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The Canada School Journal.

VOL. II.

TORONTO, APRIL, 1878.

No. 11.

MR. JOHN JESSOP.

The able and energetic Superintendent of Education for the Province of British Columbia is a native of the County of Norfolk, England, where he was born in 1829. He came to Canada at the age of eighteen, and settled down for a time to a life of toil in what was then the backwoods of the County of Ontario, where he remained till 1858. In that year, compelled by a period of illness to give up physical labour, he attended for one session the Provincial Normal School in Toronto, and having obtained a certificate he commenced teaching in the County of Durham. In 1855, he spent a second session at the Normal School, and afterwards continued to teach till he left the Province. The gold fever had broken out the year before in the Fraser River region, and this circumstance no doubt led to a revival of public interest in the great Northwest. More for the sake of seeing the country than of engaging in the search for gold, Mr. Jessop made up his mind to seek the Pacific coast, and in May, 1859, he commenced the overland journey. The voyage from Collingwood to Fort William was made in the iron steamer *Rescue*, then commanded by Captain Dick; and the route from Fort William to Fort Garry was traversed on foot or in canoes. The journey was made long before the Dawson Road was in existence, and occupied a whole month. The route followed was for the most part coincident with the line of the so-called Dawson Road—up the Kaministiquia, across by portages to Rainy Lake, and down the river of the same name to the Lake of the Woods. From Rat Portage the voyageurs followed the Winnipeg River to its mouth, crossed Lake Winnipeg to the mouth of Red River, and ascended thence to Fort Garry. The site of the now busy and populous city of Winnipeg was then almost free from houses, and though there were many farms along Red River, there were comparatively few settlers up the Assiniboine.

After remaining at Fort Garry a month, to recruit and lay in supplies, Mr. Jessop started for the Pacific with a single companion. When they reached Fort Ellice, however, they fell in with half-a-dozen adventurers of various nationalities from St. Paul. The latter had been swindled by some enterprising colonization agent, and were ready to go anywhere in search of a livelihood. The journey towards the setting sun was made up the Assiniboine and Qu'Appelle Rivers to the Big Bend of the Saskatchewan, and thence

up the Belly River toward the point where the forty-ninth parallel crosses the Rocky Mountains. For seven weeks the travellers found themselves traversing the buffalo country, and they were thus enabled to save a considerable portion of the flour they had brought with them from Fort Garry. It was fortunate that they did so, for they found the means of subsistence more difficult to procure as they approached the mountains. Falling in with a tribe of Blackfeet near the boundary, they were kindly treated, and a Kootenay Indian, whom they found about to return to his tribe, conducted them through the Boundary Pass to the west side of the mountain range. The party had by this time broken up, and Mr. Jessop and his comrades reached Fort Colville on the fifth of November. This old Hudson Bay Fort is now abandoned, its

place being taken by Fort Shepherd, on the Columbia, just north of the forty-ninth parallel. Fort Colville was 750 miles from the mouth of the Columbia, and the journey from there down to San Francisco, and up to Victoria, occupied the rest of the time till the beginning of 1860.

Arrived at the latter place, Mr. Jessop found employment for three months in the office of the now defunct *Gazette*, before spending a fruitless year in the Cariboo mining region. He returned to Victoria, and entered once more into the journalistic field. The *Daily Press* was started by him, in company with a Mr. McClure, who at a subsequent date immortalized himself in the colony by talking against time in the Legislative Assembly for the larger part of twenty-four hours, the balance of the day having been filled up by one of the present members for Victoria in the House of Commons, Mr. Amor de Cosmos. The object in view



was to prevent the passage of a measure to which they were opposed, and in this they were triumphantly successful. As an illustration of the hardships amidst which the work of publication was carried on, it is only necessary to state that while one of the partners was composing the leading articles in the double sense of the term—that is, composing them mentally and setting them up in type at the same time—the other was doing the same with the news columns. In the autumn of 1861, Mr. Jessop commenced a private school, which he kept in operation for three or four years. In 1866, the Legislature of Vancouver Island, then separate politically from British Columbia, created a rudimentary school system, which subsisted till the union of the Provinces in 1868. During these two years, and down to the entrance of British Columbia into

the Dominion in 1871, when for the first time responsible government was fully conceded, he continued to act as Principal of the Victoria Public School. During the first session of the Local Assembly the school system now in force was adopted, the then Provincial Secretary, A. Rock Robertson, Q.C., being the framer of the measure. Under it, Mr. Jessop became Provincial Superintendent of Education, and he discharged the laborious duties of his office unaided until he was supplied last year with a Deputy, in the person of Mr. Robert M. Clementson. It should be added that he married, in 1868, a Miss Faussotte, who at the time kept a private school in Victoria.

Mr Jessop made an unsuccessful attempt to enter public life in 1870. In that year he contested the District of Vancouver as a candidate for a seat in the House of Commons, but was defeated by a narrow majority.

Cleanings.

EDUCATIONAL APHORISMS.

From the *Cyclopædia of Education*, E. Steiger, New York.

LANGUAGE.

Things and words should be studied together, but things especially, as being the object both of the understanding and of language.—*Comenius*.

He who has no knowledge of things will not be helped by a knowledge of words.—*Luther*.

The signs of thoughts are so intimately associated with thought itself, that the study of language, in its highest form, is the study of the processes of pure intellect.—*Everett*.

Speech and knowledge should proceed with equal steps.—*Comenius*.

We cannot express in words the thousandth part of what we actually think, but only a few points of the rapid stream of thought, from the crests of its highest waves.—*Zschokke*.

Language is the sheath in which is kept the sword of the mind; the casket in which we preserve our jewel; the vessel in which we secure our drink; the store-house where we lay up our food.—*Luther*.

Thinking is aided by language, and, to a great extent, is dependent upon it as its most efficient instrument and auxiliary.—*Potter*.

SELF-EDUCATION.

The primary principle of education is the determination of the pupil to self-activity—the doing nothing for him which he is able to do for himself.—*Hamilton*.

The peculiar importance of the education of childhood lies in the consideration, that it prepares the way for the subsequent self-education of manhood.—*Currie*.

Self-activity is the indispensable condition of improvement; and education is only education—that is, accomplishes its purposes, only by affording objects and supplying materials to this spontaneous exertion. Strictly speaking, every man must educate himself.—*Hamilton*.

The child learns more by his fourth year, than the philosopher at any subsequent period of his life; he learns to fix an intelligent sign to every outward object and inward emotion, by a single impulse imparted by his lips to the air.—*Everett*.

If all the means of education which are scattered over the world, and if the philosophers and teachers of ancient and modern times were to be called together, and made to bring their combined efforts to bear upon an individual, all they could do would be to afford the opportunity of improvement.—*Degerando*.

HINTS IN TEACHING.

1. *Never attempt to conduct a recitation without special preparation.* Always decide before beginning, what to do, how to do it, and what to do next. Aim at something. The bow drawn at a venture seldom does much execution. Don't allow yourself to be diverted from your aim by chance remarks or incidents. Even a faulty plan, if adhered to, is better than none at all. When the recitation is finished, if your children cannot state clearly what they have learned, consider the exercise a failure.

2. *As a rule, stand when conducting a recitation.* You are more likely to be alive yourself, and to infuse spirit and animation into

your pupils. If they see you "taking it easy," they will be apt to do the same. Children are great imitators; and enthusiasm, like yawning, is wonderfully contagious. Of the two, a noisy recitation is decidedly preferable to a sleepy one; and remember that the hum of business is not, necessarily, disorder.

3. *Never break in upon a recitation to attend to matters of discipline.* I refer not simply to formal punishments, but to the numberless little interruptions that some teachers subject themselves to. "Mary, sit round in your seat." "John, put that knife away, and attend to your geography," etc. If the mischief is not very serious, take no, or little, notice of it till you have finished your exercise. You will thus be able to make your teaching more interesting, and so cure the disease, may be, without a local application.

4. *Never raise your voice above the common conversational tone.* If you do, you will be likely to get angry, and then make a fool of yourself in public. The wise teacher who sees an evil, will do one of two things: if the evil can be cured, he sets himself quietly and persistently at work to do it; if it cannot be cured, but must be endured, he makes the best of it, and devotes his time and strength to more promising subjects. In no case does he fume and fret and scold about it.

5. *Never whip, or resort to any severe punishment till the day after the offence was committed.* By so doing you will generally avoid punishing at all. You may find you were mistaken in the pupil, the act, or the intent. You will be able to reflect, and act calmly and justly. Put yourself in the pupil's place. Remember children are not vipers or devils, and most of their troublesome pranks are the outcome, not of malicious premeditation, but of fun—comparatively innocent,—combined with a thoughtlessness not unreasonable when their youth and inexperience are considered. Reformation can generally be brought about in a better way than by scolding and flogging.

6. *Teach your pupils habits of personal neatness.* See to it, in a kindly way, that no child will be willing to enter the school-room in the morning without first having washed his face and hands, brushed his hair, clothing, and shoes, and cleaned his teeth and finger-nails. Do it very kindly and discreetly, by speaking in a general way to the whole school, and, as occasion requires, to the pupil privately. However, I may as well say that the only effectual way to do this is by example, and no teacher whose own finger-nails are habitually in mourning need hope for much success in this department.—*New England Journal of Education*.

WHY SHOULD TEACHERS BE TRAINED?

Dr. Armstrong in the *Teachers' Monthly*, says:

If learning a subject be all that is needed in order to teach it successfully, then, having teeth extracted should be enough to make the patient a practitioner in this department of dentistry. But, before any one would submit his eye-teeth to the forceps of such a graduate, would he not require that a little professional education in the art of handling his instrument of torture be added to the sympathy which his own experience may have taught him to feel for his patient? It is cruel to the teacher as well as to his pupils to send him to do his difficult and important work of teaching with so little idea of the nature and objects of his labors as he has been able to obtain in his preliminary studies.

Before the sculptor began his work upon the block of marble, he had an angel in it. He had a clear idea of what he wanted to form. He studied the capabilities of the block, and discovered what it would make. Now he can apply his instruments understandingly. The rough angles are carefully and tenderly hewn off. The figure takes shape by degrees. The limbs are soon free, and the arms and hands relieved from durance. At length the features begin to beam with intelligence and love—the angel stands before him. How often the teacher, intent on making his work a success, commences his operations on the human being under his hand, without much thought of what he ought to develop, or any sufficient knowledge of the delicate and sensitive material awaiting his skill. He sees no angel in it. He has no ideal before him, toward the development of which his labors tend, and has little thought of what will be the result of his work. Should he succeed in teaching certain facts and principles which he himself has been taught, he, in all honesty, considers that he has done his whole duty to his class, faithfully and well.

MISSPENT EVENINGS.—The boy who spends an hour each evening lounging idly on the street corners, wastes in the course of a year three hundred and sixty-five precious hours, which, if applied to study, would familiarize him with the rudiments of almost any of the familiar sciences. If, in addition to wasting an hour each evening, he spends ten cents for a cigar, which is usually the case, the amount thus worse than wasted would pay for ten of the leading periodicals of the country. Boy, think of these things. Think how much time and money you are wasting, and for what? The gratification afforded by the lounge on the corner or the cigar is not only temporary, but positively hurtful. You cannot indulge in them without injuring yourselves. You acquire idle and wasteful habits which will cling to you with each succeeding year. You may, in after life, shake them off, but the probabilities are that the habits thus formed in early life will remain with you to your dying day. Be warned, then, in time, and resolve that as the hour spent in idleness is gone for ever, you will improve each passing one, and thereby fit yourself for usefulness and happiness.—*Exchange.*

WRITING FOR THE PRESS.—Waste no time on introductions. Don't begin by laying out your subject like a Dutch flower garden, or telling your motives for writing. The key note should be struck, if possible, in the very first sentence. A dull beginning often damns an article; a spicy one whets the appetite, and commends what follows to both editor and reader. Above all, stop when you are done. Don't let the ghost of your thought wander about after the death of the body. Don't waste a moment's time in vindicating your production, against editors or critics, but expend your energies in writing something which shall be its own vindication.—*Exchange.*

EDUCATION.—Accustom a child as soon as he can speak to narrate his little experiences, his chapter of accidents, his griefs, his fears, his hopes; to communicate what he has noticed in the world without, and to what he feels struggling in the world within. Anxious to have something to narrate, he will be induced to give attention to objects around him, and what is passing in the sphere of his observation, and to observe and note events will become one of his first pleasures; and this is the groundwork of the thoughtful character.—*Exchange.*

SAXONY.—*Le Progrès*, of Brussels, states that, last December, there was founded at Dresden an institution which evidences, on the part of the Saxon people, a profound love for teachers and a great solicitude for those who devote themselves to this laborious career: it is an establishment, under the patronage of the Prince George, where female teachers of any creed may obtain board and lodging, as long as they are out of employment, at the very moderate price of 1.87 francs, or about 85 cents, per diem. The founders of this excellent institution propose to annex to it an asylum for female teachers, superannuated or infirm.

—Superintendent W. T. Harris said in his recent address before the Spelling Reform Association: "In this matter we of St. Louis can speak with positive experience. In the fall of 1866 the phonetic modification of the alphabet, as invented by Dr. Edwin Leigh, was tried in one of our public schools as an experiment, and the following year it was adopted throughout the Public Schools of this city, where it has ever since retained its place. By this system the child has a perfectly phonetic alphabet in so far as 'one sound for each character' is concerned, although it violates the third law of Latham in having more than one character for the same sound. Yet, even with this, we find the following advantages in the system, which is still in use with us after ten years: 1. Gain in time—a saving in one year out of the three years usually occupied in learning to call off easy words at sight. 2. Distinct articulation, the removal of foreign accent and of local and peculiar intonations. 3. The development of logical power of mind in the pupil. He can safely be taught to analyze a word into its sounds and to find the letters representing them, whereas with the ordinary orthography it is an insult to his reason to assure him that a sound is represented by any particular letter. Hence, analytical power is trained instead of mere memory from the day of his entrance into school—and analytic power is the basis of all thinking activity."

—Teaching is an art. Men don't pick up art skill without much close study and patient toil. To teach is not like pouring grain

into the hopper of a mill. To teach is to develop, to train, to make men wiser, better, purer, happier and the music teacher has much of this work to do. To teach, requires more than mere knowledge affords, more than a mere acquaintance with the subject to be taught. He who aims to train the minds and hearts of pupils, ought to know something about the mind and heart of the pupil. The man of great knowledge is not necessarily qualified to teach because of his learning, no more than he may be gifted to speak in public. To possess or to acquire knowledge is one thing, to impart it to others is quite another. Yet few will agree to this fact.—*Brainard's Musical Monthly.*

—A project is on foot to hold an educational conference, composed of English and American teachers, and friends of education, in England, during the coming summer. It is assumed that a large number of persons interested in education will visit the exposition at Paris, and in so doing will pass through England; and it is thought that in this case it could be made convenient and pleasant to stop a few days in London, or some other suitable place, and make the acquaintance of, and hold counsel with, their English brethren. We vote for the conference. We think it would do good. And the only difficulty in the matter is, as it occurs to us, whether there can be assembled in England at any one time a representative body of American educators.—*Penn. School Journal.*

—Some years ago, the late Horace Mann, the eminent educator, delivered an address at the opening of some reformatory institution for boys, during which he remarked that if only one boy was saved from ruin, it pays for all the cost and care and labor of establishing such an institution as that. After the exercise had closed, in private conversation, a gentleman rallied Mr. Mann upon his statement, and said to him: "Did you not color that a little, when you said that all expense and labor would be repaid if it only saved one boy?" "Not if it was my boy," was the solemn and convincing reply.

—The chief ground upon which I venture to recommend that the teaching of elementary physiology should form an essential part of any organized course of instruction in matters pertaining to domestic economy, is that a knowledge of even the elements of this subject supplies those conceptions of the constitution and mode of action of the living body, and of the nature of health and disease, which prepare the mind to receive instruction from sanitary science.—*Prof. Huxley.*

—A young man was teaching in a district school when one day the following conversation took place: *Teacher* (to a little girl whom he sees weeping violently)—"What is the matter, Fanny?" *Fanny*—"Je—Je—Je—Johnny's tryin't—t—to kiss —" *Teacher* (interruptingly)—"Johnny, were you trying to kiss Fanny?" *Johnny*—"No, sir." *Teacher*—"But she says you were." *Fanny*—"No—n—no, sir. He w—w—w—was t—t—t—tryin' to kiss M—M—Maggie J—Jackson."

—All elementary instruction is wasted unless it leads to something practical. The study of drawing is a very broad one in application to practical life; and no course of instruction can be satisfactory that does not embrace its scientific and practical features as a basis. The study of drawing, as now taught in the public schools of the country, can be regarded as neither an amusement or an accomplishment. It is industrial in its character.

Industrial drawing does not mean picture drawing, or the drawing of the human figure, or birds, animals or miscellaneous objects generally, in the elementary instruction. Industrial drawing teaches the principles of design, as applied both to the form and to the decoration of all manufactured objects—develops the taste, the imagination, and the inventive faculties, and in such a way as to benefit every one who has to do with form, either as producer, merchant, or consumer.—*Dr. Hupp in Virginia Journal of Education.*

—The following incident happened in one of the public schools in this city: *Teacher*—"Define the word excavate." *Scholar*—"It means to hollow out." *Teacher*—"Construct a sentence in which the word is properly used." *Scholar*—"The baby excavates when it gets hurt."—*New England Journal of Education.*

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The Canada School Journal.

Recommended by the Minister of Education for Ontario.
 Recommended by the Council of Public Instruction in Quebec.
 Recommended by the Chief Supt. of Education for New Brunswick.

TORONTO, APRIL, 1878.

SUMMER NORMAL CLASSES.

It is a common practice in some parts of the United States for teachers to organize a normal class for special instruction in certain subjects during their vacation. There are some subjects, such as Drawing, Music, Drill, Writing, Elocution, etc., which have not yet been at all *fairly* taught in our schools, and most teachers FEEL and many *acknowledge* their inability to teach these subjects properly. By means of these vacation classes they can obtain the necessary instruction to enable them to do so. A cheerful retired place is usually selected for the class, and only a portion of the time devoted to study, the remainder being occupied by recreation and rest. If any Canadian teachers desire to make suggestions regarding such classes, they may do so in the JOURNAL.

DISHONESTY AT EXAMINATIONS.

Owing to certain irregularities in connection with the Intermediate Examination at St. Thomas, in July, 1877, which were investigated by Mr. Buchan, High School Inspector, an Order in Council was passed to prevent the issue of Intermediate Certificates to the candidates concerned, and taking away the Government grant for them from the St. Thomas High School Board. The High School Board of St. Thomas petitioned the Minister of Education for the withdrawal of the Order, and were successful, as the following resolution passed at the last meeting of the Board will show :

"Resolved, that the thanks of the Board be tendered to Dr. Wilson, M.P.P., for his successful exertions in obtaining a reconsideration and reversal of the Order in Council taking away the certificates of several teachers who had obtained the same at the last intermediate examinations and withdrawing the Government grant to the Board for said pupils."

Of course, forgiveness is not extended to those pupils of St. Thomas High School who had possession of the examination papers before the examination.

It will doubtless be felt by some, that the Minister of Edu-

cation was unduly lenient in his punishment of the offending candidates of July, 1877 ; but it must be remembered that the papers had been purchased for some years before the examinations were held. It was therefore impossible to detect all the offenders, and it would scarcely have been fair to punish the few with the clear conviction that the many were escaping. It was the knowledge of the fact, that the papers had been obtained in former years, which led the students of 1877 to try to obtain them. They have received more punishment already than many others equally guilty, because their names have been published to the world in a most undesirable connection, and they have lost the certificates for which they wrote. No doubt all honest teachers sincerely wish that *all* who ever had papers before the examinations took place could be convicted of their wrong-doing. We join them in that wish. As this could not be, however, we think the Minister acted wisely as well as charitably in allowing the convicted students of 1877 the privilege of writing again for certificates.

In the case of Intermediate Examinations it is of the utmost importance that great care be exercised by Public School Inspectors in selecting the presiding examiners, when it is necessary to have substitutes appointed. There has undoubtedly been considerable laxity on the part of some "substitutes" and even some Inspectors in the past. Some men have such unbounded confidence in the integrity of candidates. It is a matter of deep regret that they are not always worthy of the confidence so innocently reposed in them. High School Masters cannot always be blamed, when their pupils act improperly at an examination. They are not allowed to be in the room while the examination is going on. True, they should train their pupils to be honest and manly ; but a pair of *practical* eyes will do much more to make pupils honest at an examination than any theories. No honest boy or man either fears to be watched.

We have no fears that the Minister of Education will repeat his leniency in dealing either with High School pupils or candidates for certificates. Any communication in an examination hall should lead at once to the expulsion of the offender. The regulations are quite clear on this point, but regulations need to be carried out by trustworthy and *competent* examiners. The Department should satisfy itself thoroughly as to the fitness of every substitute before he is appointed. We would be glad to see a law placed on the Statute Book, making it a felony to sell examination papers before the date when they are to be submitted to candidates by the proper authorities.

A TEACHERS' ASSOCIATION FOR CANADA.

No one who knows anything of the history of the Ontario Teachers' Association will deny that it has been largely instrumental in bringing about educational reforms of various kinds, and that to its existence and operation are very largely due the present excellence of our school system in this Province. It has urged upon the attention of successive Governments and Legislatures the necessity of changes in the law, until these changes were in substance, if not exactly in form, effected, and it has laboured earnestly for the improvement of teaching.

methods with a degree of success which only those who knew what school teaching was like fifteen years ago and what it is like to-day are in a position to appreciate. Not less earnest or less successful have been the efforts of the Association to improve the system of text-books, while its influence has been steadily and effectively directed towards the elevation of the teacher's professional status and the cultivation of *esprit de corps*.

We have no reason to doubt that a similar good work has been done by Teachers' Associations in other Provinces of the Dominion. In some cases incontrovertible evidence of this has been brought under our notice, and in Provinces with which we are less intimately acquainted, we have been assured that the most gratifying results have followed the formation of Associations for large districts. Much remains, no doubt, to be accomplished in this direction, but this need not hinder us from contemplating with some satisfaction the good already done.

The degree of success which has hitherto attended the working of Provincial or District Associations suggests the expediency of making an earnest effort to organize one for the Dominion. This is a project which has often been talked of, and though there are obstacles to overcome it certainly appears feasible enough provided the results to be achieved are sufficiently important to warrant the attempt at overcoming them. From a national point of view an annual convention of Canadian educationists is certainly a desideratum. We are not yet, as Canadians, in a position to dispense with any aids likely to help on the work of consolidation, and one of the most important of these aids would be a community of ideas on educational subjects, and free interchange of views with respect to them. Underlying the educational system of each Province will be found certain general principles which are common to all, but there will also be found a great deal of variety in the modes of applying them. These variations, due often if not always to local causes and conditions, frequently contain useful hints to the educationists of other Provinces than the one for the time being under consideration. It would be simply impossible for an intelligent and experienced teacher of Ontario to study attentively the peculiarities of the school system in Quebec, for example, without having his educational horizon widened and himself made by this very process a more competent member of the profession. We do not propose to enter just now into a discussion of the peculiarities of the different Provincial systems; it is sufficient to know that such peculiarities exist, that educationists everywhere would be all the better for being more acquainted with them, and that the best way to make them so is to bring them into association with each other in Conventions. We trust that this matter will be brought up during the year at the various Provincial Conventions, and that a determined effort will be made to have at least an experimental meeting of delegates from all the Provinces at Ottawa.

THE TEACHERS' ASSOCIATION.

"What is the proper function of the Provincial Teachers' Association?" is a question that deserves the attention of the Teachers of Ontario at the present time.

It certainly does not require to do Institute work. The County and City Teachers' Associations, established under the Regulations of the Education Department, perform that duty most effectively. Comparatively few teachers can attend the Provincial Convention; all must attend the meetings of their Local Associations. Those who attend the Provincial Association meetings are those, as a rule, who have least need of instruction in methods of teaching.

There remain, however, two most important functions for the Provincial Association. It should discuss and express opinions in the form of resolutions on the educational affairs of its own Province; and it should devote a fair share of attention to the consideration of the great educational questions of the age. In order to do either of these properly the Provincial Association ought to be representative. All will agree, that, if its resolutions are to have their due effect, it must be representative in *character*, if not in *constitution*. To be representative in character it should consist of delegates from all parts of the Province, and from each of the three classes of school workers, Inspectors, High School Masters, and Public School Masters. In the first respect, at least, it has not yet become representative; and however great the ability and long the experience of those who now attend its meetings, their opinions and votes would bear more weight, if they were given not merely as their own, but as the expression of the views of the teachers of associations which they represented. The Government gives a liberal grant in aid of the Associations in each Inspectorial district. Part of this grant might very properly be spent in paying the expenses of delegates to the Provincial Association. These delegates could bring with them the opinions of the teachers on matters of immediate and special interest to Ontario, and they could take away with them intelligent views regarding the educational problems of the world. The Association would thus be the means of bringing the educational light of the Province to a focus, and of reflecting this light in its increased brilliancy and power.

Contributions and Correspondence.

SCHOOL PRIZES.

THEODORE H. RAND, D. C. L.,

Chief Superintendent for New Brunswick.

Much has been written by educational authorities both in advocacy and in condemnation of Prizes; but all discussions of this subject which fail to take account of the conditions on which prizes are awarded, overlook that which, in point of fact, really determines the legitimacy or illegitimacy, the benefit or injury, the wisdom or unwisdom of School prizes. To offer to children under fifteen years of age prizes for proficiency in special subjects is indirectly to offer inducements for the neglect of other school studies. The recipients of such prizes will almost invariably be those who not only needed no extraordinary stimulus in the direction in which it was furnished, but who, having their activities diverted from subjects in which they were not proficient, or else being stimulated to overwork, become the ready victims of a system which has not the sanction of any sound educational principle, but of long time custom only in its support. To offer prizes for regularity, or punctuality, or good conduct, or diligence, or any

combination of these, is to elevate one or more virtues in the mind of the child by indirectly depressing every other. Every member of a well-ordered School must become acquainted with a variety of subjects of study, and have varied duties to perform. Every subject and duty is equally important to the pupil as a member of the School, and the regularity, promptness, good spirit and devotion with which every school obligation is discharged, are scarcely if at all of less moment than the obligations themselves. If it is unsound to emphasize the importance of one proscribed intellectual task to the indirect disparagement of another, it is no less unsound to emphasize intellectual attainments to the virtual exclusion of other elements of a successful school life. The converse is equally true. But it is legitimate and wise to acknowledge and reward those who distinguish themselves in the discharge of all their obligations, as members of the School. The conditions, therefore, on which School prizes should be awarded, must include regularity and punctuality of attendance, conduct, quality of school work, and application to all school duties; and these elements of school life are not to be divorced from each other, but regarded as parts of one whole—character. Prizes thus conditioned would afford a pleasant and many-sided stimulus to every pupil, and would prove an important auxiliary to the efforts of Parents, Teachers and Trustees in behalf of regularity of school attendance, and at the same time facilitate the best discharge of every other school duty. No prizes should be offered in any school except through the Board of Trustees, who should be responsible for the character and general suitability of the same. These prizes should be awarded by the Trustees on the written report of the Teacher of the School or department.

METHOD.

BY J. B. CALKIN, M. A., PRINCIPAL NORMAL SCHOOL, TRURO, N. S.

I.

A child seems to be a bundle of paradoxes. His likes and dislikes often appear to be contradictory and capricious. In nothing is this more apparent than in his attitude with respect to new truth. He is irrepresible in his curiosity to pry into the unknown; importunate with his questions to find out why this is so, and what that is for; and yet, no sooner do we adopt a systematic plan for satisfying this craving, than he regards our efforts with indifference and opposition. The school-room is to him a prison-house, and lessons are tasks burdensome as Egyptian bondage.

But the child is not such a contradiction as we may suppose. If we examine his case, we shall find that it is perfectly simple and intelligible. The mistake is where it generally is—with the one who fancies all the world wrong but himself. It does not follow, because the chemist in his laboratory can by some chemical process convert sawdust into starch or sugar, that we ought to consider sawdust good, nutritious food, and that we should be greatly surprised that an animal fed on it becomes emaciated and dies. The fact is, we often present to the child as knowledge, something which to him is no more knowledge than sawdust is food. Of this nature are those general principles and abstract statements with which the young learner is too frequently bewildered and discouraged. No one would expect a child to gain any ideas from committing to memory the words of an unknown language. No one would expect him to take an interest in such work. Nor should we hope for any better results from learning unintelligible English words. The child's reflective powers are yet feeble; he has used them but little; and that knowledge which is the product of thought, generalized truth, is to him wholly unintelligible. Ignoring this fact, we block up the way to almost every study by an

impassable barrier of rubbish in the form of definitions. Our arithmetics, geographies, and especially our grammars, give ample proof of this absurd practice.

The beginner should be made to feel that knowledge is a matter of things, and not of mere words. We should present knowledge in the concrete form, give individual objects and examples for the child's inspection. By examining these individuals, and by comparing them, he frames his own definitions and deduces his own rules. In pursuing this course, every step the child takes is intelligible; the idea is developed first, and then he receives the appropriate term or expression to represent it. We shall find, too, that as we are gratifying the natural desire for knowledge by giving the genuine article, the child's interest is awakened, and his attention is fully secured. But, further, that exercise of thought by which he works out the definition or rule for himself, tends to strengthen and develop mental power. He is encouraged and made confident in himself by a consciousness of power, and a feeling that he is capable of becoming an independent worker in the search after truth. Instead of taking knowledge second-hand, he begins to realize that he can get it fresh from its very sources in the field of nature.

Teaching principles through examples, sometimes called the *Analytic Method*, and also the *Inductive Method*, is carried on through the medium of oral lessons. It affords a fine opportunity for the display of skill on the part of the teacher. The child is placed in the position of an investigator who is exploring a new subject. The work must not be simply an investigation conducted by the teacher in the presence of the children as silent spectators. The learner is not to be treated as a passive being, or a mere receptacle of knowledge. In fact, the knowledge acquired is of less value to the child than the discipline and power which he secures through the efforts which he puts forth in obtaining that knowledge. The learner is a co-worker with the teacher, and he is guided in the working out of knowledge by a process of questioning carried on by the teacher.

The method of teaching here indicated will be exemplified in a future number.

THE FIRST STEPS OF READING AS TAUGHT IN NEW BRUNSWICK.

BY WM. CROCKET, A. M., PRINCIPAL NORMAL SCHOOL, FREDERICTON.

Perhaps the best way to gain from paper an idea of the method of teaching the First Steps of Reading as practised in the schools of New Brunswick is to visit in imagination one of these schools and witness the teacher at work on a lesson. A class of little children is in front of her. She has secured their attention by a short and animated conversation held with a view of leading them to use the words which are to form the subject of the lesson, and of developing those pleasant tones which are to be carried into their reading. The visitor will see that the teacher has so diverted the conversation as to lead them to express in words some one idea which she has brought vividly before them. Her object is now to teach them to recognize in printed form the words they have just used, and to this end she prints the sentence neatly and rapidly on the blackboard, at the same time engaging their attention by keeping up the conversation. Suppose such a sentence as "Tom has a dog" is the one in question. The children, while observing its form, repeat it simultaneously and individually. They are then required to distinguish it from among other sentences placed on the blackboard. In this way the sentence is recognized as a whole; the separate parts of it are yet, however, unknown.

As a first step towards leading the child to the recognition of

the individual words, at least in the earliest stages, the teacher may be observed to transpose the order of the sentence, not by re-printing the words, but by pointing to them in the sentence, naming them at the same time—*e. g.*, she would point to *has*, naming it, then to *Tom*, and last to *a dog*. Such an order is taken as shall make complete sense, and the pointer, guided by the teacher herself, is made to move rapidly from word to word, so that the sentence may be read with the same rapidity as before transposition. It is seen that the teacher's object in this exercise is not to impress the form of the individual words, but to lead the children to see that the whole is made up of parts. (At a later stage this transposing exercise is dispensed with.)

The class is now prepared to deal with the separate words. An observer will perceive that the teacher does not select the words promiscuously, but calling upon the children to re-read the sentence requires them to stop at the word whose form she means to drill upon, thus leading them to name the word without being told, and keeping up the connection between the part and its whole. It is also seen that the teacher takes care to deal first with those words which the children can readily associate with some object—*e. g.*, *Tom* or *dog*. When the word has been named, and attention called to its form, various expedients may be adopted to impress it—to select it from a list of words in which it repeatedly appears, to name it each time the teacher prints it, and to throw it when practicable into some sentence already known by the class. Each word of the sentence is dealt with in a similar way, after which the children themselves are required to form other sentences by transposing the order of the words, an exercise which is often amusing and at all times profitable. It is scarcely necessary to say that before the whole sentence is mastered in the way described several lessons will have to be given, no lesson exceeding a quarter of an hour in length. When several sentences have thus been taught the visitor will observe that they are then arranged so as to form an interesting story on *one* subject, and the Lesson Cards prescribed by the Provincial Board of Education—which are constructed so as to be used in this way—are taken advantage of, and render the printing of the story on the blackboard unnecessary. The children are prepared for each story on the card in a similar manner.

When the cards have been mastered, the children are introduced to the Primer, which contains no word that they have not hitherto met with on the cards. Different stories are formed merely by a different arrangement of the same words, and each lesson is invested with fresh interest, just as the different arrangement of a child's toys affords it new delight.

When about half the lessons of the Primer can be read with ease and fluency, and each word in them readily recognized, the process of phonic analysis is commenced. The teacher is observed to select some word from a sentence of their reading lesson—*e. g.*, the word *mat*. When it has been pronounced by the children, they are required to imitate the sounds as given slowly by the teacher, *m-a-t*. The pupils repeat the separate sounds several times, and are thus led to see that the word consists of three sounds. The first of these, *m*, may be selected as the sound to be drilled upon. The character is printed along with other letters on the blackboard, and the sound given each time it is pointed out, and different expedients may be adopted to impress it, as in the case of the *word*. Each sound is evolved in a similar manner—the exercise being generally taken previous to the close of a reading lesson. Before the Primer has been finished, the children have become acquainted with the elementary sounds, whether represented by one letter or more.

As they become acquainted with several sounds, they are led to

see their use in the formation of words. During their first exercise in these lessons, monosyllabic words of two letters are taken as the root out of which other words are made to grow, as it were, by prefixing a sound—*e. g.*, from *at* are formed by prefixing the sounds *c*, *f*, *r*, *s*,—*c-at*, *f-at*, *r-at*, &c.; from *in*, by prefixing *t*, *f*, *d*,—*t-in*, *f-in*, &c. When all the sounds are known, and their use drilled upon, the children are put in possession of a power by which they can ordinarily make out new words which they may meet with in their subsequent reading. The names of the letters of the alphabet which are of no use to the pupil till he begins oral spelling, which should not be during Primer work, are learned without any formal instruction. The course which has been described is very satisfactorily accomplished in one year. Nothing is gained by attempting to accomplish it sooner with pupils who enter school about five years of age.

This method carries out the true theory of teaching reading, which is to enable the pupil to recognize in visible form the language he daily employs. The child, at the age we are considering, expresses his ideas not in detached words, but in sentences. It is true that the word *Tom* or *dog* will suggest an idea, but that idea implies a notion of doing or being, and which when expressed will assert something of *Tom* or *dog*. The sentence, therefore, is the smallest whole which should be presented to the child.

The method is on the principle of leading from the known to the unknown. The teacher, in her preliminary conversation, takes care that the sentence which is to form the subject of the lesson is understood, and conveys a distinct and definite idea. The unknown thing to be taught is the visible expression of that idea. It carries out to the full extent the principle which pervades all sound elementary teaching—the wholes before parts, analysis of the wholes, and the recomposition of these parts into wholes.

It appeals to the intelligence of the child from the outset. Unless a symbol is the representation of some idea either just excited, or previously existing in the mind, the impression made does not act on the intelligence, but is remembered merely as a matter of sight and sound, without connecting it with any idea intended to be conveyed. The names of the twenty-six letters, the knowledge of which was at one time deemed necessary in order to be able to read, were, besides a hindrance to reading, nothing more than twenty-six seeing sensations with which no intellectual activity could possibly be associated. The sounds of the letters also, unless evolved from wholes or known words, are so many hearing sensations, but of a more mysterious character, because heard nowhere outside the schoolroom. In the method described, a source of pleasure is initiated by the child's associating the symbol with the mental conception. By such a process, the associating of idea and symbol becomes habitual, and if after a time the language the child meets with should represent unknown ideas, these will be sought for by the mind, and an intelligent curiosity will be excited in regard to them. The child will come to feel that there is something to be known in connection with any words or language that may be strange to him, and the impressions made cannot but lead to intellectual action.

ENGLISH LITERATURE.

ENTRANCE EXAMINATION FOR HIGH SCHOOLS.

THE NORWEGIAN COLONIES IN GREENLAND—BY MR. ARNOLDUS MILLER.

1. By what other name are the Norwegians known?
2. Who was the founder of these colonies?
3. From what country did he sail?
4. How did he induce the colonists to leave their home?
5. Does the name "Greenland" convey a correct idea of the character of the country? Give reasons for your answer.

6. To what country does Greenland belong?
7. Write brief notes on "Leif," "Olavs Tryggesson," "Magnus," "Skraellings."
8. Explain the meaning of "Osterbygd," "Westerbygd," and mention some other words similar in meaning and having a similar ending.
9. State the events that happened in these colonies in 1256 and 1348.
10. What change has taken place on the coast of Greenland since the establishment of these colonies?
11. During what centuries did the events narrated in this selection take place?
12. Tell what you know of Capt. Scoresby.
13. Give the roots of "disseminate," "exaggerate," "exodus," "missionaries," "gospel," "churches," "hamlet," "flourished," "marvel," "armament," "period," "king."
14. What is the prefix in "subject"?
- (a) Give its various modifications.
- (b) Give the meaning of suffixes "ly," "ry," "al," "ic," "en," in the words "completely," "century," "original," "domestic," "wooden."
15. Define "benighted," "naval armament," "wrapt," "embarrassed," "annihilated," "aborigines," "drill," "exodus," "disseminated," "dispensation," "oblivious," "barrier."

ENGLISH LITERATURE FOR THIRD CLASS TEACHERS.

THE ORIGIN OF THE ENGLISH NATION.—FIFTH BOOK, PAGE 140.

BY J. D. CHRISTIE, M.A.

1. Give the derivation of *exertion, physical, homogeneous, enmity, annals, identity, colleges, aptitude, poet, gentleman, literature, Norman, islander*, explaining fully the force of the prefixes and suffixes.
2. Write notes on *William, Harold, Cinque Ports, House of Commons, Ancient Colleges*.
3. Explain the meaning of the following expressions: *Morally separated, homogeneous mass, archetype, Languages of the South, New World, dawn of that noble literature, Imperial jurisprudence*
4. "The history of the preceding events is the history of wrongs inflicted and sustained by various tribes." "The national character began to exhibit those peculiarities which it has ever since retained." "Sterile and obscure as is that portion of our annals." "The great English people was formed." "The common law rose to the dignity of a science." Paraphrase fully the preceding quotations.
5. Macaulay says: "Here (1215) commences the history of the English nation," Collier says: "True English History begins with the reign of Henry VII." Reconcile these two statements.
6. Give a biographical sketch of Macaulay, describing his college life, his travels, and his political career.
7. In what departments of literature did Macaulay distinguish himself? Mention his chief works.
8. Name the English historians who preceded Macaulay.

ENGLISH FOR HIGH SCHOOL ENTRANCE.

FOUNDING OF NORTH AMERICAN COLONIES.—BY A. MCGILL.

Grammatical.

- P. 80, line 1. In what mood is the verb? Is the form correct?
- "4. "Details." Where is the accent? To what role is it as usually, and correctly, pronounced, an exception?
- "5 & 6. "Leaving out of view, &c." What sort of a clause? Point out similar constructions on the page.
- "8. "Colonizing." Is this the same part of the verb as "exploring" in l. 5?
- "12 & 13. "The name of Cape Breton." Is the preposition needed? Discuss.
- "14. "Nearly twenty years later." Parse these words fully.
- "17. "As touching, &c." Discuss.
- P. 81, "1. "Was shortly afterwards joined Roberval." Are the adverbs correctly placed? What difference in meaning would result from the use of the verb in the active voice?

- P. 81, line 2. "To plant a colony." To plant a tree. To plant a field with trees. To plant one's foot. Give synonyms.
- "15. "Was consolidating." What tense? Parse the words separately.
- "19. "As well as." Parse each word. Re-unite the sentence, separating this phrase.
- "20. "Were being formed." What tense?
- "21. Is "purpose" correctly used in the singular here?
- "29. "Possession was taken of the country." Re-arrange these words.
- "81. Parse "privations," and "contests," in line 82.
- "84. "It." Explain the force of the pronoun.
- "89. "There landed, &c." Note the frequent change of tense in this sentence. Can it be justified?
- P. 82, "6. "As an asylum." Parse these words.
- "12. "Emigrants." Distinguish from "jimmigrants."
- "17. "So was founded." Illustrate half a dozen different usages of "so."
- "21, 22. "Its commencement was, however, by the Dutch." Explain this construction.
- "28. "When." Explain. Also explain *when* in "He came when I did."
- "25. "Is the word *originally* needed here?"
- "27. "Characteristics." Explain.

Historical, &c.

1. Give some account of the first discovery of the lands of the new world.
2. What islands and what part of the continent of South America did the Spaniards colonize?
3. "Basque and Breton fishermen." Explain.
4. What is the origin of the name of Newfoundland?
5. Write short notes on Verazzano, Francis I., Jacques Cartier, Roberval, Henry IV. (of France), Champlain, Raleigh, Sir Humphrey Gilbert, Henrietta Maria, Charles II., Wm. Penn, and Henry Hudson.
6. "St. Lawrence." Why was the river so named? "Virginia, in honor of the maiden queen." What queen?
7. Who were the Pilgrim Fathers?

Words whose Etymology is interesting and important.

Century, colonizing, endeavors, considerable, dissensions, course, amicable, confederacies, science, pioneer, disastrous, expedition, auspices, flourishing, exodus, conscience, exiles, inaugurate, asylum, Pennsylvania.

VOYAGE OF THE "GOLDEN HIND."—BY RICHARD LEWIS.

1. In whose reign did this voyage take place?
2. What objects had Sir Humphrey Gilbert in view in this expedition?
3. What is meant by "the patent," and why did he require a patent? Give the derivation of the word, and its general meaning and appropriateness.
4. What disasters are referred to at the commencement of the lesson?
5. Show why Sir Walter Raleigh took such interest in this expedition, and why after engaging in it he deserted it.
6. What other navigators had been engaged in similar enterprises, and with what results?
7. State what leading motive governed the explorers of the age, and give reasons, if there be any, to show that Sir Humphrey's motives were higher than those of his contemporaries.
8. Explain the meaning of the figures on the "jewel" presented by the Queen: "an anchor guided by a lady."
9. What is meant by "taking formal possession of the country"?
10. Describe the ceremonies with which the act of taking possession was done.
11. By whose authority were these acts generally done, and how can they be justified?
12. "They were well received by the ships of various nations." Name the nations that were probably represented on that occasion, and state which were the most distinguished for maritime power and discoveries.
13. How could Sir Humphrey Gilbert "take possession of the country" when other nations were there before him?
14. Name the regions of North America which had already been discovered, and their discoverers.

16. Explain the terms *salvo of ordinance, soundings, bearings of the harbor, barque, cutter, frigate, and abaft.*

16. Why did Sir Humphrey select the "cutter," and how did he show his courage and devotedness in making that selection?

17. Explain the terms "mineral ion;" give the scientific name of the class, now in use, and give reasons, if there be any, to show that they were deceived in believing the ore they found to be silver?

18. Name the figure of speech used in comparing the amusements of the sailors to the singing of the dying swan, and show how it was and was not appropriate.

19. Describe the chief difficulties with which Sir Humphrey Gilbert had to contend; show what qualities of mind he displayed on the occasion, and what sustained him to the last?

20. Explain what he meant by saying "We are as near to heaven by sea as by land," and of what mental quality did this give evidence.

21. How should that quotation and the words of the watch, "The general is cast away," be vocally read to distinguish them from the general narrative?

22. What is the grammatical object of "cried" in the above extract, and the antecedent of "which was true?"

What parts of speech are "withal," "whereof," and "true," and their relation?

23. Parse "delight," "near," and "shore," lines 22, 23, p. 35.

24. Give the meaning of *chronicler, faculty, morris dancers, conceits, incredible* and *bottell*. Explain the origin of *Munday*, and show the difference in the meaning of the word *conceit* as used then and now.

25. Give synonyms for *equip, disaster, boisterous, outrageous, marine, reiterate, allurements*. Write out an abstract of this extract embracing only its leading features.

26. In the reign of which of the other Tudor monarchs were discoveries made, and by whom and where?

PICTON, March 11th, 1878.

MR. EDITOR,—Dear Sir:—I beg to propose, through the medium of your JOURNAL, the propriety of arranging for the holding of one or more *Teachers' Holiday Institutes* during the next summer vacation, either on one of the Thousand Islands of the St. Lawrence, or at some other suitable place of summer resort. In this way I think mutual improvement and recreation may be pleasantly combined. Who will second the motion? Yours, &c.,

G. D. PLATT.

Mathematical Department.

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

At what distance above the surface of the earth must a person be to see one-fourth of its surface?



Let AOB be a quadrant of a section of the sphere through its centre, PQ a small arc, QR perpendicular to PM . Then as P approaches indefinitely near to Q , the chord PQ ultimately becomes the tangent at Q , and angle $PQR = 90^\circ - RQO = OQN$. Hence ultimately the triangles PQR, OQN , are similar, and $\frac{PQ}{RQ} = \frac{a}{QN}$. or $QN, PQ = a.RQ$, where a is the radius of the sphere. Also,

ultimately, the surface generated by the revolution of PQ about MN is $2\pi QN \times PQ = 2\pi a \cdot RQ$, from above. And the entire arc AB , or any part of it, may be broken into indefinitely small elements like PQ , the surface generated by all of which = $\Sigma(2\pi a \cdot RQ) = 2\pi a \Sigma(RQ)$. Hence surface generated by $AC = 2\pi a \cdot OD$; and surface of hemisphere = $2\pi a^2$. Let CT be the tangent at C . An eye at T will see the portion of the surface enclosed by tangents drawn from T ; and, if this eye see one-fourth the surface $2\pi a \cdot OD = \pi a^2$, or $OD = \frac{1}{2}a$. Now $\frac{OT}{OC} = \frac{OC}{OD}$; $\therefore OT = \frac{a^2}{\frac{1}{2}a} = 2a$; and $BT = a =$ height of eye above the surface.

We are asked: "Is the following proposition true either particularly or generally: 'The areas of rectangles vary as the squares of their like dimensions.'" Ans.: It is true of similar rectangles. See Euc. Bk. VI., Prop. 20.

The following solution of the "wool" question in the last number of the JOURNAL has been communicated by Mr. J. A. Clarke, of Pictou:

Let $x =$ No. of lbs. of wool retained by B ,
 $\therefore 80 - x =$ " " " " left for A .
 But $1\frac{1}{4}$ lbs. in 10 lbs., or $\frac{1}{8}$ of the whole spun, is wasted in spinning;
 $\therefore \frac{1}{8}(80 - x) =$ No. of lbs. of yarn spun for A ;
 Wherefore $\frac{1}{8}(80 - x) \times 12\frac{1}{2} = 30x$,
 Whence $x = 8\frac{1}{3}$, and $\frac{1}{8}(80 - x) = 19\frac{1}{3} =$ lbs. of yarn.

ANALYSIS.

Since $1\frac{1}{4}$ lbs. in 10 lbs. is wasted, $\frac{1}{8}$ of A 's wool becomes yarn.
 $\frac{1}{8}$ of A 's wool @ $12\frac{1}{2}c. = B$'s wool at $80c$;
 or $\frac{1}{8} \times \frac{1}{8}$ of A 's share of wool = $\frac{1}{64}$ B 's share;
 $\therefore \frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$ " " " = $\frac{1}{512}$ " "
 And $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8} \times \frac{1}{8} = \frac{1}{4096}$ A 's share = B 's share.
 $\therefore A$'s share + $\frac{1}{512}$ A 's share = 80 lbs.

$$\frac{192 + 70}{192} = 80 \text{ lbs.}$$

$$\frac{1}{192} = \frac{80}{262}$$

$$\frac{70}{192} = \frac{80 \times 70}{262} = 8\frac{1}{3} \text{ lbs.}$$

A correct algebraic solution was also given by Mr. S. H. Parsons, of Montreal, who considered the statement "there being a waste of $1\frac{1}{4}$ lbs. of wool on every 10 manufactured," to mean that 10 lbs. of yarn were manufactured from $11\frac{1}{4}$ lbs. of wool. A correct algebraic solution was also given by G. S., of Kimble.

- The following problems have been sent to us by subscribers:
1. A particle moves from rest under the action of a force varying inversely as the square of the particle's distance from a given point, determine completely the motion.
 2. Given the three equations,

$$a_1x^2 + b_1x + c_1 = 0$$

$$a_2x^2 + b_2x + c_2 = 0$$

$$a_3x^2 + b_3x + c_3 = 0,$$

determine the conditions that they shall have a common root.
 3. "If $f(a) = 0$, $f(x)$ is divisible by $x - a$." Show that this theorem is not universally true.

4. Prove that

$$\tan \frac{-12}{1^2} + \tan \frac{-12}{2^2} + \tan \frac{-12}{3^2} + \dots = \frac{8\pi}{4}.$$

J. C. GLASBEN.

5. Prove that the following problem from the Equation Papers of St. John's College (Colenso's Algebra, Pt. II., p. 27) cannot be solved:

From the middle of a town two streets branched off, and crossed a straight river by bridges *A* and *B*. From their junction, a sewer, equally inclined to both streets, led to a point in the river distant 6 chains from *A*, and from *B* 11 chains less than the length of the sewer, the expense of making which was as many £'s per chain as there were chains in the street leading to *A*. The sewer proving insufficient, a drain was made from a point in this street, distant 4 chains from *A*, which entered the river at the same point with the sewer, and was equally inclined to the river and the sewer. Now, a drain down each street, at £9 per chain, would have cost only £54 more than the sewer. Find the lengths of the streets and sewer.

THOS. CAMPBELL, Ottawa.

6. *A* and *B* paid \$120 for 12 acres of pasture for 8 weeks, with an understanding that *A* should have the grass that was then in the field, and *B* what grew during the time they were grazing; how many oxen, in equity, can each turn into the pasture, and how much should each pay, providing 4 acres of pasture, together with what grew during the time they were grazing, will keep 12 oxen 6 weeks, and in similar manner, 5 acres will keep 35 oxen 2 weeks?

7. A steambot boiler 4 feet in diameter and 14 feet long (heated from beneath), has 60 flues, 4 inches in diameter, running the whole length. How many gallons of water would be required to fill the boiler after deducting the flues and reserving one-third of the whole space for the steam generated. In other words, find the length of the chord which will divide the surface of a circle into two parts in the proportion 2 : 1.

J. A. CLARKE.

Practical Education.

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

HOW TO SPEAK PLAINLY.

VI.

SUBSTITUTION OF SOUNDS.

This error is chiefly confined to vowel sounds, but several of the consonants are also interchanged, especially by children and foreigners. Errors of this class are more difficult to remove than any others. They require the most careful ear-cultivation possible, and unremitting watchfulness for years, before they can be eradicated.

Consonant Substitutions.

T FOR D.

Examples.

Words for Words. Colts for Colds.

A very good example of a double substitution of these letters is found in the invalid's description of his cold. "I have a bat colt in my chest and it makes me very horse." This error results from the fact that *d* and *t* require the same arrangement of the vocal organs. It may be cured by allowing a part of the stream of sound which has been shut in by the meeting of the tongue and teeth to escape through the nasal passages when sounding *d*. *D* is a "sound" letter, *t* is merely a "breath" letter.

K FOR QU.

Examples.

- Kotient for Kwotient. (Quotient.)
- Kotation " Kwotation. (Quotation.)
- Korum " Kworum. (Quorum.)
- Kota " Kwota. (Quota.)
- Koth " Kwoth. (Quoth.)

Cause. *Q* and its inseparable companion *u* are equivalent to *Kw*, and this error consists in the omission of the *w*. The mistake is made only before *or* and *ot*. We never say *kick* for quick, *kiver* for quiver, or *cash* for quash.

Remedy. Acquire the *Kw* sound by sounding such words as quick, quilt, quit, &c., and then articulate it before *or* and *ot*.

F FOR TH.

Examples.

- Fink for Think.
- Fissel " Thistle.
- &c. &c.

Cause. Shutting off the air coming from the lungs by meeting the upper teeth and lower lips.

Remedy. The sound of *th* is made by placing the end of the tongue lightly against the points of the upper incisors, and forcing the air through the narrow passage thus formed. The tongue should never protrude beyond the teeth in properly uttering any sound in our language, but some can more easily learn to articulate this sound by allowing the point of the tongue to pass beyond the teeth.

Practise, Only think, Timothy, Thick. *ug*, thrust, three thousand thistles, through the thick of his thumb, last Thursday at 8 o'clock.

TH FOR F.

Examples.

- Triumth for Triumph.
- Lymth " Lymph.
- Nymth " Nympth.
- &c. &c.

For the cause and cure of this error it is only necessary to reverse the instructions given in the last paragraph.

L FOR N.

Example.

Chimley for Chimney.

Cause. *L* and *N* are both formed by placing the tongue against the roof of the mouth. The difference between them is that part of the sound escapes through the nose when *n* is formed; *l* is a breath and *n* a sound letter.

Remedy. Pause slightly after [the *m* in *Chim* before sounding the *ney*. Be sure to press the tongue firmly against the roof of the mouth in saying *n*, so that the sound may be forced partly through the nose.

D OR T FOR J, TH, CH, G, C, AND K.

Examples.

- 1. Doe for Joe. Dood for Good.
- 2. Don " John. 4. Dirl " Girl.
- 3. Dis " This. 5. Dake " Take.
- 6. Dese " These.
- 7. Tarles " Charles. 8. Tiss " Kiss.
- 9. Turn " Churn. &c. &c.

These errors are most common among children, but many persons retain them in their full impurity during their lives.

Causes. The cause of the substitution in the first three cases is, that the introductory sound of any word commencing with *J*, *Th* or *Ch*, is made by the same formation of the vocal organs that required for *d* or *t*. Those who err in these words merely make the introductory sound of *J*, *Th* or *Ch*. The cause in the last three

is placing the *point* of the tongue against the incisor gums when commencing a word, instead of placing the *body* of the tongue against the roof of the mouth.

MAP DRAWING.

II.

REQUISITES.

1. Plain drawing paper, not too smooth.
2. A lead-pencil, not too hard.
3. A pair of fine-pointed compasses.
4. A ruler with scale.
5. A flexible ruler. A piece of whale-bone, bamboo cane, or a thin strip of cedar or other even-grained elastic wood will do.
6. Ink for lining in, and lettering. India ink is best. Use a fine pen.
7. A box of water colors, with a few hair pencils.
8. A right-angled triangle.

ORDER OF PROCEEDING.

1. The *projection* of the map to any scale required.
2. Drawing the outline in pencil.
3. Coloring.
4. Filling in details; coastline, mountains, rivers, cities, &c.
5. Lettering.

PROJECTION.—By the *projection* is meant drawing the border or side and end lines of the map, and placing the parallels and meridians in their proper places. This is the most difficult part of map drawing, and the pupils should be made proficient in it before they are allowed to take a single step in advance. More depends upon this than on any other part of the work. The first thing to do is to draw the *border lines*. In doing so great care must be taken to *have the angles at the corners right angles*. This must be accomplished with the triangle. One of these is usually sold with a box of instruments, but the pupil can make his own, as follows: Take a piece of stiff paste-board, and draw upon it a line corresponding with AB in the following diagram. Then from any point, as C ; and with the radius BC , draw a circle intersecting the given line at some point, as D : then draw a diameter through the points D and C , and through the point E , where it intersects the circumference, draw the straight line BE .



By cutting along the lines AB and BE with a sharp knife the required right angle will be obtained.

One side of the border should be drawn of the proper length, and *parallel* with the side of the sheet of drawing paper. Placing the right-angled ruler with one side along this line the end lines may be drawn in the proper directions, and by repeating the process at the other corners the border may be completed. These lines, like all other important lines, should be drawn first *lightly in pencil*, and lined in with ink when the pupil is satisfied that they are in their proper positions. The inner border lines should next be drawn parallel with the outer lines.

The points where the Meridians and Parallels cut the inner

border line should now be marked in pencil. This must be done accurately, and may be done either with the aid of a pair of compasses or a slip of white paper marked first while placed on the map to be copied, and afterwards laid along the border line of the drawing.

If the map to be drawn represents only a portion of a continent, the Meridians and Parallel can now be ruled in easily with the aid of the flexible ruler. Maps of countries, or parts of countries, should be drawn before maps of continents, because it will not be so difficult to obtain the proper curve of the Meridians and Parallels. The *projection* of the map of the World is much more difficult to draw than that of any other map.

In drawing the *projection* of a map of a continent or of the map of the world, it is best to draw the central Meridian and Parallel first, and mark on them, as well as the inner border lines, the points at which the other Meridians and Parallels cut.

The flexible ruler should have a string fastened to it at each end, so that the pupil may, by twisting the string with a stick at the middle, cause the ruler to bend until it assumes the required curve.

The pupil must be shown that the curves of the Meridians of the same map *have not* all got the *same curve*. This remark is also true of the Parallels. The ruler must therefore be adjusted for each line, or each pair of lines, if the map takes in enough of the earth's surface to include corresponding lines. It will be a *very great assistance* in drawing the *projection* of a map, and in *filling in the outline*, to rule the map to be copied and the one being drawn by the pupil lightly with pencil in *squares*. Those on both maps must correspond in number, of course. If the map to be drawn is to be of the same size as the copy, these squares should correspond exactly in size as well as number. If the drawing is to be made twice or three times as large as the copy, ' squares on the drawing will have to be twice or three times as large as those ruled on the map, and so on for any required scale. Maps may be reduced in a similar manner. Of course all border lines, Meridian distances, &c., will have to be lengthened or reduced if the scale is to be changed. This can best be accomplished with the aid of the compasses and the ruler with the scale.

Some may object to the practice of ruling the maps in the Geography in squares, even though the pencil be used and the lines may be easily erased. Two methods are used in order to avoid the necessity for doing this.

1. Transparent paper ruled in squares is laid over the map.
2. A wire frame is made, and thread or fine wire strung across it so as to form squares of the size desired. This is then placed over the map to be copied, and the map to be drawn is ruled in corresponding squares.

Pupils are sometimes supplied with paper on which the *projection* of the map is already drawn. The practice is not to be commended, as drawing the *projection* is a very valuable exercise both in Geography and Drawing.

NOTE.—In our next we will explain outlining, coloring, lettering, &c.

MENTAL ARITHMETIC.

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

I.—INTRODUCTORY.

Arithmetic is the **LOGIC OF THE PUBLIC SCHOOL**; but it is this only when properly taught. The old mechanical methods that until recently prevailed certainly did not educate the logical faculty; with equal certainty it may be said that they failed to give a sound practical knowledge of the subject. Rules and formulæ

were the order of the day; the despotic How reigned supreme, with no toleration for the independent Why. By a reversal of the natural order, the rule preceded the analysis, not the analysis the rule; or perhaps it would be more correct to say that principles were ignored and analysis had no place; there was the rule, the RULE and—nothing more. The rule was memorized; it was applied to questions set under it; certain results were obtained; if these agreed with the answers, the "reasoning" was supposed to be correct; if not, the persevering pupil performed a series of experiments which perchance issued in the agreement of answer and result. Could such a system produce aught but unsatisfactory effects, or fail to bring discredit on the science? Of what possible use could it be, so far as a practical knowledge and mental discipline are concerned, for a pupil to be told that by going through certain operations with figures—operations whose rationale was to him an impenetrable mystery—he would at last arrive at certain "answers?"

The consequences of such teaching were inevitable; the two invaluable objects aimed at in the study of that subject—intellectual discipline and useful practical knowledge—were not attained. As to the first, it is plain that a blind observance of rules can never lead to habits of patient investigation and develop a self-reliant energy of mind. As to the second, it is notorious that this system, by a strange misnomer called the PRACTICAL, did not produce practical Arithmeticians. Pupils that had "ciphered" through the text-book, even those that had been regarded as prodigies in Mathematics, were wont to be nonplussed by the simplest business questions. Not intelligence, but rule and routine were their guides—and blind guides they are and ever will be. The servile follower of rules can never be truly practical; he only is truly practical who knows his subject; whose knowledge is founded on principles which he has made thoroughly his own, and who has been so trained to habits of patient analysis that he is independent of all formal rules.

Under such circumstances it is not strange that the value of Arithmetic, as an agency in education, began to be seriously questioned. Consequences, clearly traceable to bad teaching, were, for a time, ascribed to an inherent worthlessness in the subject taught. But better methods have given rise to sounder views. A marked improvement in teaching, and therefore in results, has taken place; and as might have been expected, and certainly cannot be denied, an increased intelligence and power in mastering other subjects have been simultaneously developed. The results of the various examinations prove that pupils who do well in Arithmetic almost invariably do well in other branches—that their knowledge of Arithmetic is a fair measure of their general intelligence. As an example of this a single fact may be quoted: during the last three or four years 357 candidates for entrance into one of the leading High Schools obtained 50 per cent. in Arithmetic, and of these only seven failed in any other branch. We believe that the records of all the official examinations would be equally conclusive as to the value of this COMMON LOGIC OF THE PEOPLE as an instrument of education.

With the introduction of rational methods of teaching, we may hope to see exploded the too prevalent idea that only a few who have been endowed with special powers can become good Arithmeticians—that, in fact, Arithmeticians, like poets, are born, not made. The truth is, that while different minds possess different degrees of mathematical power, every one born with the faculty of reason can become fairly proficient in Arithmetic when it is rationally taught. Only let him not be made the blind follower of rules; let him be taught by one who is thoroughly master of his subject, and bases his instruction on a knowledge of the laws of mental

development; let him gain a clear insight into principles, and follow rational order in every investigation; let him clearly comprehend the why and the wherefore of every numerical operation, "and Arithmetic will become a SCIENCE to him, in the proper sense of the term, invested with attractive charms, and serving as the most healthy and invigorating discipline of the mental powers."

Holding these views of Arithmetic as a means of mental discipline, and believing that the highest results of the study can be reached only by thorough and SYSTEMATIC mental training, we purpose giving a few papers on MENTAL ARITHMETIC, in the hope that a practical discussion of its aim and scope and methods may not be without value to our fellow-teachers throughout the Dominion.

Notes and News.

ONTARIO.

Hon. Adam Crooks is to deliver a lecture in Lindsay on April 5th.

Madoc lost its Model School by fire recently, and is going to have a real model school-house as the result.

Stratford High School had 105 pupils on the roll in February, and her Public Schools had 1,078.

St. Thomas had 1,034 pupils in attendance in February.

Mr. John McLean has been appointed Inspector of Public Schools of St. Thomas for the year 1878, in room of Rev. Mr. Cuthbertson, resigned.

Professional Examination of Second-class Candidates at the Normal Schools—These examinations were conducted consecutively in Toronto and Ottawa during the last week in March. The examiners were in Toronto Dr. McLellan and Mr. J. Hughes, and in Ottawa Mr. Glashan and G. W. Ross, M.P.

The teachers of the County of Prince Edward received salaries as follows for the year 1877.—5 teachers received \$500 or over, 7 received \$450 to \$500, 16 had \$400 to \$450, 23 had \$300 to \$400, and 32 received less than \$300. The average salaries of male teachers in the county was \$389, and of females \$241.

The *Picton New Nation* says:—A correspondent calls attention to the fact that "drill" is one of the subjects in the Public School programme, and also to the surprising fact that, in spite of its intrinsic value as a mode of discipline, the requirements of the law are so seldom complied with. Teachers who once give military drill a fair trial will not feel disposed to abandon it.

The trustees of S. S. No. 3 Percy, have decided to pay their teachers quarterly. If school boards in rural districts as well as towns and villages could only be induced to follow their example, the improvement that would follow would effectually prevent any return to the old system of paying semi-occasionally.

A TESTIMONIAL.—A document, signed by 68 head masters of High Schools, has been sent to the Minister of Education, stating the regret they felt in noticing attacks lately made on Dr. McLellan in a Toronto paper, and strongly disavowing all sympathy with the assailants. The Minister of Education made a fitting reply, stating his high sense of the ability and integrity of Dr. McLellan.

The following resolutions were passed at the last meeting of the Teachers' Association for East Middlesex:

Moved by Mr. McKellar, seconded by Mr. Eckert, that in the estimation of this Association the regulations relating to the Superannuated Teachers' Fund should be altered so that the fund may be available to teachers after 30 years' service, or on arriving at the age of 55 years.

Moved by Mr. Manning, seconded by Mr. O'Connor, M.A., that this Association considers that uniform examinations for promotion in the classes of the public schools of this inspectorate would be of benefit to the said schools.

Moved by Mr. Houston, B.A., seconded by Mr. O'Connor, M.A., that in the opinion of this Association third-class teachers should be allowed to write for a renewal of their certificates at the third-class examination, and that no such certificates should be renewed without such examination.

According to the *London Advertiser* a long discussion followed the introduction of the last resolution, the majority of the speakers being of the opinion that the standard of qualification for third-class certificates was now high enough to enable those holding such certificates to teach most of the public schools, and that it would

be better if third-class teachers who had proved themselves efficient should have their certificates renewed, instead of being thrown out of the profession because they could not come up to the standard required for a second-class certificate. The motion was then carried.

A Competitive Examination was held in the Beckwith Township Hall, on the evening of Friday, March 1st. The competition was a contest in mental arithmetic, between eight of the public schools of the township, bringing forward in all twenty-eight pupils for competition. The Rev. Jno. Allister, of Ashton, occupied the chair, and the examination was conducted by the head masters of the Carleton Place High and Public Schools, with the Rev. Mr. Tigger, of Franktown, as referee. The following rules were laid down by the Examiners before proceeding with the examination. (1) A scholar's slate once down not to be taken up again. (2) The one who gets right first to get a certain number of marks, and the next to get one less, &c. ; and the pupil getting the greatest number of marks to be the victor. Twelve questions were then put, and the best pupil worked eleven of them correctly, the 2nd nine, the 3rd ten, and the 4th eight. Four prizes were then awarded by the chairman to the successful competitors. Very great interest was manifested in the proceedings.

The annual report of Rev. Mr. Torrance, P. S. Inspector, Guelph, shows that there were registered in the schools under his charge 1,635 pupils during the year 1877. The expense per pupil was \$5.56. Eighty-three pupils passed examination for admission to the High Schools during the year. Mr. Torrance concludes his valuable report as follows:—It must be a matter of gratification to all persons, as it is to the Inspector, to see the numbers of new applicants presenting themselves for admission to our schools, whether they are strangers coming in from other districts, or children living in our midst whose education has been neglected. It is also gratifying to witness the advance made in the efficiency of the schools, as shown by the numbers that have passed at the promotion examinations, the average for the last half-year being eighty per cent. And this cannot be owing to the teachers having the children a longer time under their tuition, for the last half-year had only eighty-eight teaching days, against one hundred and twenty-one in the first, when the average was a little under sixty-four per cent. And it is further gratifying to find the two senior classes in the Public Schools sending so many up for the admission examination to the High School, and so many of these proving successful, and the successful candidates eager to avail themselves of the benefits which the High School, which we trust before long will be a Collegiate Institute, in a building worthy of it, furnishes with its present staff of teachers.

The following synopsis of Inspector Kelly's Annual Report for the city of Brantford is taken from the *Expositor*:—The highest salary paid a male teacher was \$1,000, the lowest \$600. Average \$733½. The highest salary paid a female teacher was \$450, lowest \$200. Average \$266 44. Seven of the teachers were trained in the Normal School. Two hold first-class Provincial certificates, fourteen second-class Provincial certificates, and nine new County Board third-class. The number of children in the municipality, according to the Assessor's roll, between the ages of 5 and 16 years, was 3,065. The number of those enrolled in the public schools was 1,968. It is the intention of the Trustees to add shortly about \$400 worth more of books to the library. The members of the Board take a very active interest in the schools, visit them frequently, and are always ready and willing to do anything or grant anything that may contribute to their welfare. They are constantly making improvements in the furniture and equipment of the school rooms, and the adornment of the grounds. Gymnasias are still wanted, and I have no doubt will be supplied, so soon as the finances of the city will warrant the expenditure. The physical education of the boys and girls of Brantford has been too long neglected. It is just as important a part in their training, and just as necessary to their future wellbeing, as their intellectual or moral culture is. The Roman poet was right when he prayed for a sound mind in a sound body.

The fourth annual competitive examination for the Public Schools of the county of Durham was held on the 15th and 16th of March, in the townships of Darlington, Clarke, Hope, Cartwright, Cavan and Monaghan. On the 15th the pupils were examined in Algebra, Euclid, Book-keeping and Advanced Arithmetic, and on next day in the ordinary work for third and fourth classes. Pupils were divided into four classes: 1st under 12 years of age, 2nd under 14, 3rd under 17, and the special class for the work on

Friday. Each school was allowed to send three pupils in each class. The questions, which were printed, were prepared by a central committee, and teachers from one township were selected to examine the pupils from another township. 172 candidates came up for examination, and the results were highly satisfactory, especially in the work on Friday. Prizes of the value of \$400 will be awarded to the successful competitors; eight general proficiency prizes and one subject prize in each class, but no prize will be given on less than 40 per cent. of the marks. Honour cards are also given. During the past three years \$960 worth of prizes have been awarded in connection with these competitive examinations, which have developed a lively interest in school work among both teachers and pupils.

QUEBEC.

At the last meeting of the Protestant Committee of Public Instruction, a letter was read from Mr. W. J. Gage, of Adam Miller & Co., Publishers, Toronto, urging on the Committee the claims of "THE CANADA SCHOOL JOURNAL" as a professional paper for the use of Teachers, and stating the relation it sustains to Education in Ontario, Nova Scotia, New Brunswick, &c., and offering it at a low rate to teachers. The Committee recommend Teachers to avail themselves of the advantages offered by this journal. It was also agreed to add Hamblin Smith's Mathematical Works to the list of School Books already authorized.

The Protestant Committee are making great efforts to organize that portion of the Educational system which they control. Hitherto educational institutions, especially those which are supposed to be devoted to superior education, have gone on in a hap-hazard kind of way—partly under the control of religious bodies, partly aided by the State, without uniformity of text books, and without any sufficient test of the qualifications of masters and teachers. Secondary education has languished. Of late, however, matters have begun to change. The appointment of Professor Weir, of Morrin College, and F. C. Emberson, M.A., to inspect those institutions which obtain grants from the Superior Education Fund, will induce a more rigid classification, and give the Protestant Committee something more than mere names as a basis for the apportionment of the annual grants. To form an idea of the state of Higher Education, one has only to look at the classification of Institutions which receive public money, as set forth in the last report of the Hon. Superintendent of Education: viz—(1) Universities, (2) Affiliated Colleges, (3) Classical Colleges, (4) Industrial Colleges, (5) Academies, (6) Model Schools, (7) New Applications. Below all these subsist the common schools.

There are three grades of public certificates for teachers. (1) Elementary for the Common Schools, (2) Model School, (3) Academy. For the last, in addition to the ordinary English and Mathematical subjects, Greek and Latin Grammar, a book of Xenophon and of Cæsar are also required. The Academy certificate thus corresponds somewhat to the old Grammar School certificate which was obtained some years ago in Ontario. It must be admitted, however, that no Province of the Dominion has such obstacles to overcome in the path of reform as the Province of Quebec.

The collection of objects for the Paris Exhibition, which is to show what Quebec has already done and is now doing in Educational matters, must afford feelings of pleasure to all those who are interested in the welfare of the Province. The Commission deserves great praise for the exertions made in forming the collection.

The *Scholastic News* is the name of a new paper published in Montreal and devoted to the interests of education.

In the last report of the Superintendent of Education the reports of Inspectors are given at length, and not, as in former years, by extracts merely. Some of the Inspectors complain of the too great indulgence of Boards of Examiners in granting certificates to young girls who have neither the age nor the requirements necessary for managing even an elementary school. On the other hand, Inspectors are almost unanimous in condemning the miserable pittance called salaries paid to teachers, and in testifying to the unwillingness of the municipalities to increase them. They even go so far as to recommend that a minimum amount of salary should be fixed by law. It is extremely doubtful whether such a law would provide the necessary remedy.

NOVA SCOTIA.

The annual report of the Education Department, presented to the Local Legislature this month, contains some interesting statistics of the expenditure on schools. The whole expenditure on

education last year amounted to \$681,134.36, of which the Government contributed \$204,266.38. The expenditure was thus divided:

		Portion paid by Gov. of N. S.
Public Schools.....	\$610,158 36	\$178,775 38
Normal and Model Schools..	10,162 30	5,011 00
Special Academies	11,386 00	5,750 00
Colleges	49,427 70	14,700 00
Total, 1877	\$681,134 36	\$204,266 38
" 1876	717,274 58	194,605 55

Decrease..... \$ 36,140 22 Increase ..\$ 9,660 83

The local expenditure on public schools was \$431,382.98, the money raised by county assessments having been \$106,832.73, and by section rates, \$324,550.25. The number of school sections last year was 1,770, showing an increase of 16 over the previous year; and the number of sections having no school during any portion of the year was 14, or 43 less than in 1876. During the winter term there were 1,731 schools in operation, with 80,788 pupils, and an average daily attendance of 46,350; during the summer term 1,871 schools, 83,941 pupils, average daily attendance 47,000. In all these figures there is an increase over last year. The total number of teachers and licensed assistants employed was, winter term, 1,829, an increase of 89; summer term, 1,947, an increase of 6. There were 76 new school houses built in 1877, and 58 more begun, \$32,179 having been voted by trustees for building purposes.

The six colleges receiving Provincial aid had the following number of students. King's, (Church of England) 30; Dalhousie, (non-sectarian) 46; Acadia, (Baptist) 53; St. Francis Xavier's, (Roman Catholic) 68; Mount Allison, (Wesleyan) 48; St. Mary's, (Roman Catholic) 32. The endowments of the institutions are: King's, \$106,891; Dalhousie, \$94,864; Acadia, \$103,000; Mount Allison, \$45,000; St. Mary's \$15,000. The income and expenditure do not appear to balance in most cases, as may be seen from the following table:

College.	Income.	Expenditure.
King's.....	\$8,978	\$11,414
Dalhousie	7,009	8,526
Acadia	7,060	6,020
St. F. Xavier's.....	1,804	1,954
Mt. Allison	12,800	12,800
St. Mary's.....	2,200	2,387

At the Provincial Normal School four teachers were employed last year, and 140 students were in attendance, 43 during the whole session, and 97 during a part of it; 73 obtained licenses. The Model School had 11 teachers and 881 pupils.

The number of candidates examined for licenses to teach in the public schools was 2,058; of these 554 received a license of the grade sought, 1,344 received licenses, though in many cases of a lower grade, and 714 failed to receive a license. 18 applied for Grade A, 15 succeeded; 190 for Grade B, 56 succeeded; 984 for Grade C, 319 succeeded; 715 for Grade D, 132 succeeded; 151 for Grade E, 32 succeeded. Most of those who failed in getting the grade they asked for obtained a lower one, as may be seen from the following summary of licenses awarded. Grade A, 15; B, 58; C, 359; D, 491; E, 401. Of new candidates receiving licenses there were 747. There was a falling off in the number of successful candidates for the two higher grades, A and B, the figures last year being 15 and 56 as against 16 and 82 in 1876, but there was an increase in the number who, in all grades, obtained the grade they asked.

The University of Halifax has published its calendar for 1878. It contains, besides the Regulations respecting Matriculation, and Degrees in Arts, Laws, and Medicine, published last year, the Regulations respecting Degrees in Science, issued this year. The Registrar's report shows that the University is making excellent progress. The offices have recently been removed to much more extensive and commodious quarters in Hesslein's Building, Hollis street.

Mr. J. S. D. Thompson, M.P.P. for Antigonish, and a Fellow of the University, has introduced a Bill in the Local Legislature, conferring certain important privileges on law students graduating in the University.

The Technological Institute—this is the name finally given to the College of Science—has been fairly started. Hon. W. J. Stairs, Vice-Chancellor of the University, very liberally provided rooms and all necessary class appliances. Lectures have com-

menced, and the attendance of students already exceeds the number expected.

Dr. Bayne, of the High School, and Dr. Mackenzie, of Dalhousie College, are doing knightly service in the cause of popular science by their lectures given to the general public.

There is a hitch in the final securing of the site for the Halifax High School, as a good title to one of the properties cannot be obtained. A very much better site should now be obtained, as the one fixed upon is not considered by many persons at all a desirable one.

NEW BRUNSWICK.

At the opening of the Local Legislature of this Province, on the 26th February, notice was given in the "Speech" of the the Government's intention to amend the School Act so as to enlarge the School Boards in cities and towns with a view to a more varied representation. It is understood that the object of the proposed enlargement is to facilitate the appointment of Catholic members on these Boards.

In the January number of the JOURNAL, notice was taken of the appointment of the Rev. Howard Sprague, of St. John, to the Presidency of Mount Allison College and Academics, in succession to Dr. Allison, now Superintendent of Education for Nova Scotia. The position thus honourably tendered, Mr. Sprague has been obliged to decline on account of feeble health, and Prof. Inch, of the same College, and for a number of years Principal of the Ladies' Academy, has, by a unanimous vote of the Governors, been elevated to the vacant post. The Governors have made a most judicious and fortunate selection, as all who are well acquainted with Prof. Inch will very readily testify. The Rev. George S. Milligan, another practical educationist, well tried in many fields, is to succeed Prof. Inch at the Ladies' Academy, and the Rev. Mr. Kennedy, the present Vice-Principal of the Boys' Academy, will take charge as Principal.

Teachers' Institutes are in the course of formation in several counties of this Province, and from present appearances give fair promise of being popular and useful. As yet the teachers of the County of St. John have not given in their adhesion to the movement, but it is understood that meetings have been held and other steps taken which may lead to the establishment of a large and active institute. Should the negotiations now in progress fail, it is probable that the teachers of the city schools will unite, as the teachers in the town of Portland have done, and form an association of their own.

A large number of teachers in St. John and Portland have recently formed themselves into a class for the systematic study of botany under the direction of the Rev. James Fowler, A. M., who has made the subject a specialty for over a quarter of a century. In the earlier lectures of the course, the attention of the class has been turned to the consideration of cellular growth, the root, stem, buds, leaves and flowers of plants, every step being illustrated by appropriate specimens, as fresh as the season will allow. Before the close of the course, spring will have arrived, and then excursions to the fields will form part of the programme. It is a rare chance for the class to have secured the services of so highly qualified an instructor, and every member has taken a corresponding degree of interest in the study.

As the winter is passing away, and the weather still continuing unusually mild, the schools of the city of St. John are rapidly becoming thronged, as they have not been since the great fire in June. This is a feature very pleasing in many respects to contemplate, but it is one which is taxing the efforts of the school authorities to a great degree to know how to provide for all applicants with the limited accommodation at their disposal. That friends at a distance may know what a burnt city really means, let them try and realize, if they can, that for months past hundreds of the city scholars have had to make shift with one-fourth the floor space which either health or proper teaching arrangements require, without desks to write on, without, in short, the thousand and one appliances lately possessed in abundance. All this, too, with scarcely a murmur or complaint. Truly the lessons taught by misfortunes are wonderful. The patience of the people is being fast rewarded. The opening of New St. Malachi's Hall on the 4th March has brought great, and greatly needed, relief to a number of over-crowded departments. The new Hall has ten rooms, admirably furnished, five for boys and five for girls, and the attendance, in less than a week from the day of opening, reached the godly number of seven hundred.

PRINCE EDWARD ISLAND.

The Board of Trustees for Charlottetown has been increased in the number of its members, by the election of Messrs. McDonald, Handrahan, and Hodgson. These gentlemen were elected by the City Council.

A graded school has been opened at Georgetown, and another is about to be organized at Mount Stewart.

The teachers of Prince Edward County propose to hold their Institute in June, when it is expected that the Board of Education will grant them the privilege of attending without a deduction being taken from the usual allowance. A general Association of Teachers for the whole Province will probably be organized in the spring.

The calendar of the University of Halifax has been received. Much interest is taken in the welfare of this institution, as it opens up a course of study which can be accomplished by the young men of the Island, who can now work for a college degree without going to other Provinces for their education. The plan adopted is similar to that of the London University, an institution which has stirred up the ambition of thousands of young men who were unable to provide for a term at college.

The male students of the Normal School have established a Debating and Mutual Improvement Society, of which Mr. George Harris is president, and Mr. John T. McNeill is Secretary. They hold meetings once a week to discuss matters referring to the profession they are about to enter. The last subject under discussion was, "Which is the better plan—to pay the teachers altogether from the public treasury, or to pay them according to the enactments of the present law?"

The House of Assembly met on the 14th of March. In the Governor's Speech, the new system of education inaugurated last July was referred to.

During the discussion of the address, the majority of the members congratulated the country on its progress in education; while several of those who had opposed the passing of the Act said they were willing to give the new system a fair trial. The sanction of the Governor-General, received some months ago from Ottawa, has hushed the excitement arising from the supposition by some that the Act was unconstitutional. As has been remarked, the people are now only anxious to co-operate in making the schools what they ought to be.

The Education Report has been issued. It contains the usual information in regard to the working of the system, the Inspector's Reports, and the Reports of the Board of Trustees of Charlottetown and Summerside. In the former town a new school has been opened in the large brick edifice formerly occupied by the Christian Brothers. This institution has been graded into four departments, is attended by over two hundred pupils, and is known as the Queen's Square School. The teachers are Messrs. Curran, McElmeel and McDonald. In Summerside the Trustees have made arrangements, by the sale of debentures, for the erection of a large district school in their town. In the meantime, Messrs. Gunn and Morrison, with their colleagues, are making praiseworthy efforts to raise the standard of education in their district.

"I am happy to be able to inform you that the Public Schools Act, 1877, has received the assent of the Governor-General, and is now in full operation. Its results, so far, especially in the towns, have been very satisfactory, and I am rejoiced to know that, under its provisions, a large increase has taken place in the number of schools in operation, as well as in the number of children receiving instruction.

"The Normal School in Charlottetown is now upon a satisfactory footing, and is attended by as large a number of pupil teachers as the accommodation will permit. The proper training of these teachers will offer one of the best guarantees for the efficiency and improvement of our public schools in the future. Papers relating to this matter will be laid before you.

"The practical working of the School Act and of the assessment law has suggested a few amendments, which will be submitted for your approval."

MANITOBA.

It seems that the Committee appointed by the Council of the University of Montreal, to consider and report on the course of study and examinations for degrees, found considerable difficulty in the course of studies, and from the different prominence of individual subjects, in the English and French colleges and universities. The French members of the Council are almost all, if not

all, graduates of Laval, and with the system of that university alone do they seem to be acquainted. To show the difference of system, it may be mentioned that the French members were in favor of having in the curriculum an amount of Greek and Latin that almost appalled the English members, many of them good classical scholars. After a good deal of discussion it transpired that the St. Boniface representatives expected the candidates to be permitted to take their lexicons into the examination hall and have their assistance in disposing of the passages presented.

Another point to which the French members took strong objection was specifying text-books in any case where, by merely stating the subject, any one of several text-books might be used. However, in most of the subjects, with the exception of Mathematics and Natural Sciences, it was thought desirable to give definiteness to the course by prescribing certain works.

To meet, in some measure, the want of trained teachers in Winnipeg, the School Board has, at the suggestion of the Principal, Mr. Fletcher, authorized the closing of all the schools at 3 p.m. on Friday of every week, the next hour to be spent under his direction in discussing school management and discipline, and the methods of teaching the various subjects on the programme. The plan has been very successful so far.

BRITISH COLUMBIA.

In the generally expressed desire for governmental retrenchment, and for bringing expenditure within the revenue, legislative attention is being called, among other branches of the Public Service, to that of Education. A motion was brought up in the House to "diseestablish" the High School in Victoria, on account of the expense, but after one postponement it was abandoned. Much to the regret of advocates for free education in the higher as well as the lower branches, a monthly fee will probably be imposed on High School pupils, so as to lessen the burden on the school grant. The abolition of this indispensable adjunct to any liberal free school system is, however, entirely out of the question, judging from the published remarks elicited by the introduction of a motion asking for the names and occupations of parents sending to the High School.

As the school grant is not likely to be larger than that of last year, namely \$46,000, some of the smallest schools in the outlying districts will have to be discontinued temporarily. Hitherto, current expenses connected with schools, such as the items for fuel, cleaning, &c., &c., have all been paid out of the general revenue. Those charges must hereafter be defrayed by municipalities and trustee boards. The office of Deputy Superintendent is also to be abolished. The School Act will be amended in order to give effect to these contemplated changes.

FOREIGN.

The Maryland State Board of Education regards such an enactment as this essential to reaching the proper standard: "No person shall be employed as a teacher at the public expense until he has learned how to teach."

Girard College has been enlarged, so that there is room for 320 scholars in addition to the 550 formerly accommodated. Children born in Philadelphia have had the preference of admission, and until now the College has confined its usefulness to the State of Pennsylvania, but recently the doors have been thrown open to fatherless boys born in New York. The income of the Girard estate applicable to the purpose of College improvements and support amounts to about \$400,000 a year.

The Dean of the Faculty of Medicine in Paris states, in answer to an inquiry from the Dean of the London School of Medicine, that since 1865 thirty-two women have entered the school. Of this number nine have obtained diplomas and twenty-three are still at their studies. The nationality of the students was: English, six; Russian, twelve; and French, five. The Dean says that the conduct of these ladies and their devotion to their studies have been blameless.

—Don't punish often. If you are obliged to resort to frequent punishment among your scholars, you may very wisely and reasonably come to the conclusion that you have mistaken your calling.

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.

OXFORD.

The next meeting of the Association will be held in the Town Hall, Woodstock, on Wednesday and Thursday, April 17th and 18th. Exercises—First day—9 to 10 a.m.—The Oxford Teachers' Association will be in session. 10 to 10.30 a.m.—English Verb, a Specimen Recitation, by Mr. Dd. Morrison, Master No. 12, Dorham. 10.30 to 11 a.m.—Mason's Analysis, by Mr. D. G. Donnocker, Master Otterville P. S. 11 to 12 a.m.—Unitary Method, by Mr. F. D. Brown, Principal Model School, Woodstock. 1.30 to 2 p.m.—Composition, How to Teach it, by Mr. J. W. Clark, Master No. 1, Dorham. 2 to 3 p.m.—Statics How to Study it, by the Venerable Archdeacon Sweatman, M.A. 3 to 3.30 p.m.—Algebra, How to Teach it to Junior Classes, by Mr. S. R. Gill, Master No. 7 E. Oxford. 3.30 to 4 p.m.—Spelling, How to Teach it, by Mr. J. S. Morcer, Master Norwich P. S. 4 to 5 p.m.—Hygiene, by Dr. Field, Woodstock. Second Day.—9 to 10 a.m.—Receiving Report on Organization. 10 to 11 a.m.—Reading, (1, 2, 3, and 4 Readers), How to Teach it, by Miss Fullerton, Central School, Ingersoll. 11 to 12 a.m.—English Literature, Entrance and Teachers' Examinations, by Mr. Geo. Strachon, H. M. H. S., Woodstock. 1.30 to 2.30 p.m.—Paper on Natural Science in Public Schools, by Mr. S. T. Ellis, B.A. Mathe. Master H. S., Woodstock. 2.30 to 3.30 p.m.—Rudimentary Chemistry, How to Teach it, by Professor Montgomery, Canadian Literary Institute, Woodstock. 3.30 to 5 p.m.—Miscellaneous. Besides those whose names appear in the programme of exercises, several Inspectors of other counties are expected to take part in the proceedings. On the evening of the first day a public meeting will be held, when Prof. Montgomery will give a lecture on Science, with experiments. Additional arrangements are making, including Music and Readings, that will add to the attractiveness of the evening entertainment. By order of the Committee on Arrangements,

W. CARLTLZ,
Inspector P. S.

Geo. STRACHON, H. M. H. S., Woodstock,
Secretary of Committee.

EAST VICTORIA.

The Convention will be held at the Separate School, Lindsay, commencing on Friday, April 5th, at 10 a.m. Programme:—Friday, April 5th, 10 a.m. Class Registers, Mr. Knight. 11 a.m.—Arithmetic, Dr. McLellan. 2 p.m.—Eloction of Officers. 2.30 p.m.—Grammar, Mr. Swift. 3.15 p.m.—Algebra, Dr. McLellan. 4.15 p.m.—Map Geography, Mr. Hallett. 5 p.m.—Question Drawer. 7.30 p.m.—Reading, Dr. McLellan. 8.30 p.m.—Lecture, Hon. A. Crooks. Saturday, April 6th.—9 a.m.—Prizes, Mr. Irwin. 9.45 a.m.—Mental Arithmetic, Dr. McLellan. 10.30 a.m.—Geometry, Mr. McDonald. 11.15 a.m.—History, Mr. Dobson. J. H. KNIGHT, P. S. Inspector.

PRINCE EDWARD.

The Association met on February 1st and 2nd. The attendance was very good, and the interest manifested unusually great. The following is the programme of the work done:—Grammar for Junior Classes, Mr. W. R. Brown. Employment of School Time, Inspector Platt. Statics, Mr. B. Martin. Conversational Lessons, Inspector Platt. Algebra, Dr. McLellan. Intellectual Arithmetic, Mr. W. R. Miller. Arithmetic, Dr. McLellan. Grammar for Senior Classes, Mr. G. E. Crawford. Reading, Dr. McLellan. Dr. McLellan delivered his popular lecture on "Canada's Elements of National Power," on the evening of the 1st to a large audience.

SOUTH HASTINGS.—The semi-annual meeting of this Institute was held in the assembly room of the Union School, in the City of Belleville, on Friday and Saturday, 15th and 16th ult. The attendance was very large, nearly every teacher in South Hastings, and a large number of the friends of education from the city and surrounding country, being present. The proceedings were unusually interesting, in consequence of the attendance of Dr. McLellan, High School Inspector, who took a very prominent part in the proceedings. Dr. McLellan explained the method of teaching Arithmetic, Algebra and Reading. Professor Dawson gave addresses on Composition and English Literature for 3rd Class Teachers. Inspector Johnston explained how to teach Arithmetic to Junior Classes; Professor Macoun, Geographical Distribution of Plants and Animals; Mr. Irwin, Geography; Mr. Kenny, Grammar; and Mr. Swayze, Writing Master in the Public Schools of Belleville, Penmanship.

SOUTH WELLINGTON.—On Friday and Saturday, 25th and 26th Feb., the teachers of South Wellington and the town of Guelph held their first regular meeting in the Central School. The attendance was large, about one hundred teachers being present, and the meeting was a grand success. Besides the local talent, Dr. McLellan, Senior High School Inspector, and Prof. Young, chairman of the Central Committee, were present, and delivered addresses of a most interesting and practical character. Mr. Young's address on "Some relations between Psychology and Education" was especially good, and showed how simple and interesting metaphysical subjects may become when treated by so eminent a teacher. Mr. Tyler, President of the Association, read a paper on "The Entrance Examination." He explained the nature of many of its advantages; had no sympathy with those who thought Arithmetic was receiving undue prominence, but regretted that History had been added to the list of subjects. Mr. Boyle, of Elora, gave a very practical address on "Educational Hobbies."

NORTH GREY.—The first Convention of the North Grey Teachers' Association, at which there was a good attendance of teachers of both

sexes, was held in Owen Sound on the 7th and 8th ult., and passed off in a manner that far surpassed the most sanguine expectations of those interested. The success attending this Convention was undoubtedly largely due to the presence of the Provincial President, Dr. McLellan, High School Inspector. An essay on the new system of time tables was read by Mr. Bonner; Mr. Ferguson gave a paper on the teaching of Geography; and John Armstrong, B. A., of the Owen Sound High School, gave an address on the teaching of Analysis. On Thursday afternoon Dr. McLellan gave an address on Reading, during which he recited the "Battle of Waterloo," and part of the "Address of Marco Anthony at the funeral of Caesar." On Friday the doctor gave another address on "How to teach Arithmetic and Algebra," handling the subject in an easy and masterly manner. In the evening he delivered his lecture on "This Canada of Ours."

Readings and Recitations.

COMBAT BETWEEN FITZ-JAMES AND RODERICK DHU.

ARRANGED AS A DIALOGUE BY J. HUGHES.

Believing that a few of the incidents given in narrative form by Scott and others may be presented in a more impressive manner in dramatic order; and with a view of supplying dialogues of a standard character, which will yet be very attractive to all audiences, it is proposed to give occasionally adaptations of some of the most striking scenes in the works of English Authors.

The characters should be dressed in appropriate costume. Foils should be used instead of swords. If the piece is performed with spirit, it is certain to be interesting to spectators.

SCENE I.

Enter FITZ-JAMES (*Kneeling, with a braid of hair in his hand, which he fixes on his breast as he speaks*).

Fitz-James. Poor Blanche! no more by Devon-side
Thou'lt search for him who bravely died
Defending thee, his new-made bride.
Thy blood poured out for me demands
A signal vengeance at my hands,
And though Red Murdoch low docs lie
His rebel chieftain too must die.
By Him whose word is truth! I swear
No other favour will I wear,
Till this sad token I imbue
In the best blood of Roderick Dhu!
But hark! what means you faint halloo?
Like bloodhounds now they seek me out;
I hear the whistle and the shout
Well, I can perish sword in hand!

Roderick. Thy name and purpose! Saxon, Stand!
Fitz. A Stranger.

Rod. What dost thou require?
Fitz. Rest and a guide, and food and fire;
My life's beset, my path is lost,
The gale has chilled my limbs with frost.

Rod. Art thou a friend to Roderick?
Fitz. No.

Rod. Thou darest not call thyself his foe.
Fitz. I dare! to him and all the band

He brings to aid his murderous hand!
Rod. Bold words, brave youth; they surely lie
Who said thou camest a secret spy!

Fitz. "They do, indeed!—Come Roderick Dhu,
And of his clan the boldest two,
And let me but till morning rest,
I write the falsehood on their crest."—

Rod. Stranger, I am to Roderick Dhu
A clansman born, a kinsman true;
Each word against his honour spoke,
Demands of me avenging stroke;
Yet more, upon thy fate, 'tis said,
A mighty augury is laid.
It rests with me to wind my horn,—
Thou art with numbers overborne;
It rests with me, here, brand to brand,
Worn as thou art, to bid thee stand;
But, not for clan, nor kindred's cause,
Will I depart from honour's laws;
To assail a wearied man were shame,
And stranger is a holy name;
Guidance and rest, and food and fire,
In vain he never must require.
Then rest thee here till dawn of day;
Myself will guide thee on the way,
O'er stock and stone, through wach and ward,

Till past Clan-Alpine's utmost guard,
As far as Coilantogle's ford;
From thence thy warrant is thy sword.
Fitz. I take thy courtesy as 'tis given!
And, though thy foe, will proudly share
Thy soldier's couch, thy soldier's fare.

SCENE II.

Enter RODERICK and FITZ-JAMES.

Rod. Now, stranger, say why wandered you
Without a pass from Roderick Dhu.
Fitz. My safest pass, in danger tried,
Hangs on my belt here by my side.
Perhaps I sought a greyhound strayed;
Perhaps I sought a Highland maid.
Rod. But, stranger, if in peace you came,
Bewildered in the mountain game,
Whence the bold boast by which you show
Sir Roderick's vowed and mortal foe?
Fitz. Warrior, but yester-morn I knew
Naught of thy chieftain, Roderick Dhu,
Save as an outlawed, ruthless man,
The head of a rebellious clan.
But now, I am by promise tied
To match me with this man of pride;
Twice have I sought Clan-Alpine's glen
In peace; but when I come again,
I come with banner, brand, and bow
As leader seeks his mortal foe.
For love-lorn swain, in lady's bower,
Ne'er panted for the appointed hour,
As I, until before me stand
This rebel Chieftain and his band!
Rod. Have then thy wish! Thy rashness rue!
(Blows a whistle, when warriors appear on all sides.)
Those are Clan-Alpine's warriors true;
And, Saxon, I am Roderick Dhu!
Fitz. (Drawing his sword.)
Come one, come all, this rock shall fly
From its firm base, as soon as I.
Rod. (Waves his hand and the soldiers disappear.)
Fear nought—nay, that I need not say—
But—doubt not aught from mine array.
Thou art my guest;—I pledged my word
As far as Coilantogle ford:
Nor would I call a clansman's brand
For aid against one valiant hand,
Though on our strife lay every vale
Rent by the Saxon from the Gael.
So move we on;—I only meant
To show the reed on which you leant,
Deeming this path you might pursue
Without a pass from Roderick Dhu.

(They walk around the platform until Roderick suddenly stops and facing Fitz-James, says:)

“ Bold Saxon! to his promise just,
Vich-Alpine has discharged his trust.
This murderous Chief, this ruthless man,
This head of a rebellious clan,
Hath led thee safe, through watch and ward,
Far past Clan-Alpine's utmost guard.
Now, man to man, and steel to steel,
A Chieftain's vengeance thou shalt feel.
See here all vantageless I stand,
Armed like thyself with single brand;
For this is Coilantogle ford,
And thou must keep thee with thy sword.
Fitz. Sir Roderick I have ne'er delayed,
When foeman bade me draw my blade;
Nay more, brave chief, I vowed thy death:
Yet sure thy fair and generous faith,
And my deep debt for life preserved,
A better meed have well deserved.
Can naught but blood our feud atone?
Are there no means?

Rod. No stranger, none!
And hear,—to fire thy flagging zeal—
The Saxon cause rests on thy steel:
For thus spoke Fate by prophet bred
Between the living and the dead:
“ Who spills the foremost foeman's life,
His party conquers in the strife.”
Fitz. Then, by my word, the riddle's read,
Seek yonder brake beneath the cliff;

There lies Red Murdock, stark and stiff.
Thus Fate has solved her prophecy;
Then yield to Fate, and not to me.
Rod. Soars thy presumption, then, so high?
Because a wretched kern ye slew,
Homage to name to Roderick Dhu?
He yields not, ho, to man nor Fate!
Thou add'st but fuel to my hate:
My clansman's blood demands revenge.
Not yet prepared? Ah, then, I change
My thought, and hold thy valour light
As that of some vain carpet-knight,
Who ill deserved my courteous care,
And whose best boast is but to wear
A braid of his fair lady's hair.

Fitz. I thank thee, Roderick, for that word!
It nerves my heart, it steels my sword;
For I have sworn this braid to stain
In the best blood that warms thy vein.
Now, truce, farewell! and, ruth, begone!
Yet think not that by thee alone,
Proud chief, can courtesy be shown:
Though not from copse or heath or cairn,
Start at my whistle clansmen stern,
Of this small horn one feeble blast,
Would fearful odds against thee cast.
But fear not,—doubt not,—which thou wilt;
We try this quarrel hilt to hilt.

(A desperate combat follows. Roderick attacks, striking wildly. Fitz-James coolly defends himself, showing much skill, and occasionally making a home-thrust at his antagonist. At length he disarms Roderick and brings him to his knees. With his sword pointing at Roderick he excitedly exclaims:)

Now yield thee! or by Him who made
The world, thy lifeblood dyes my blade.

(Roderick springing at and seizing Fitz-James, fiercely exclaims:)

Thy threats, thy mercy, I defy,
Let miscreants live who fear to die.

(They struggle with all their power for the mastery, and at length they fall, Roderick on the top. He draws a knife and raises it to strike it into the breast of Fitz-James, but while his hand is raised he loses consciousness from loss of blood, and Fitz-James rolls him over dead. Fitz-James then takes the braid from his breast, and pressing it to the heart of Roderick, rises and holds the braid aloft, saying:)

Thus by just heaven's mighty aid,
Poor Blanche, thy wrongs are dearly paid.

REVIEWS.

A SCHOOL HISTORY OF CANADA; Prepared for Use in the Elementary and Model Schools. By Henry H. Miles, M.A., LL.D., D.C.L.

THE CHILD'S HISTORY OF CANADA; for the use of the Elementary Schools and of the Young Reader. By the same author.

These little volumes are no doubt well adapted for the schools of the Province of Quebec, owing to the prominence they give to the French regime. Indeed the author, in the preface to the larger work, expresses the opinion that English writers on Canadian History have hitherto greatly underrated the history of Canada prior to the Treaty of Surrender. This may be true of books intended for use in Quebec, but it is not true of Ontario school histories. No one who has looked into the charming works of Parkin can ever feel disposed to deny the value of a knowledge of early Canadian History, but at the same time the most important part of our history must be held to date from the year 1768. It was only after that date that the settlement of the country made any real progress, and it was long after it before the introduction of constitutional government imparted to our political history a value it never had before. It is to be hoped that before long we will have a school history which will do for the whole Dominion, and the aim of which will be to cultivate the feeling of Canadian nationality and the sentiment of patriotism with reference to Canada as a whole. Judging from the manner in which he has executed his

self-imposed task. we have an idea that Dr. Miles is more likely to undertake successfully the above more important work than almost any other writer on Canadian History.

INTRODUCTION TO THE STUDY OF INORGANIC CHEMISTRY. By W. A. Miller. Price \$1.00. INTRODUCTION TO THE STUDY OF CHEMICAL PHILOSOPHY. By W. A. Tilden. Price \$1.00. QUALITATIVE CHEMICAL ANALYSIS AND LABORATORY PRACTICE. By Thorpe & Muir. Price \$1.00. The above form part of Longman's excellent "Text-books of Science" series, and are of a high order of merit. They are far superior to the text-books on chemistry hitherto used in this Province, and we are glad to see that the Minister of Education has placed them on the authorized list. They should be in the hands of every teacher and student of chemistry.

BACON'S ESSAYS. By E. A. Abbott. This edition, by the well-known Dr. Abbott, contains a very valuable introduction, and notes explanatory of allusions and textual difficulties. It is all that can be desired either by the general reader or the student preparing for examination.

MACAULAY'S ESSAYS ON MILTON; ON MOORE'S LIFE OF BYRON; and HALLAM'S CONSTITUTIONAL HISTORY. By Francis Storr. Price 25c. each. These are capital little books, forming part of the series (Rivington's) of "English School Classics." Nothing can be better suited to encourage the study of English literature in our schools than such carefully annotated selections from our great English writers. Candidates preparing for examination will find in these books exactly what they need.

MACBETH, 60c; CORIOLANUS, 75c; KING LEAR, 75c. These form part of the "Select Plays of Shakespeare—Rugby edition" (Rivington's). Each play is accompanied with an introduction and notes by eminent teachers.

A DICTIONARY OF ROMAN AND GREEK ANTIQUARIES. Price \$2.25. By Rich. (Longman's) Fourth edition. As evidence of the popularity of Rich's book, we may state that it has been translated ("without any consent" of the author) into French, Italian and German. It should be in the hands of every student of the classics.

THE WORKS OF HORACE. By J. M. Marshall, M. A. Containing the Odes, Carman Seculare, and Epodes. Price \$2.25.

THE ILIAD OF HOMER. By S. H. Reynolds, M. A. (12 books.) Price \$1.80.

DEMOSTHENES' PHILIPPICS, 90c; OLYNTHIACS, 75c; DE CORONA, \$1.50. The two former by Sidguick, the latter by Holmes. These volumes form a part of the *Catena Classicorum* series (Rivington's) which has been recommended for use in the High Schools and Collegiate Institutes. These books are all edited by first class scholars and experienced teachers, and are largely used in the great public schools of England. It is to be hoped that this admirable "series" will soon replace the American works which have so long held the first place in our classical schools.

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INTERNATIONAL ATLAS. 62 maps (32 modern, 16 historical and 14 classical). William Collins & Sons. The maps are excellent, and the letterpress description valuable. Price \$3.15.

No student of geography should be without "The Student's Atlases" (32 modern and 6 ancient maps). The "International Atlas" should be in every high school as a work of reference, and the "Collegiate" (or the student's) atlases should be so used in the better class of public schools.

TITIAN. Boston: James R. Osgood & Co. Price 50 cents. This is a handsome volume, which forms one of a series of Artist Biographies. Over thirty such volumes are promised by the publishers. Art education has made rapid strides in America during the past few years. The publication of interesting sketches of the lives of the great masters will tend to foster a love for art, which must first be formed before art education can attain its proper recognition in our American schools.

Publishers' Department.

The publishers must express their thanks to the friends of education for the very hearty support given to THE CANADA SCHOOL JOURNAL. Although not a year old, the present issue numbers 5,000 copies.

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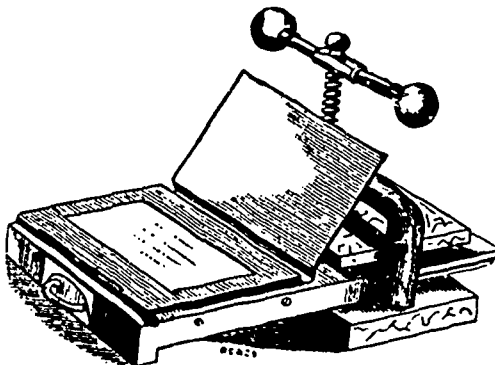
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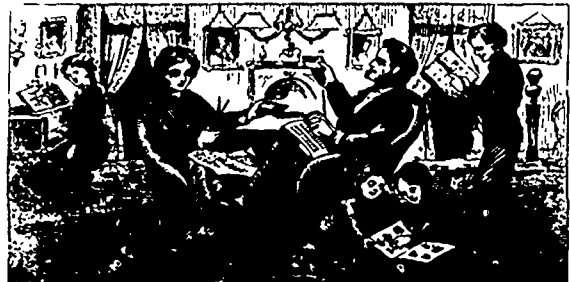
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