects were pushed into the background, and that the real test of efficiency should rest with the former. The High School masters present passed a resolution expressing the injury that was being done from the undue prominence given to mathematical subjects; to the serious neglect of English. He held with Prof. Young that the country was being mathematized to death. The High School masters also passed a resolution strongly in favour of changing the rotation of examiners, so that complaints about members of the Central Committee and others interested in the text-books might be done away with. He thought that a great many of the best reforms were brought about by patient and persistent agitation. Mr. J. R. Miller, P.S., said that the Provincial Association made the profession what it is to-day. There should be changes made, and some useless branches were lopped off, but others still remained. He noted many questions on the Algebra paper of last examination which were unfair. In the 1st class there was too much of what was called "catch-work"; and there are some persons who have spent a good deal and used every effort they possessed to become teachers, but being caught by such catch-work, had their whole prospect in life destroyed. He moved a vote of thanks to the President for his able report; seconded by Mr. H. E. Houston, and carried unanimously. **SECOND SESSION, 2 P.M.**—Mr. J. W. Morgan, in a very interesting and masterly manner, showed his plan of teaching mensuration. Beginning with the simplest measurements, he demonstrated in the most practical way the dependence of the more advanced rules upon first principles, and illustrated his method by figures cut in-leather and paper. At the conclusion he was warmly applauded and highly complimented by the President and several of the members. On motion he received the thanks of the meeting. Dr. T. F. McLean next read a paper on Hygiene of the Brain. He recommended good exercise to circulate the blood and stimulate the brain, which from study becomes heated and unable to do its work effectually. This exercise may consist of a change of subject or physical exertion. He said that Dr. Mosso, of Turin, had devised an apparatus called a plethysmograph, designed for measuring the volume of an organ. It is capable of

measuring the relative amount of mental power required by different persons to work out the same problem, and it was suggested it should be brought into the examination-room to test the mental capacity of the students. He (Mr. McLean) said that the school-room should be a place not only for mental exercise, but physical. An active dance would be of use if it would not detract from the dignity of the institution. Too much study in school often resulted in weak sight, especially when the light was not properly admitted. Light should come in from the left side of the apartment, and the walls should not be white. A cordial vote of thanks to Dr. McLean was proposed by Mr. J. R. Miller, I.P.S., seconded by Mr. Halls, and carried unanimously. Permission to publish the paper was requested and granted. Mr. H. J. Strang cleared away in a lucid manner the difficulties in analysis and parsing which had been sent in for that purpose by the teachers, after which Mr. G. W. Ross, M.P., who on entering was received with enthusiasm, gave a humorous and instructive address on the duties of teachers, as exemplified in the following five commandments of the teacher's decalogue:—1. Thou shalt have no other profession than this. 2. Thou shalt not make any counterfeit of thy profession. 3. Thou shalt not talk little of thy profession. 4. Remember to keep thy holidays sacred. 5. Honor thy trustees, that thy days may be long in the land. In the evening a crowded audience assembled in the Temperance Hall. A. M. Ross, Esq., M.P.P., occupied the chair. The Chairman, Mr. Strang, and Mr. J. R. Miller gave short addresses, bearing on the work done in the schools of the county. Mrs. Harries gave an effective reading; Miss Cooke and Miss Traynor sang each a duet with Mr. Saunders, who also contributed two solos, and Mr. Collins sang, with great ability and taste, a solo which displayed his splendid voice to advantage. Mr. G. W. Ross, M.P., then gave an address on the development of the faculties of children, chiefly discrimination, retentiveness and constructiveness. The address was marked by thrilling eloquence and an exhaustive exposition of the subject. During its delivery he was frequently applauded, and a vote of thanks was accorded him with acclamation. A similar compliment to the chairman, the other speakers, and those who took part in the entertainment was passed, and the meeting was closed by singing the National Anthem. **Third Session, Saturday, 9 a.m.** Minutes of previous meeting read and approved, after which Mr. G. W. Ross, in a clear, practical manner, showed how good reading should be taught. Mr. J. R. Miller, I.P.S., gave some excellent advice in the matter of school routine; dwelling especially upon drill, order, cleanliness, pure air, personal neatness &c. Mr. G. W. Ross then took up with great ability the subject of school management, in an address which was highly appreciated, and for which, together with his valued services at previous sessions, he received the cordial thanks of the association. The concluding exercise of the Convention was an explanation by Mr. J. A. Moore, B.A., of his method of teaching composition, which he ably illustrated. All the subjects brought forward at the several meetings were well discussed by the members. The Auditors' report was read and adopted: it showed a balance of \$94.00 in treasurer's hands. The officers for ensuing year were then elected as follows: President—Mr. H. J. Strang, B.A.; 1st. Vice-President—Miss M. A. Traynor; 2nd. Vice-President—Mr. G. Baird; Sec.-Treas.—Mr. W. R. Miller; Executive Committee—Misses Bond and Bucher, with Messrs. Houston, Halls, and Connolly. The Resolution Committee reported as follows:—*Resolved*, That this association strongly approve of the following resolutions passed at the last meeting of the Provincial Association in the High School Masters' section: 1st. That this section would desire to impress upon the Minister of Education, the advisability, in the interests of education, of adopting the principle of "rotation of examiners" as put into practice in connection with the examination of the University of Toronto. 2nd. That taking into consideration the object of the International examinations and the instructions given to the examiners by the Honorable, the Minister of Education, in his circular of December, 1877, this section considers that the paper on English Literature given at the last examination assumed too great maturity on the part of purely intermediate candidates; that the paper on arithmetic was too difficult, while that on algebra was wholly unsuitable. Your committee also submit:—That the recent changes made by the Provincial Legislature with regard to shortening the summer holidays were unwise and uncalled for in the best interests of education. On motion, the report was received and unanimously adopted. The Examination Committee was requested to formulate resolutions regarding what the Association considers the undue prominence given to mathematics in the examination of teachers; also, that the approval of the majority of the members of the Central Committee should be required in the case of each examination paper, and that candidates who fail in only one of the examination groups should be re-examined only in the groups in which they failed. Mr. George Baird, as chairman of Committee on Promotion Examination, reported fully the attempt made to obtain the co-operation of the East Huron Teachers' Association, in order to have a uniform system of promotion throughout the county. On motion, a vote of thanks was given to the members of committee, and their expenses were ordered to be paid. *Resolved*, That the Committee on Promotion Examinations be re-appointed, to act in conjunction with any committee that may be appointed by East Huron Association. The Association then adjourned, to meet in Exeter sometime in January.

Toronto.—The second semi-annual meeting of the Toronto Teachers' Association was held on the 17th and 18th September, in the Wellesley School, the President, James L. Hughes Esq., (P. S. I. City) in the chair. Teachers present, (including those in training in Yorkville Model School) 170. Mr. G. R. Powell read a paper on "Percentage," showing it to be of the nature of fractions, and classifying the problems in commission, insurance, interest, etc. The essay was well received. Dr. Playter read an interesting paper on School Hygiene, dwelling upon the principal points in Hygiene that should be taught in the Public Schools—air, exercise, food, cleanliness, etc. Votes of thanks were passed to Mr. Powell and Dr. Playter for their excellent paper. The Convention adjourned to meet at 8 o'clock p.m., in the Theatre of the Normal School.

Eight o'clock p.m., the Convention met in the Toronto Normal School, the Hon. A. Crooks, Minister of Education, in the chair. The hall was well filled. The Minister addressed the audience, and introduced the lecturer, Rev. Professor Calderwood, of Edinburgh (Scotland), who chose for his subject "The mind in relation to the brain." The lecture was a very interesting one, and thoroughly illustrated by suitable diagrams, used for the first time in Canada. Dr. Geilie moved, seconded by Mr. James L. Hughes, a cordial vote of thanks to Professor Calderwood for his excellent lecture, which was carried amidst applause.

Second Day.—Saturday.—The Convention met at nine o'clock, the President in the chair. Some time was taken up in discussing revision of regulations for guidance of parents. Miss Lewis introduced "Vocal Drill" in relation to reading by exhibiting a "Table of vocal exercises" by Prof. J. W. Shoemaker, the Convention joining in the exercises. Mr. R. Lewis followed, illustrating "Voice Culture." Vote of thanks passed to Mr. and Miss Lewis for their exercises. F. F. Manly, M.A., of Collegiate Institute, read a paper on "How to teach Euclid" to a class of beginners, illustrated by blackboard exercises. Vote of thanks passed to Mr. Manly for his paper and exercises. Afternoon Session.—Discipline on regulations relating to pupils resumed. It was considered necessary that a class for "confirmed truants" should be formed with as little delay as possible in the city schools. Miss A. Freeman read a very interesting essay on the "Teachers' Temptations," or every day life in the school-room, which was listened to with marked attention; the composition and delivery were much admired. Cordial vote of thanks passed to Miss Freeman for her paper. Resolutions were passed, changing the time of meeting from January to February, and from September to October, in each year. Also the advisability of the Association presenting a prize annually at the Combined Examination. The Convention having joined in singing the National Anthem, adjourned till the annual meeting in February, 1881. Thus ended one of the most successful meetings the Association has yet held.

LINCOLN TEACHERS' ASSOCIATION.—The members of this association assembled in the Central School, St. Catharines, at 10 a.m. 22nd ult. After the minutes of last meeting were read and adopted, the President, Mr. J. B. Gray, delivered his opening address, which chiefly referred to the duties of teachers, especially those just entering the profession from the Local Model School. The Rev. Mr. Wetherald, in the absence of Mr. Somerset, I. P. S., gave a short address to the teachers on the religious and moral nature of their work.

The Committee appointed to consider means of promoting physical well-being of the children attending the schools, presented their report. It referred (1) to ventilation, heat, and cleanliness in the school-room as directly affecting not only the health, but also the mental activity and brightness of teachers and scholars. (2) The careful oversight of the physical condition of the children with reference to the observance of the ordinary rules of health in their habits and amusements, and to the age at which children should begin school, as well as the length of their daily application to study. (3) The use of physical exercises calculated to develop symmetrically every part of the frame, and to give grace and vigour to its movements, thus preventing habits of stooping and other imperfections in form and gait. The report, which was elaborate and exhaustive, was adopted, and ordered to be printed for circulation in the county. In the afternoon session the Committee on County Promotion handed in their report. It consisted of fixed rules for the examination and promotion of pupils so as to secure uniformity throughout the county. The plan suggested by the committee was one that would tend to give better satisfaction to parents, prevent confusion on a change of teachers, &c. After a short discussion it was ordered that the report be printed and a copy be sent to every teacher and board of trustees in the county. The Committee on Physical Exercises drew up a system of short drill and calisthenics to occupy about five minutes at a time. They recommended the use of "Drill and Calisthenics," by J. L. Hughes, and "How to get Strong," by W. Blaikie, as suitable works in the hands of every teacher. This report was also adopted. Mr. Rittenhouse exemplified, by teaching a class, his method of giving instruction in Grammar. A discussion on methods followed. In the absence of Mr. Seath, Mr. Robertson took up Arithmetic, solving some difficulties in a manner that elicited the highest satisfaction and approbation. The evening session was entirely occupied by Mr. Wm. Scott, head master of the Provincial Model School, Toronto, whose able services were secured to conduct a Teachers' Institute. He selected "How to deal with indolent pupils" as his subject, and the clear, practical, common-sense manner in which he

handled it would almost lead one to think that the "indolent pupil is a somewhat mythical character. He (Mr. Scott) desired to trace up every effect to its cause, and the cause of indolence in pupils may be traced to the teacher, through neglect in seeing that home study is duly performed; to the parents, by keeping the pupils too often away from school; to the home influence, associates, or other forces at work on the pupil himself. It is the teacher's duty to trace the evil to the root and then deal with it judiciously. Many plans have been adopted to remedy the evil, but no fixed rule could be adopted, as different dispositions require different treatment. He did not approve of flogging, but as "persuasion is better than force," he would try the moral method and use occasional approbation when he sees a fair opportunity, private admonition, or deprivation of certain privileges, but principally sympathy.

Second Day.—Although the weather was very inclement, the attendance was large and the interest evinced by Mr. Scott's valuable lectures was perceptible throughout both that and the afternoon sessions. The lecturer took up "Arithmetic," handling it in a masterly manner, beginning with the simplest rules and exemplifying plans for making the science of numbers attainable by very young children; avoiding abstruse rules, which, like the ancient method of teaching Latin, gave a teacher an opportunity of showing off his profound erudition in the presence of his pupils, and left them little wiser than they were. He advocated first principles, teaching by examples, quick work, mental exercises, use of black-board, attention to slow pupils, self-reliance, and short methods.

He finished an extremely interesting and instructive lecture by solving some complex problems in a ready, able manner, which was highly appreciated, and in replying to several very intelligent questions put by the members.

A large number of the teachers gave in their names as subscribers to the CANADA SCHOOL JOURNAL, and a club was formed in the association to enable them to procure the periodical at the reduced club rate for teachers.

At the afternoon session, Mr. Wm. Scott, M.A., took up "History for Entrance Examination in High Schools." He showed the importance of learning the subject as a matter referred to in every-day life; deprecated the system of cramming with unimportant dates, or dwelling upon the records of "blood and thunder"; demonstrated how pupils could be made to take a live interest in the study by tracing certain effects to their causes, and illustrated his plan of teaching the subject by taking up the feudal system and the American War as his basis, and working out the details of each with great judgment and ability.

In reply to a teacher, Mr. Scott recommended Epoch Primers as the most suitable text book for a pupil in the fourth class; he would not use a book in the third, but would give oral lessons, which might be used with advantage as subjects for composition. On the motion of Mr. W. F. Rittenhouse, seconded by Mr. J. Hippee, a hearty vote of thanks was accorded with acclamation to Mr. Scott, to which he briefly replied. The convention then adjourned, the next time of meeting being left to the arrangement of the executive committee.

PRINCE EDWARD COUNTY TEACHERS' ASSOCIATION.—The Convention of this Association was held in Picton on the 29th and 30th ult., and was largely attended. Mr. G. D. Platt, B.A., President, opened the proceedings at 9 a.m., with a sound practical address. The minutes of previous meeting were read and approved, after which Mr. T. F. Spafford read an excellent essay on School Discipline, which gave rise to an animated general discussion. Mr. W. T. Kinney took up the subject of "Junior Reading," in which he advanced some ideas that met with sharp criticism, but defended them with ability and good humor. Simple Rules of Arithmetic met with a clear elucidator in Mr. W. J. Osborne, who showed much thoughtful care in the preparation of the subject. Mr. R. Dobson, B.A., handled English Composition in a manner testifying to refinement and deep study, and earned the well-merited applause he received. Dr. McLellan, who on coming forward was welcomed with enthusiasm, selected Euclid as his subject, and it is needless to state how he handled it. The study is one which is not generally in favor with pupils, but he showed how it could be made very interesting by a live teacher. He recommended pupils to read the history of the science, to make neat figures, to get into the logic of every proposition, to understand clearly each step, not to mix up hypothesis with proof (a frequent cause of mistake), and to practise perseverance, as every difficulty is a key to success. Pupils think the *pons asinorum* almost impassable, but it is because they are not well drilled in the previous proposition of which it is only a deduction. He strongly advocated teaching deductions as tending to develop reasoning faculties, beginning with those of the simplest kind, as a preparation for the work that follows. He advised a thorough mastery of every syllogism, for if the student carries away any difficulty which he cannot surmount, it is like an accumulating residuum that will over impede his faculties. At the conclusion of this lecture the meeting adjourned. An open meeting of the Association was held in the evening in the City Hall, which was attended by a large and appreciative audience. The chair was taken at 7.45 p.m. by Mr. G. D. Platt, B.A., President, who, in introducing Dr. McLellan as lecturer for the evening, said that to no one man in the Province, interested in education, is more credit due than to the gentleman who would address them, and the teachers held his lectures and visits in high esteem. On coming forward Dr. McLellan was received with applause, and after a few preliminary remarks he entered on

his subject, National Education. He said he believed in education because he believed in the dignity and destiny of man. He repudiated the doctrine of Evolution, which teaches that man is only a few removes from the brute creation, for if such could be established and if the distinction is only one of degree and not of essential difference of kind, then there is no claim upon which we can base the doctrine of National Education. But we are inclined to think differently by our researches in the Divine word; a man bears in mind the lessons taught at his mother's knee, lessons as old as the everlasting hills, telling of his origin, his inheritance and his end. The superiority of man is seen in the history of intellectual pre-eminence, the mind of man is set in judgment by the universe. Man walks erect and lifts his forehead to the stars, and his hope pierces far beyond the stars. Man cannot attain his true destiny, except in society, which as a Divine institution, lays on him the duty of self-sacrifice, and asks him to take up his position as his brother's keeper. Upon this principle we base the edifice of education, which is the bringing out in all their harmony, the powers and energies of the mind, and society cannot escape the responsibility of aiding the object of education so far as it may be provided. If the Church were in a position to take up the matter, it would be their legitimate work, but as they are not, the State should provide an opportunity for educating those whose abilities fit them for it. The great object the educator should have in view is to develop the mental power of the nation in all its grandeur, and to make men good citizens. It may be thought the duty of the State in this respect need go no farther than to afford a good primary education, but it is requisite they should do more, for when people occupy a high social position, they should be educated to know how to grace that position. There is no single industrial art in which education is not of advantage; if a man is to be a shoemaker, education will make him a better workman, etc. The lecturer contrasted this country with uncivilized Africa, and showed how the superiority and power of mental energy asserted its sway in the improvement and development of industry and science. He praised the efforts made by Scotland in the education of her people, many of whom went directly from the parish school into the University, and returned to be teachers of the parish school. Thus it is if you want a man to manage a work-shop, or a ruler to govern an empire, you may go to the Scotchman (applause). In Germany, the system of education is most effective, for the nation has thereby become one of the greatest in the world, and her progress in science and art indicated the wisdom of those who established state education. In Ireland the fair faces and warm hearts of that precious "gem set in the sea," beam and throb with the brightness and integrity arising from National Education. He honoured the Irish peasant for making a sacrifice that his family may be educated. They are sent forth to every land, and take with them the benefits of mental culture they receive at home. With many, however, their native genius is so great that they do not require any education at all (laughter). It is sometimes said that it is not fair to ask the masses to make provision for educating the higher classes, but he was glad to say that he always found the wealthy men of Picton ready to honour men as men should do, and to give of their wealth to further the cause. He considered the son of the agriculturalist should be fitted to take his place in the highest ranks if his ability enabled him to do so. An objection was made that the result of all this education would be that after a time there would be no "hewers of wood and drawers of water," like the party in New York, who said that the girls were getting such a fine education at present, that shortly there would be no servants (laughter). He (Dr. McLellan) often had opportunities of mixing with some of these high class grumblers, and he found, generally speaking, that a great need of education existed among themselves. He related some anecdotes to bear out these remarks, which caused much laughter; and in conclusion, urged the teachers to faithful duty, to the cultivation of high principles in their pupils; to teach them not to despise the industrial arts, but to improve their minds so as to improve mechanical skill, and to become benefactors to generations yet to be born. Mr. W. Ross moved a vote of thanks to Dr. McLellan for his brilliant lecture, which animated the audience by the pathos and eloquence with which it was delivered. He hoped the Doctor would often favor them with his presence. The vote was seconded by Mr. Platt, and carried enthusiastically. The meeting then adjourned. *Second Day.*—A very large number of teachers assembled at the morning session. Mr. Rothwell gave an interesting lecture on the Railways of Ontario, illustrating his subject by a map drawn with chalk on the blackboard. He answered some questions relative to the value of the subject as a school exercise. Mr. W. K. Bowerman exemplified the principles of measurement of angles, after which Dr. McLellan, by request, took up Algebra, and showed some handy methods of solving problems which are not to be found in the text-books. In the afternoon the officers were elected as follows:—President, G. D. Platt, B. A.; 1st Vice-President, B. Rothwell; 2nd Vice-President, P. B. Mastin; Sec.-Treasurer, John Kinney. Auditors, John Wilson, R. M. White. Executive Committee, W. K. Bowerman, Blakely, A. T. Platt, J. H. Dulmage, D. Clapp, E. M. Faul, S. B. Nethery. Mr. Nethery gave a most interesting and instructive account of his visit to the Islands of the Pacific. Dr. McLellan then gave an address to the teachers, marked by the sound practical ability which is his characteristic. On the motion of Mr. W. T. Kinney, a cordial vote of thanks was passed to Dr. McLellan for his invaluable services at the Convention. Next

meeting of the Association to be determined by the ex-committee. Adjourned.

REVIEWS.

ELEMENTARY LESSONS IN ENGLISH.—Teachers' Edition. Boston: Ginn & Heath, 80 cents. The scholar's edition of this book has already been noticed in the Journal. The book before us is intended for the teacher's use, and we have no hesitation in ranking it as one of the most valuable books for teachers which we have seen. The preliminary discussion of the principles of oral teaching is admirable—worth more, in fact, than many of the expensive manuals of method. The book contains the text of the children's book entire, and, in addition, plans for developing the lessons of the text; observation lessons, dictation and text exercises, questions of oral and written reviews, materials for composition exercises; plans for conducting picture lessons, &c. Teachers who find "Grammar the dullest of all subjects," would find every page of this book a revelation to them.

CLASS BOOK OF MENTAL ARITHMETIC.—London: John Walker & Co. This is a small manual which gives capital suggestions as to the method of teaching Mental Arithmetic, and a large collection of examples for mental working. Mental Arithmetic is too often regarded as an exercise of thought rather than practice. We are glad to see that Mr. Murwood gives only examples which exercise the calculating or computing faculties, without troubling the reasoning powers. This is true Mental Arithmetic.

MOFFATT'S BRIEF HISTORY OF THE WORLD; BY JAMES MURRAY. Price Two Pence. This is a small primer about the size of the First Reading primer, contains a brief sketch of Mathematical Geography, and fully as much as should be taught in Public Schools concerning the physical geography of the Continents and the British Empire and dependencies.

THE SCHOOL-MASTER OF THE NINETEENTH CENTURY. Translated from the German. New York: Daniel Slot & Co. This work is a philosophical development of objective teaching, chiefly with a view to the natural growth of the mind, and the cultivation of language. It consists of a series of lessons, or rather of suggestive outlines of lessons on common things. There is more gold in it than in a bushel of the ordinary books on object lessons, but it may take a third reading to find it. Each part must be taken in connection with the whole before its full value can be seen.

ILLUSTRATED SCHOOL SPEAKER AND READER. Written by A. K. Isbister, M. A., LL.B. London: Longmans, Green & Co. This is a most valuable book. Its general aim is to teach, not merely a few specially gifted pupils, but all, to read well, and also to speak well. With this as his object, the author gives first a brief, but exceptionally clear and comprehensive explanation of the principles of elocution. This is followed by a number of exercises marked for emphasis and expression, and a very large collection of the most elegant selections to be found in the English language. There is also a capital chapter on *gesture*, with several pieces marked for appropriate action. The book concludes with extracts from foreign languages, Greek, Latin, French, German. The best feature of the book is the simplicity of its theoretical parts. The author's intention has clearly been to make his subject plain; not to lead his readers to think elocution a mysterious something, only to be comprehended by a favored few.

THE ELEMENTS OF EDUCATION. C. W. Bardeen & Co., Syracuse, 15 cents. This is one of Bardeen's Schoolroom Classics. It is a paper read before the Alumni State Normal School, by Mr. Charles J. Buell, one of the leading High School Principals of Eastern New York. He is evidently a clear-headed, earnest teacher.

MAGAZINES.

THE ATLANTIC MONTHLY for November begins with the first instalment of "The Portrait of a Lady," by Henry James, Jr. The scene of this, as of many other novels by the same author, is laid in England, but the principal characters are American. It promises well. "His Best" is a complete, well-told story. Mr. Richard Grant White contributes "Letters and Notes from England." The eighth chapter of the very interesting "Reminiscences of Washington," deals with the administration of President Tyler. "A True Republic" is a review of a work of that name written by Mr. Stickney, whose views as to the noxiousness of party are very much the same as those of the "Bystander." The remaining contents are: "The Jew's Gift," a poem by T. B. Aldrich; "The Silk Industry in America"; "Storms of Autumn," a poem; the third part of the "Intimate Life of a Noble German Family"; "The Future of Weather Forecasting"; "A Sleeping City," a poem; "Philosophy and Apples," by G. F.

Lathrop; "A Search for the Pleiades," by T. W. Higginson; "North Wind in Autumn," a poem; "What is a Fact?" a vigorous protest against materialism, by Elizabeth Stuart Phelps; reviews of "Mr. Aldrich's Fiction," "Recent Poetry," "Mahaffy's Greek Literature," "Shakespeare at l'Antiquite," and "An Englishman's England." "The Contributors' Club" forms the pleasing conclusion of a good number.

THE GENTLEMAN'S MAGAZINE for September offers a good and varied bill of intellectual fare. The twenty-third, twenty-fourth, and twenty-fifth chapters of "Queen Cophetua" maintain the interest of a remarkable story. Mr. Grant Allan's able and charming article on "The Dog's Universe" will lead all who read it to regret that misrepresentations arising out of an unreasoning bigotry or other causes prevented our Minister of Education from securing his services for University College. Mr. Alfred Rimmer contributes a very good paper on "The Fishes of Canada." Dr. Benjamin Ward Richardson writes on "The Philosophy of Fasting." The remaining articles are: "The Eclipse of Shakespeare," by Dutton Cook; "The 'Thunderer' Gun," by Daniel Pidgeon; "Literary Success a Hundred Years Ago," by Margaret Hunt; "Science Notes," by W. Mattieu Williams; and "Table Talk," by the Editor.

THE GENTLEMAN'S MAGAZINE for October presents an exceedingly good table of contents. "Queen Cophetua" increases in interest as the crisis of the plot approaches. Algernon C. Swinburne, the famous living poet, contributes an article on a famous dead one under the heading "A Rolie of Dryden." Mr. Haweis furnishes a critical estimate of "James Russell Lowell, as Poet," Andrew Wilson writes on "The Science of Likenesses and its Meanings," Mr. John Amplett on "Court Rolls," Mr. S. L. Lee on "Love's Labours Lost," and Mr. F. Duncan on "Hospitalier Work at St. John's Gate in 1850." Interesting "Science Notes" and "Table Talk" conclude an excellent number.

One of the remarkable features of the age is the demand for cheap editions of scientific works. To assist in supplying this demand, Messrs. J. Fitzgerald & Co., of New York, issue twice in each month, at the low price of fifteen cents, a number of what they call the Humboldt Library of Popular Science. The eleventh number has just reached us, and we find it to contain half of an interesting work, *The Naturalist on the River Amazon*, written by Henry Walter Bates. We heartily commend the enterprise.

STEWART'S TEACHER'S MAGAZINE for October, 1880. Contents: The Kindergarten, Lessons in Chemistry for Young Students, Analysis and Composition, Reading, Easy Lessons in Latin Translation and Parsing, Algebra Papers worked out, Lessons for Young Readers from Old Authors, Scripture Lessons, Domestic Economy, The Month, Correspondence. W. Stewart & Co., Holborn Viaduct Steps, London, E.C.

EDUCATION is the name of a new periodical devoted to the interests of education. Judging from the first number, it will deserve the support of the teaching profession. The contents are: Text Books and their Uses, by Dr. W. T. Harris; The Renaissance and its Influence on Education, by R. H. Quick, M.A.; Harmony in Systems of Education, by Dr. McCosh; and other valuable matter. It is edited by T. W. Bicknell, and published bi-monthly by the New England Publishing Company, of Boston. The price is \$4.00 a year.

REPORTS, &c., RECEIVED.

Superintendent of Public Instruction, Michigan, ornelius A. Gower, Lansing. A very excellent report containing capital suggestions from the Superintendent, and a complete report of the proceedings of the State Teachers' Association.

Superintendent's Report, Wisconsin, W. C. Whitford, Madison. This also contains a full account of the meeting of the State Teachers' Association. It has also valuable statistical and other information.

GREAT ENTERPRISES.

The present time is fruitful in schemes of great magnitude. There are already projected:

A new suspension bridge over Niagara river.

A new Atlantic cable in addition to that now in process of construction.

A ship canal across the Isthmus of Darien.

A ship railroad across the same strip of land, separating the two oceans.

A railroad over the Desert of Sahara, connecting Algeria and Soudan.

A canal which, conveying the waters of the Mediterranean into the sands of Africa, shall make a great inland sea and fertilize arid wastes.

The establishment of water communication between the Black and Caspian seas.

Add to these enterprises, most of which seem likely to be undertaken in the near future:

Ericson's scheme for utilizing the sun's heat.

Ericson's scheme for utilizing electricity.

The various plans of geographical discovery.

The solution of the mysteries of Central Africa and the civilization of the savages.

The destruction of the world's plagues.

The emancipation of every slave.

Universal education.

The adjustment of the relations of labor and capital.

Publishers' Department.

THE TEACHERS' CONVENTIONS.

So many of these meetings have been held during the past month that we are unwillingly obliged, through want of space, to hold over the reports of proceedings of some for our next issue. The Conventions have been very interesting this season, and the teachers who attended must have gone back to their schools edified and refreshed for their arduous and responsible work. In most of those which have already met, the CANADA SCHOOL JOURNAL has been adopted as the organ of the Association, and its circulation among teachers is thereby increased a thousand-fold. The feeling in its favor meets with general expression, and it is pronounced to be the most suitable paper for all grades in the profession. We have abundant evidence of this, likewise, from Educationists in different parts of this continent, whose opinion deserves the profoundest respect. We request a perusal of the extracts over the *fac similes* of their autographs, giving their valuable testimony to its intrinsic merits.

We may state also that in its principles it is thoroughly unsectarian, and is subscribed to by persons of different creeds and all shades of politics, because we are careful to confine ourselves solely to what we always intended the JOURNAL should be—essentially *the teachers' paper*.

We thank the presidents and teachers of the several Associations in which it has been adopted, assuring them that nothing will be spared by us to make them well satisfied with the course they have taken respecting it. We trust the Conventions yet to be held will act wisely and copy their example, by taking advantage of the present opportunity for having a superior periodical at the price it is at present supplied to County Association Clubs.

The following extract from a letter sent us by Rev. Father Stafford shows the high opinion he has of the CANADA SCHOOL JOURNAL. Father Stafford is acknowledged to be one of the foremost in the cause of education, and his estimate of the JOURNAL is entitled to the consideration of all interested in school matters. He writes: "What a large journal yours is, compared with that of the Province of Quebec; yours is 32 pages, the other is 16! I wish there was a law compelling every teacher and every school trustee in the land to be a subscriber to the CANADA SCHOOL JOURNAL. I cannot think of any way they could invest a dollar that would bring them better value. Your journal has a name that implies for it a large circulation. It is called the CANADA SCHOOL JOURNAL. The New England *Journal of Education* is much dearer than yours—\$8 per annum—larger, but matter not better."

W. A. Stafford
President.