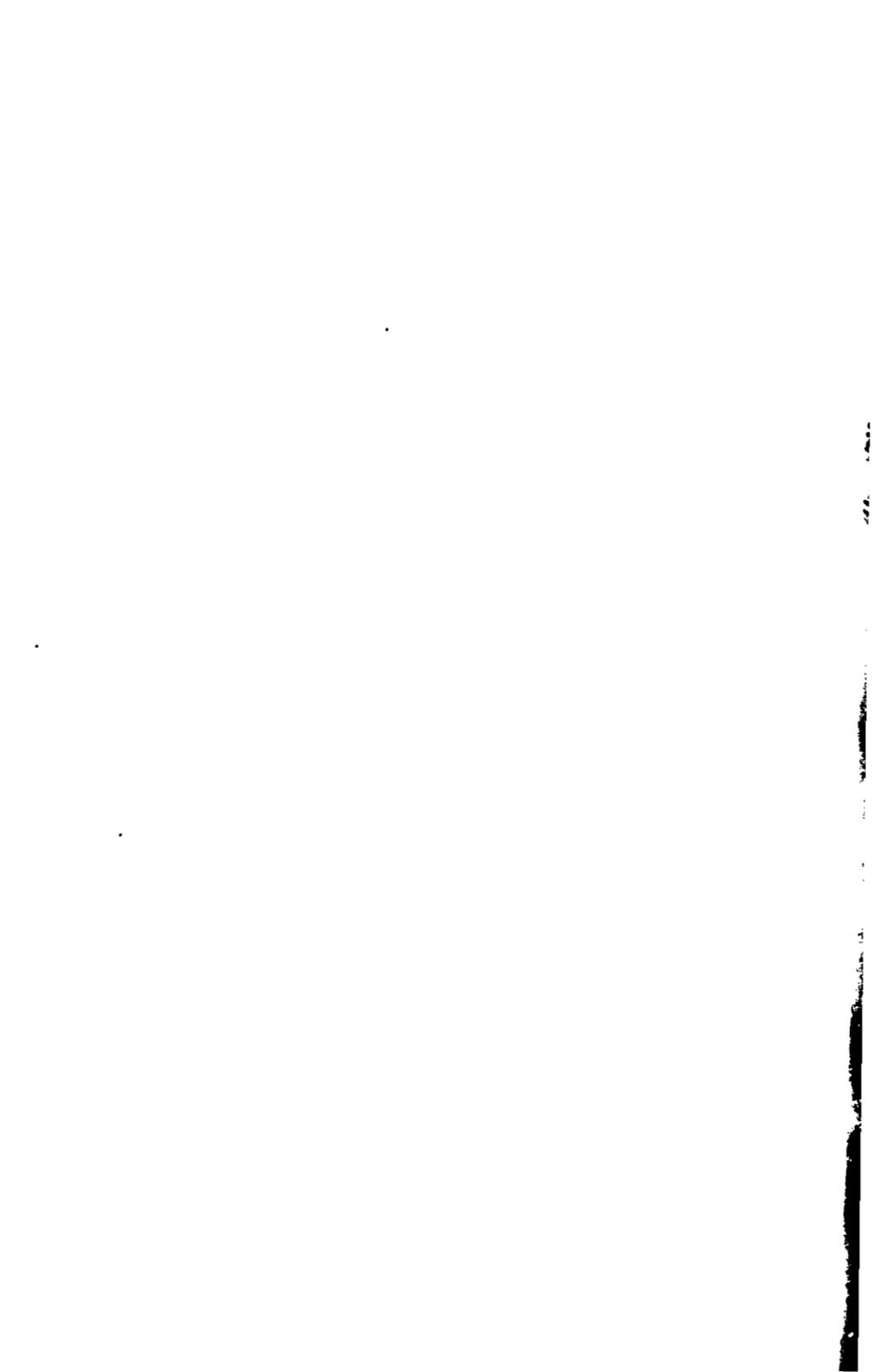




THE CANADA EDUCATIONAL MONTHLY



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THE CANADA  
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JANUARY, 1884.

CRITERIA OF SCHOOL WORK.

BY S. T. SKIDMORE.

AN essential element in modern school education is the annual torture of examinations. This is a pinchbeck form of the doctrine of the "survival of the fittest" applied to schools, for on the results of these examinations depends the question of promotion of the pupils and efficiency on the part of teachers. The percentages obtained in these examinations are taken as the indices of the pupil's intellectual growth, and of the power of the teacher to foster and promote such growth.

The highest value is thus affixed to such educational agencies as are able to formulate their results completely at the end of a single term, and the same spirit and principle reach into each day's achievement, each recitation and each single effort on the part of pupil and teacher.

The educational process thus becomes a wrestle with words and formulas that the memory may subject them to its uses for recitation and examination. The age is full of the

spirit of reform, but educational reform will be an idle dream so long as reformers and critics laud the successes wrought out by pernicious methods, and, while declaiming against "cramming," adjust their eyeglasses with great complacency, and commend in the highest terms those types of perfection which can only be attained by the most persistent and deadly cramming.

So long as the teacher's professional status with directors and parents depends on the number of pupils promoted and the value of their averages, so long we may expect that young eyes, opening to a vision of the world and life's possibilities, will be blinded by the dust of words; so long the vitality of the future will be sacrificed to this moloch of folly in the school-room.

Not many days ago the author, in conversation with a gentleman quite prominent among educational reformers, was forcibly reminded of the failure made by "educators" and re-

formers outside of the school-room to penetrate the "true inwardness" of this problem of educational reform. This gentleman was commending in the highest terms the work of a teacher whose school he had visited: "The results were wonderful. The place was fairly alive. I never saw anything equal to the promptness, accuracy and order of that school-room. Not a second was lost, and the questions were answered with a promptness and correctness that was almost equal to inspiration." Inspiration, indeed!

One could smile at this but for the sad reflections which it suggests. This veneer of words and drill mistaken by the most intelligent for genuine mental growth; these roses deftly tied by the teacher on life's expanding branches, admired as the unfolding bloom of the tree itself; the hopelessness of any moral or substantial support of the soil-stirrer or the seed-planter, who has nothing but brown furrows to show when the visitor and inspector comes upon him in the midst of spring seeding, and condemns his work for its barrenness of harvest fruit.

To possess knowledge as a basis of action, as power in bond, is one thing; while to be able to chant promptly and accurately the formulas of knowledge, is quite a different accomplishment; the one being informed reason, the other charged memory.

How easy it is for the teacher to lop off fruit-laden branches from the tree of knowledge, and, by sharpening the ends, thrust them down with pressure into soil in which they have no root. They will be green for a time, and the examiners on the outside of the fence exclaim with satisfaction: "There is a good teacher; the field speaks for itself; see the growth, see the fruit!" So long as such criteria of school work prevail we may expect

to find, not orchards in the future, but dead brush, the dried-up formulas of knowledge which grew elsewhere, and never had a living connection with the soil on which it lies in decay.

The spirit of display in its constant effort to substitute the superficial for the real, the false for the true, nowhere works more mischief than in the school, and it is a radical mistake to foster that spirit by entering judgment on the efficiency of a school from the ability of its pupilage to rehearse formulas or execute a pretty drill in recitation or gymnastics.

The results which can be displayed in the school-room to an occasional visitor amount to very little; they indicate even less than college honors do of the merits of an education that will make its possessor strong in future years. It is the seeding-time, not the harvest. It is not the season for results. They should be regarded at best but accidental, and not adopted as a basis of criticism. In education the tree cannot be judged by its own fruit, for the trees are yet saplings and have not reached fruit-bearing.

The tree must be judged in its futurity by the nature and character of the potencies now forming it rather than by anything that itself exhibits. Until this is more clearly recognized and criticism of the teacher's ability withdrawn from the performance of the pupil, and fixed more intelligently on the methods of the teacher, all movements for the betterment of schools will be attended with partial and unsatisfactory success. The method of preparing the soil and the quality of the seed only can be made matters of criticism at seeding-time. Education of youth is the storage of the mind with potentialities by the exaltation of innate faculties. Only by measuring the power that is lifting the weight can we judge of the force with which that weight will strike when it is released.

In starting an untried engine, while the initial pressure is generating, the business of the expert is with the methods of feeding and firing. The few intermittent turns that it may make are of little significance; only when it has started on its long career of work with life's load upon it do its indicator diagrams become of value.

We do not wish to be understood by this as stating that the teachers of public schools are held loosely to their accountability. By no means. The failures of our school system, from whatever causes, are held to react primarily on its teachers, but this accountability should be fixed in accord with the natural relationship of cause and effect. It is not consistent to blame the teachers and condemn the final results of a kind of teaching which is praised in its daily performance and made imperative by the yearly standards. It cannot be expected that all teachers are made of martyr stuff or have suicidal tendencies in their profession, or that they will adopt a true method of teaching when the true is condemned and a false method commended in the daily and yearly show. They will not cast the bread by which they live on the waters of the future. In this connection we call attention to a single point. On all sides has been heard the complaint against home work assigned to pupils by teachers. Parents and elders cordially object to doing the work at home which the teacher is paid to do in school, while physicians are positive in their denunciations of the tax placed on eye-sight and general health by evening study. So far that is well enough, but when those same parents or physicians in the capacity of school examiners visit the schools, do they bestow the encouragement of their presence and enkindled interest on those teachers who do not assign home lessons, preferring to lead the mind of the pupil

to the struggle with its own ignorance in the class-room? Do they sit for an hour listening with interest to the halting answers, and pleased with the vague and misshapen forms of ideas, as they slowly grow into the likeness of a more or less perfect thought in the pupil's mind?

Is the ability and ingenuity of the teacher in drawing illustrations from every available source, and shaping that thought to definiteness by every possible question, appreciated or praised? On the contrary, the visitors never congregate in those rooms. If, by chance, they enter, they leave about as soon, and with as little ceremony as they would if they were rooms in which the old furniture was stored. Those rooms are workshops; they are filled with labour, chips and unfinished material, and never have any other appearance. There is nothing in them to please the eye or delight the ear by its symmetrical completeness; so the inspectors move on to another room, where an orderly performance is in progress. A teacher is thumbing out of an instrument called school-room order the death-march of mind, and young voices are chanting the notes learned from their text-books the evening before under parental supervision.

How dull the room seems in which minds are struggling with their ignorance, when compared with the one enlivened by these bright prodigies who rarely miss a question! The teacher is not a teacher so much as a director, so with questions the time is struck with precision and the class performs beautifully. The pupils are not held responsible for any questions "not in the lesson," so, of course, none such are ever asked. With many congratulations the visitors take their leave and continue to object to lessons assigned for them to teach at home!

Teachers are so closely amenable

to school authorities and public sentiment, and their work lies so near domestic and social life by their direct intercourse with children, the chief object of home solicitude, that their duties are discharged daily with as strict conformity to the criticism under which they rest as the possibilities of the case will permit. So sensitive are teachers on this point that many a teacher trembles and turns pale when a visitor is announced, fearing that something may occur during the visit that will not meet with the critic's approval.

This strict conformity of the teacher to opinion and nervous fidelity to the set standard, primarily fixes the responsibility of failure in the grand results, not on an inferior teacher, for the child passes through many hands in his career; not on meagre facilities, they might be better in some cases, but for the most part they are very good; not on small salaries paid to teachers, for in that, as in everything else, the price is fixed by the inexorable law of supply and demand. The cause is to be found if anywhere in the standard itself—in the faulty and inconsistent criteria by which a teacher's success is judged.

A true critic, when he enters the school-room, will desire to hear the teaching, not the recitation. The comprehensiveness of information, the accuracy of statement, the genius and force of illustration there displayed, the taste with which the elements of the theme are selected, and the earnestness by which the whole is kindled into life, alone determine for him the success of that room and everything in it. The pupils may not make the best display when judged by the readiness or literal correctness with which they are able to express themselves in speech or on paper. Pupils, under such teaching, do not thus distinguish themselves, and cannot, for that it is not primarily the end sought

in the teacher's effort. The end is to expand their intelligence and interfuse their growing minds with the best thought and the best thinking. Principles are taught, not inky copies of their molten images in type metal. Wherever possible, pupils will be required to formulate their ideas as best they can, and a higher value is placed on the imperfect and erroneous statements which they evolve from their own understanding than on the precise exactness of book or dictation, which is returned undigested and unassimilated in answer to set questions. The teacher is surrounded by incompleted forms and mental crudities, it is the material to be worked, and worked in such manner that out of it shall be educed as perfect mental growth as can be genuinely evolved from such conditions of mental life.

Would such a teacher receive approval or promotion under existing standards of the system? I think not, for the pupils' yearly percentages would be very low as recitations are now estimated and marked. The examination theses of the infants would be sadly barren of those concise formulas of knowledge which in their production are the crown of the greatest minds and the reward of prolonged effort of the highest order, but are, nevertheless, every year displayed to admiring critics in the answers of the children.

That there can be a school system without some law to govern the pupils' advancement to successive grades no one believes; that promotion should be offered as a mark for ambition and stimulus to effort on the part of pupils and teachers is unquestionable; but we are of those who believe that it is entirely possible and practicable to bestow the awards of progress on real growth, and that if such growth is conscientiously sought and truly encouraged by appropriate methods the

means of estimating it will not be wanting. Human energies naturally work toward the end to be accomplished, and if in the educational process growth is required, growth will be attained: if, instead of that, the tokens of knowledge are exacted and accepted on periodic trials, the energies of schools will be directed only to the acquisition of such tokens, and the examination will measure, instead of actual attainments, a ghostly spectre of knowledge conjured from the unformed void of the child's mind in the shape of literal answers to carefully-conned questions. The percentage awarded is the estimated conformity of this misshapen spectre to the form of the perfect ghost. A step toward true reform will be to call the performance of teaching to judgment, rather than, as at present, the performances of the taught.

When the merit of the teacher is judged *in* the work done, and not from it, we may hope that the value set upon that work will appreciate proportionately with its increased value to the world; but so long as the tendency is to lead recitation-producers and examination-coachers to the thrones of the profession, all teachers of true instincts must hold themselves conformable to the system lest it crush them, and do *sub rosa* whatever honest work they can in stimulating thought; so long, moreover, we may expect the profession to be overstocked with incompetent material, for very slender attainments are quite adequate to success if supplemented by a certain degree of positiveness and system in driving words and sentences into youthful minds.

## LIFE AND WORK OF DARWIN.\*

BY GEO. ACHESON, M.A., TORONTO.

WHEN this Society did me the honour of electing me to the presidential chair, it occurred to me that a suitable subject for my inaugural address would be one coming under the head of Science rather than Literature; because, although the Society is called "Literary and Scientific," yet, of late years especially, its literary character has almost completely overshadowed its scientific aspect; and I would like, in a small degree at least, to be instrumental in restoring to the latter part of this title some of the significance it was originally intended to possess. Ac-

cordingly I propose to direct your attention this evening to what appears to me to be one of the most important, as it is certainly one of the most interesting subjects connected with the history of modern scientific research: The Life and Work of Charles Darwin.

I know of no mind that has exercised such an influence on the current of scientific thought, or has been more effectual in making the nineteenth century illustrious, than that of the eminent naturalist, who, at his peaceful and happy English-home at Down, in Kent, on the 20th of April, passed quietly away from the scene of his labours, having won for himself an imperishable reputation,

\* Inaugural Address of President of University College Literary and Scientific Society—Session 1882-83, delivered in Convocation Hall, November 10th, 1882.

not only as a patient, earnest, and successful observer of nature, but also as a most skilful reasoner, and the most important generalizer in the whole history of biological science. His claim to everlasting memory rests upon the fact that he established, or rendered sufficiently probable, the immortal principle of Evolution, by suggesting as its reasonable cause the theory of Natural Selection.

The idea of evolution had occurred to other minds before Darwin's time, but it had never recommended itself to the judgment of science, because no adequate cause for any of the effects ascribed to it had been given, before he propounded his theory of natural selection. Whether this cause is the chief, or only a subordinate one, scientific men are by no means agreed; but once enunciated, it gave some probability to the theory of descent, and so wrought a complete revolution in almost every branch of science. Few men have been so wilfully, maliciously, and persistently misrepresented in all quarters, and especially by the pulpit and the press. Darwinism has been caricatured, burlesqued, and satirized by men of science, theologians, and humourists. Many of you doubtless can remember the antagonism and unreasonable opposition offered on all sides at the mention of his theories; but we have lived to see a great change. There is now scarcely a naturalist of any note, who does not accept the doctrine of descent in some form or other; sober-minded divines have ceased to regard his views as necessarily opposed to our conceptions of the omnipotence and glory of the Creator, or even to the generally received truths of revelation; and the speculations as to how apes lost their tails and turned into men no longer afford amusement to any but weak-minded enthusiasts and silly schoolboys. If not long ago, the notorious relationship with monkeys,

was regarded as the sum and substance of the doctrine of descent, now we only hear such superficial condemnatory opinions from the most grossly ignorant. The old jest of inquiring why we do not see some ambitious gorilla, or high-toned chimpanzee, transforming himself into a man has now lost most of its force.

In contemplating Darwin's career it is difficult to say whether we should most admire his wonderful intellect or the beauty of his character. We can truly say of him, as he himself said of his friend and teacher, Prof. Henslow of Cambridge, "Reflecting over his character with gratitude and reverence, his moral attributes rise, as they should do in the highest characters, in pre-eminence over his intellect." Only those who were intimate with him could understand and appreciate the grand simplicity and sublime beauty of his character, and to others any language adequate to portray this must seem extravagant. The main features of his disposition seem to have been an all-absorbing love of truth, a total disregard of self, a keen interest in the pleasures of others, large benevolence, kindness, and generosity of heart, and permeating all a deep thoughtful wisdom, the whole forming a character eminently worthy of our love and reverence. All his thoughts and actions were characterized by intense honesty. No man more fully realized his own weakness; and therein lay his strength. He would accept suggestions and criticisms from anyone, even the most humble; and he spared neither time nor pains in collecting from every source all the possible information upon every subject which engaged his attention.

Charles Robert Darwin was born at Shrewsbury, England, on the 12th of February, 1809. His grandfather was the celebrated Dr. Erasmus Darwin, F.R.S., a physician of Lich-

field, and author of several well known scientific works. His father was Dr. Robert W. Darwin, F.R.S., also an eminent physician, remarkable for his quickness of perception and benevolent inclinations, qualities which were transmitted in greater degree to his son. His mother was a daughter of Josiah Wedgwood, a name well known in connection with the English pottery manufacture. Of his early boyhood very little is known. His education was begun at the Grammar School in Shrewsbury, under the direction of Dr. Butler, afterwards Bishop of Lichfield. In 1825, he was sent to Edinburgh, as it was his father's intention that he should study medicine. He remained there two years under the tuition of Prof. Jameson, but, as he did not profit much by his instructions, and was beginning to dislike the idea of a medical life, he was removed to Christ's College, Cambridge, with the view of his entering the Church. While here he came under the notice of the Rev. Prof. Henslow, who at this time occupied the chair of Botany. Between the two sprang up a life-long friendship and attachment, which was productive to both of much pleasure and benefit. To Prof. Henslow belongs the honour of first rousing in the mind of young Darwin an enthusiastic love for the study of natural science. It was in the field excursions of Henslow's class that he first developed a taste for natural history, and before long he became a most zealous and successful collector, especially in entomology. His life at Cambridge, was a very happy one, much of his time being spent in the company of this amiable man, of whom he says, "I never once saw his temper even ruffled." He took the degree of B.A. in 1831, and that of M.A. in 1837, and his own University forty years afterwards, conferred on him the honorary degree of LL.D. The University of Leyden also gave him

the honorary degree of M.D., in 1875. Besides these titles he possessed many others indicative of the honours conferred upon him from time to time by various British and foreign scientific societies.

During his last session at Cambridge, when the class was out on one of its usual excursions, Professor Henslow informed him that he had been asked to recommend to the Admiralty some young naturalist to accompany Captain Fitzroy, of H.M.S. *Beagle*, on a surveying expedition to the Southern Seas. This was the second scientific voyage of the *Beagle*, and Captain Fitzroy had expressed a wish to have a naturalist on board, and offered to give up part of his own accommodation if his request were acceded to. Accordingly application was made through Professor Peacock to Professor Henslow to recommend some one, and as Darwin thought this would give him the very best opportunity of studying the natural history of different countries, he decided to volunteer his services, which were accepted by the Lords of the Admiralty. A desire to travel had been awakened in him by reading Humboldt's "Personal Narrative," but his father was rather averse to the idea, as he was afraid it might alter his plans for entering the Church. However he was prevailed upon to give his assent, and, shortly after graduating, Darwin set sail with the expedition on the 27th of December, 1831. He served without salary, paying also part of his expenses, on consideration that all his collections should be at his own disposal. The object of the expedition was to complete the survey of Patagonia and Tierra del Fuego, to make a survey of Chili, Peru, and some of the islands in the Southern Pacific, and to carry a chain of chronometrical measurements round the world. It was this voyage which settled the whole course of his subsequent life. As his father

fearcd, he never entered theology, but devoted himself to the study and elucidation of natural phenomena with such a measure of success as rarely falls to the lot of any one man.

An account of his own labours in connection with this expedition was given by him shortly after his return to England in a work entitled a "Journal of Researches into the Natural History and Geology of the Countries visited during the voyage of H.M.S. *Beagle* round the World," or, as it is often called, a "Naturalist's Voyage round the World." This was originally published, along with a general account of the voyage by Captain Fitzroy, and afterwards separately. In this work appear the first glimmerings of his ideas on the doctrine of evolution of species. It would be useless to attempt to give in detail the numerous observations made during this voyage as they are contained in this book. I will just refer to a few of the most interesting.

In considering the fauna of North and South America in the Existing period, and comparing it with that of the period just preceding, he arrived at the conclusion that, within a comparatively late geological period, North and South America were much more closely related in the character of their land animals than they now are; and he accounts for this by supposing the great Mexican plateau to have been recently elevated, or more probably, the land in the West Indian Archipelago to have been recently submerged. At the present time, if America be divided by a line crossing the southern part of Mexico in latitude 20°, rather than through the isthmus of Panama, because at this point the great tableland forms an obstacle to the migration of species, we shall find that only a very few species have crossed the barrier, *e.g.*, the opossum, puma, and peccari, and these have come from the south. We have North America characterized by

many peculiar Rodents, and by the ox, sheep, goat, and antelope, genera belonging to the hollow-horned ruminants, a group of which South America does not possess a single species; while in South America we have numerous Rodents quite different from those of North America, a family of monkeys, several genera of Edentata (sloths, *ect.*), the llama, tapir, peccari, and opossums. Within a period however, when most of the existing shells were living, North America possessed the mastodon, elephant, horse, and three large Edentates, *viz.*, *Megatherium*, *Megalonyx*, and *Mylodon*, besides hollow-horned ruminants; and within the same period South America had a mastodon, horse, the same three Edentates (as well as others), a hollow-horned ruminant, and possibly an elephant. The conclusions from these facts I give in his own words. "When America, and especially North America, possessed its elephants, mastodons, horses, and hollow-horned ruminants, it was much more closely related in its zoological characters to the temperate parts of Europe and Asia than it now is. As the remains of these genera are found on both sides of Behring's Straits and on the plains of Siberia, we are led to look to the north-western side of North America as the former point of communication between the Old and so-called New World. And as so many species, both living and extinct, of these same genera inhabit and have inhabited the Old World, it seems most probable that the North American elephants, mastodons, horses, and hollow-horned ruminants migrated, on land since submerged near Behring's Straits, from Siberia into North America, and thence, on land since submerged, in the West Indies, into South America, where for a time they mingled with the forms characteristic of that southern continent, and have since become extinct."

While travelling along the Rio Pa-

rana he saw a very remarkable bird called the Scissor-beak (*Rhynchops nigra*). It is about the size of a tern, has short legs, web feet, and very long pointed wings; but the peculiarity about it is its beak. This is very much flattened laterally, and is quite elastic, and, unlike any other bird, the lower mandible is about an inch and a-half longer than the upper. They fly generally in small flocks rapidly backwards and forwards near the surface of the water, keeping their bills wide open, and ploughing the water with the lower mandible. In this way

they plough up small fish and secure them between the blades of their scissor-like beaks. Occasionally they leave the surface of the water, and then their flight is wild and irregular, and they utter loud harsh cries. These curious birds are quite common along the course of the Parana, remaining there all the year round, and breeding in the marshes. Their fishing is done at night, and during the day they rest in flocks on the grassy plains at a little distance from the water.

*(To be continued.)*

How many teachers ever show or tell their pupils how to study? This is very important. Weeks and months are often wasted even by older pupils, because they do not have a definite idea of, or a systematic plan for, studying.

THE question of the overwork of pupils has found its way into the English Parliament. The pay which the teacher receives depends largely upon the number of pupils he is able to pass to the grade above. It has led, of course, to a great amount of cramming, to long hours of study, and even recesses have been given up in order that more time might be gained for recitation or study. The result has been, as one of the Lords puts it, "to overstrain the teachers, and to make

the pupils slaves to enable the teachers to acquire an income." One of the leading journals of education in that country, treating this topic, says, "Individual examination and payment by results are among the curses of the time. They are sowing misery among teachers, and diseases among children. They are turning the hairs of young men gray, and shattering the nervous system of young women who would otherwise be healthy and strong." Are not some of our towns and cities sinners in the same direction? To be sure, no teacher's salary depends upon the number of children sent forward from her room, but the results of "individual examinations" very often determine her rank in the regards of committeemen.—*Boston Journal of Education.*

## CORPORAL PUNISHMENT IN SCHOOLS.

A NEW set of instructions lately issued by the Education Department to Inspectors contains the following paragraph:—

“My Lords regret to receive frequent complaints of the excessive use of corporal punishment in schools, and of its occasional infliction by assistants and pupil-teachers, and even by managers. The subject is one on which your own observation is necessarily incomplete, since children are not likely to be punished in your presence on the day of inspection. But you will not fail in your intercourse with teachers and managers to impress upon them that the more thoroughly a teacher is qualified for his position by skill, character, and personal influence, the less necessary it is for him to resort to corporal chastisement at all. When, however, the necessity arises, the punishment should be administered by the head teacher; and an entry of the fact should, in their Lordships’ opinion, be made in the log-book.”

At first sight this appears perfectly reasonable, and it must be very hard indeed for any outsider to understand how objections can be raised to so grave and kindly a recommendation. Yet a body of practical men, representing the elementary teachers of the country, recently passed a resolution in these terms:—“This Conference is of opinion that the sentimental objections raised by public speakers and writers to the legitimate use of corporal punishment are subversive of discipline and injurious to the best interests of the children.” So an old controversy is revived, and a great many bitter words are being used by the holders of opposite opinions

on the matter. What with professional resentment on one side, and rash theorizing on the other, it happens that many non-essential issues are disputed, and the main question is badly obscured, simply because the disputants will not clear the ground, nor try to fix their points of disagreement. People who talk about “sentimentalism” prove nothing; people who speak with wrath about “survivals from a brutal age” prove nothing. It will be better to leave hard words alone, and try a little conciliatory reasoning.

Before a man can pretend to talk with authority about anything that concerns the inner work of an elementary school, he should know something of the minute and monotonous drudgery that produces educational results; he should have passed not hours but years in observing the development of young minds; the school history of hundreds of children should be in his memory; and he should have felt the perplexities, the anxiety, the weariness that visit conscientious teachers day by day. The present writer taught for fifteen years in elementary schools, opened four new Board schools in London, and acted as conductor of an educational journal, which “kept touch” of teachers all over the country. Such an experience should prevent any one from speaking in an amateurish way about school business.

The “educationists,” whose action has undoubtedly produced the new Circular issued by the Department, frame all their arguments and all their regulations on the supposition that only direct restraint will keep teachers from inflicting unnecessary pain

on scholars. They say in effect, "We believe that any school can be soundly disciplined if the teacher is strong enough to rely on moral influence alone. But some men give way to temper; they fail to sympathize with children, and they solve every difficulty connected with maintaining discipline by means of the sharp argument of physical pain. Indolence and ill-humour cause the cane to be used: we want to make the teacher shake off his indolence, and pause before he lets his ill-humour have scope: seeing that schoolmasters and schoolmistresses are so weak in temper and judgment, we must frame regulations to guard them against their own frailty." The spirit expressed in these words has taken shape in the regulations of the London School Board; the example of London has been widely followed in the provinces, and now the Departmental Circular comes as a climax.

The London regulations show the amateur in apotheosis. No more unwise set of directions was ever put together, for the teachers cannot render full obedience, however they may strive. Indeed, if the code were rigidly followed, three out of four schools would become inefficient. Again and again the Board have been challenged to name any schools in which their code is followed; again and again the challenge has been declined. For the sake of keeping up an appearance, the managers of the great London schools almost force their servants to be disingenuous. The amateurs say, "We know that our rules only insure partial obedience; but it is better that the teacher should be partially obedient than that he should be wholly free. Therefore we restrain the teacher." Now it happens that the very root of the matter lies in the fact that the teacher is better left without restraint. All his training tends to make him cau-

tious, and his self-interest renders it absolutely essential that he shall never inflict punishment excepting under pressure of extremest necessity. The humane regulations are usually put together as though no such necessity ever existed, and the teacher is treated as though he were a truculent person with a latent tendency towards bullying. Six months of steady work in an elementary school would serve to do away with that idea.

The elementary teacher is obliged to get the greatest possible quantity of work out of his lads, and to manage that he must be popular. An unpopular teacher cannot live, and an unjust teacher cannot be popular. Knowing this, the average modern schoolmaster tries to make school a happy place. If his lads are dull, the work is bad, and the teacher very soon finds his position unpleasant. If he scolds or threatens, his influence is gone at once, and he learns, long before he has finished his apprenticeship, that a set of youngsters cannot be kept going unless their guide is bright, patient, and good-tempered. There is a other consideration: competition between schools is now as keen as the competition in trade. Now, children are the keenest critics of ability and conduct. They do not reason—they see; and if a man is hard or unsympathetic they simply desert him, and persuade their parents to send them elsewhere. The bright and kindly head master always has a full school; the bright and kindly assistant always has regular attendance in the section which he teaches; but no one ever knew any school to be well attended if the master took no pains to make youngsters like him.

Here the humane individuals may say—"This is precisely our contention. Why not carry your argument through to the end? Since it is good to be kind—since the very professional existence of the teacher de-

pend upon his practising forbearance, why blame those who try to make forbearance universal?"

But this very common argument is only used by reason of insufficient knowledge. In every school a large number of children never need any admonition; they are industrious, obedient, and thoughtful by nature. Schoolmasters know well the type now mentioned. Then there are other children who are not bad at all, but who give a little trouble occasionally through sheer lightheartedness. When a class slackens work for a minute, these merry chatterers are very likely to begin making that low, distressing hum which teachers are bound to check. A look is all they require; then they smile in an apologetic way and settle into prim silence. But in almost every school there are certain children who are tainted with some really serious fault, and it is in dealing with these children that the teacher finds prohibitory regulations so grievously embarrassing. The black sheep often exhibit a diseased precocity in vice, and their lack of moral sense is sometimes astounding. Such faults as untruthfulness are easily cured, but if a lad is cruel, or thievish, or foul-mouthed, or insolent, there is only one way with him. A thoroughly insolent boy will poison a whole class, and, since he is usually conceited, he grows unbearable if he is left alone. The same observation holds with regard to the other serious delinquencies named. It may be said that a child is driven deeper into brutality if brutal means are applied to cure his brutal nature. There is only one reply to this contention: All experience is against it. If a boy is thoroughly bad (and amateurs can hardly imagine the badness to which a mere youth may attain), the only way of preventing him from tainting others is to make him, at all events, refrain from showing his real disposi-

tion. He may not be *essentially* improved by sharp punishment; but if he is sternly compelled to conceal his worst side there is less risk of his contaminating his class-mates.

We must now go on to a very serious consideration. It happens that no boys are so quick to learn and to misconstrue prohibitory regulations as are the very worst characters in a class. Since the rules of the London Board have been made public, it has happened not once, but a hundred times, that defiant children have said, "You ain't allowed to punish. It's in the paper, and you ain't going to do what you like with me." The teacher must then either humiliate himself by explaining a regulation, or appear to be showing an example of deliberate disobedience. What can be said of regulations which allow such an alternative to be presented? And can we approve a Circular which appears to give the sanction of the central Government to the very Code which brings about so much mischief?

Yet, even when the teacher is strictly within the law, it is not fitting that he should appear to the worst of his scholars as an arbitrary underling. All such rules as are hinted at in the Circular of My Lords hamper the good teachers without in the least restraining the half hundred bad ones who are aimed at. Why impose an unnecessary burden upon a vast majority of conscientious workers, only in order to keep in check a few incompetent persons who could easily be found out and promptly dismissed.

To change ground: it is continually said that certain elementary schools *are* carried on without corporal punishment. It is even said that many schools in rough neighbourhoods are managed by moral suasion alone. This may be true; although no institution of the sort has ever come under the writer's observation. There are schools where corporal punishment is

not inflicted once in six months, but those schools are carried on under conditions which shall be explained presently.

Corporal punishment in school is analogous to martial law in society. Law-breakers know that if the policeman fails, the soldier is in reserve. At the root of all law is martial law; at the root of all good order in an average school is the knowledge that the teacher can inflict punishment should occasion arise.

Once let it be known that the teacher cannot punish, and the need for punishment grows frequent. There are dozens of schools known to the writer where, at this present, the work goes on from week's end to week's end without even a scolding being administered to any pupil. You can tell by the first glance at a school of this kind that you are in the domain of a good disciplinarian. A low, cheerful murmur prevents the silence from being oppressive; the teachers talk softly; the lads look interested and happy, and they pay little attention to your entrance. They are enjoying their work too much to spare time for glancing at a stranger. You notice that the teachers are very polite to the boys, and if some youngster puts up his hand and asks to be shown over a difficulty, you will see that the master talks with a caressing tone—probably with his arm over the lad's shoulder. If, by any chance, a boy shows signs of carelessness while you are there, a quiet voice will say, "I shouldn't do that if I were you, Johnson," and the culprit reddens and puts on an appearance of fierce industry. Go down in the playground, and you will see that the master is too secure of respect to be pompous or distant.

But the stamp of teacher who brings about this result has nothing soft or sentimental about him. Ask him whether he has given up corporal

punishment, and he will probably say, "No; if I am forced to punish a boy, I take care that he remembers it." The lads know this; they know they are justly ruled; they know that their ruler would be stern if he had cause—and they take very good care to give him such cause as seldom as possible. A teacher of this sort would get on perfectly well with his best boys even if it were known that he would never punish; yet with good but thoughtless boys, and with bad and worthless boys, his trouble would be endless. If any one cares to see things for himself, he can be directed to many schools where he may drop in casually without giving notice. He will find charming spectacles of order, industry, trustfulness, and skill; but if he makes inquiry he will also find that the men who make a school as enjoyable to the visitor as a pleasant work of art, are just the men who desire least to be trammelled by sentimental regulations.

Let us now glance at that phrase in the new Circular which speaks of excessive punishments inflicted by adult teachers, pupil-teachers, and even managers. In round numbers there are 75,000 members of the general teaching staff of the country. Now no one in England can count up fifty cases in which it can be shown that teachers from this vast staff have been convicted during the past two years for having been guilty of inflicting excessive punishment. My Lords cannot name two score. Since the crop of humane regulations began to flourish a few parents have seen fit to drag teachers into police courts; but even with the stimulus furnished by published prohibitions the number of cases in which cruelty has been alleged falls within the figure named above. If not five per thousand of the teaching profession can be proved to have been guilty of cruelty, surely there is little need of a sweeping censure which affects the whole body?

Supposing now that any critic inquires whether teachers are really never in need of prohibitive supervision, the answer must be, "Yes, some of them are." Among teachers there are coarse, dull people—ill-bred, ill-educated, callous, and cruel. The writer has known men who had no pity in them; men to whom the sight of a child's tears brought no sorrow. Considering how teachers are often pitchforked into the profession, how they are sometimes left half-cultured, and how the discipline of their colleges tends to convert the worst of

them into overgrown charity boys, the wonder is that there are not more black sheep among them. But penal regulations should not be applied to a whole class because of the doings of a few individuals. Let the individuals who do wrong suffer. If with all the corps of inspectors and managers it is impossible to get at the delinquents, then the managers and inspectors have no reason for continuing to hold office; if they are of any use, then it should be impossible for a cruel man to hold a post in school for a single year.—J. R., in *Macmillan's Magazine*.

## LETTERS FROM A CANADIAN STUDENT ABROAD.

### I. PARIS.

*Berlin, Oct. 23rd, 1883.*

MY DEAR B.—

AFTER a short stay in England, I came to Paris in the beginning of February, and I remained there till the 4th of August. The city of Paris affords great facilities to a foreigner, not only for enjoyment but also for instruction. It is not only the pleasure-loving capital, but it is also a great centre of intellectual life. I need not tell you about the Louvre with its wondrous collections of paintings and sculptures, or the Luxembourg, the gallery which best displays the modern sensuist style both in painting and sculpture, nor will it be necessary to speak about the magnificent churches which one finds in the great metropolis. These have been so often described that you are doubtless familiar with them. Père la chaise, the great burial ground, is celebrated, but one can hardly say that it is on account of

the beauty of the graves or monuments that are to be found in it. A very few only can put forward pretensions in that respect. It is interesting, as well as conducive to much sober thinking to pass through a city containing such illustrious names which, though dead, yet seem to speak to one out of the past, as one wanders along where their mortal remains were laid. Few cities possess so many sights to interest as does Paris. Besides those I have mentioned there are the Pantheon, the Invalides with the magnificent tomb of Napoleon, the Gobelins tapestry manufacture, and outside of Paris, Versailles, with its halls, galleries of pictures, its gorgeous fountains and artistically laid out park, all speaking of the pleasure-loving age of Louis XIV., when money wrung from a luckless populace was lavished with so free a hand, Sevres, with the porcelain manufacture, St. Cloud, with its ruined palace and grounds and the

ancient St. Denis Abbey. These and many others must be looked at, in order "to do Paris." I was fortunate enough also to see Paris underground, that is to visit the catacombs and sewers. Both were exceedingly interesting, especially the latter. The numerous company, for here were probably hundreds who saw through them at the same time with me, were conveyed along wide passages beneath which flowed the refuse water, and above, along the roof of which were the water pipes and telegraph wires. We rode first in small cars and then in boats. The width and height of the main sewer must be twelve or fourteen feet, and one experiences scarcely any unpleasant odour. Thus ample provision is made, so far as drainage is concerned, for the health of the great city. Above too, with the same end in view, as also to beautify, of late years magnificent boulevards have been created in all quarters. Old streets have been widened and magnificent six and seven storey stone houses, many of them profusely ornamented, have replaced simple structures. But you will not need to be told that Paris is beautiful—its fountains, parks, and wide shaded streets are too well known to need description. I saw somewhat also of that other city, one may call it, within the walls of the beautiful pleasure-loving capital, and yet so unlike it, for its streets are narrow and its inhabitants squalid and ever ready for an insurrection. Barricades are probably now however, a thing of the past; the wide and straight boulevards, radiating from centres like the spokes of a wheel are not made to suit them. Much too is being done to elevate the condition of these people by education and a wise system of government.

But my aim in going to Paris was not to see its sights so much as to improve my knowledge of French. Liv-

ing there is dear, that is, one can live cheaply when he only knows how to do it, but that is not at first. Boarding in a private family is so expensive that I did not try it. I attended a number of lectures at the Sorbonne and College de France. The former is a degree-conferring body or University, the latter is merely a higher teaching institution, where lectures are given on all subjects pertaining to a liberal education, by professors paid by the State. In the case of both institutions everything is gratuitous. I attended several courses of lectures at the College de France. Quite a number of foreigners were always present, and I found the work there very agreeable and instructive. When I first came to Paris I found some difficulty in understanding the language though I could make my wants known tolerably well; I am glad to say, however, that before I left I found a great deal of improvement in my knowledge of the language though I could not feel that I knew it at all perfectly. Only a lengthened residence among the people and very close study could accomplish that for me, yet I had greatly benefited myself. I was fortunate enough to get an authorization to visit the public schools, and afterwards the secondary schools or *Lycées*. I somewhat cursorily inspected about twenty-five of the former, and several of the best of the latter. By this means I not only gained a pretty fair acquaintance with the French School System and manner of teaching, but also had an opportunity given me of telling to their teachers somewhat of our country and its schools. They were not, by any means, universally ignorant about Canada. Not unfrequently on introducing myself as a Canadian was I greeted with "*Oh, nous aimons beaucoup le Canada.*" In these days when France is displaying such colonial activity it is not unnatural that she

should look with regret on the English dominions in North America. The exposition of 1878, also did much to make known in the French educational world not only the United States school system, but also to some extent the Canadian. The public schools of Paris, and in fact of France and her colonies, are free and attendance at school is compulsory. In Paris, especially of late years, much has been done for education. Not only are the children taught for nothing but even books and all necessary school requisites are also supplied at the public expense. A great number of new buildings have been erected lately, and increased attention is now paid to drawing, gymnastics, and also to the natural sciences. The teachers receive their appointment from the central authority, and seniority seems to be largely considered in the promotions. A

teacher is always sure of a position, which is not the case with us, but there is perhaps not quite so much incentive to work on his part. It did not seem to me that the teachers were, proportionately to the cost of living, as well paid as ours; however the superannuation fund provides to a French teacher a sufficiency, and obviates the necessity of his having to save very much yearly from his salary. Teaching is in France usually a life work. Normal School students are lodged and taught free of expense during their three years of preparation in that school, but they must sign a declaration on leaving that they will teach for at least ten years. Of course the schools were not universally good or well managed, and the material in some parts of the city was none of the best; still I was on the whole quite favourably impressed with what I saw.

(*To be continued.*) T. W.

"A TEACHER should never study, or read, or think himself out of sympathy with bounding young life," is a sentence we have run across somewhere. It is done, however, too frequently. The scholar, ambitious to know all things except a knowledge of the young soul before him, is apt to study himself away from what seems to him the humdrum duties of his daily toil. Such a teacher is cold, philosophical, if you please, but there is no warm side to his nature, attracting to himself the hearts of the young. We have heard men, and women, too, boast that they "left the shop behind them" when they turned the key in their school-room doors; but to the true teacher "all roads lead to Rome." The more knowledge, the more culture the teacher has, the better; but only that he may give more generously, and not that he may get more glory, or a certain personal gratification to himself.

THERE *is* a royal road to learning, Euclid and the authorities to the contrary notwithstanding. The expression is a formula of

priestcraft. It is a species of infallibility, which educational popes have arrogated to themselves. Ascham, Ratich, Comenius, Rousseau, Pestalozzi, Froebel, Holbrook and hundreds of others have protested against it again and again. It is the seal of stagnation placed upon all educational enterprise. It is the stronghold of old fogyism, and the apology for professional laziness. The ancients, with sickle in hand, might just as well have said there is no royal road to farming. There *is* a royal road to farming. The inventive genius of man has been opening it up, and, to-day, a farmer may till his thousands of acres, yet receive and entertain company, attend social and professional clubs, and otherwise enjoy life, right royally. In no department of human activity except education has this badge of fossilism been so clamped upon all originality and invention. Even religion has broken its power, and to-day human souls proclaim without fear their freedom toward God, the Bible, and eternal truth.—*National Normal.*

UNIVERSITY WORK.

MATHEMATICS.

ARCHIBALD MACMURCHY, M.A., TORONTO,  
EDITOR.

SOLUTIONS.

SEE NOVEMBER NO.

Jas. Millar, Math. Master, Bowmanville H.S.

1. If  $O$  be the centre of the circle described about the triangle  $ABC$  and  $AO, BO, CO$ , be produced to meet the opposite sides in  $D, E, F$ , the circle in  $D', E', F'$ , respectively,

prove that  $\frac{DD'}{AD} + \frac{EE'}{BE} + \frac{FF'}{CF} = 1$ .

1.  $\triangle ABC + \triangle D'BC = 2$  quad'l  $OB'DC$ ,  
 $\triangle ABC + \triangle E'CA = 2$  quad'l  $OCE'A$ ,  
 $\triangle ABC + \triangle F'AB = 2$  quad'l  $OAF'B$ ,  
 $\therefore 3 \triangle ABC + (\triangle D'BC + \triangle E'CA + \triangle F'AB)$   
 $= 2$  hexagon  $AF'BD'CE'$   
 $= 2 \triangle ABC + 2(\triangle D'BC + \triangle E'CA + \triangle F'AB)$ ,  
hence  $\triangle ABC = \triangle D'BC + \triangle E'CA + \triangle F'AB$ ;

again,  $\frac{DD'}{DA} = \frac{\triangle D'BC}{\triangle ABC}$ , etc.,

$$\therefore \frac{DD'}{DA} + \frac{EE'}{EB} + \frac{FF'}{FC} = \frac{\triangle D'BC + \triangle E'CA + \triangle F'AB}{\triangle ABC} = 1.$$

2. If  $x + y + z = x^1 + y^1 + z^1 = 0$ ,

prove  $\frac{x^6 + y^6 + z^6}{x^3 + y^3 + z^3} = \frac{x^2 + y^2 + z^2}{x + y + z} = xyz$ ,

and  $x^6 + y^6 + z^6 = 0$ .

2. Since  $x + y + z = 0$ , and  $xy + yz + zx = 0$ ,  
 $\therefore x^3 + y^3 + z^3 = 3xyz$ , and  $x^2y^2 + y^2z^2 + z^2x^2 = 3x^2y^2z^2$ .

Again,  $x^6 + y^6 + z^6 = (x^2 + y^2 + z^2)^3 - 2(x^2y^2 + y^2z^2 + z^2x^2) = 9x^2y^2z^2 - 6x^2y^2z^2 = 3x^2y^2z^2$

and  $x^6 + y^6 + z^6 = (x^2 + y^2 + z^2)^3 - 3(x^2 + y^2 + z^2)(x^2y^2 + y^2z^2 + z^2x^2) + 3x^2y^2z^2 = 27x^2y^2z^2 - 27x^2y^2z^2 + 3x^2y^2z^2 = 3x^2y^2z^2$ ,

$$\therefore \frac{x^6 + y^6 + z^6}{x^3 + y^3 + z^3} = \frac{3x^2y^2z^2}{3xyz} = xyz,$$

$$\text{and } \frac{x^6 + y^6 + z^6}{x^6 + y^6 + z^6} = \frac{3x^2y^2z^2}{3x^2y^2z^2} = xyz.$$

3. If  $x = bz + cy$   
 $y = cx + az$   
 $z = ay + bx$ ,

prove  $\frac{x^3}{1 - a^2} = \frac{y^3}{1 - b^2} = \frac{z^3}{1 - c^2}$ ,

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

3. (1)  $x^2 = bzx + cxy$   
 $y^2 = cxy + ayz$ ,

$$\therefore x^3 - y^3 = z(bx - ay) = (bx + ay)(bx - ay) = b^2x^2 - a^2y^2$$

$$\therefore x^3(1 - b^2) = y^3(1 - a^2), \text{ or } \frac{x^3}{1 - a^2} = \frac{y^3}{1 - b^2}.$$

Similarly  $\frac{x^3}{1 - a^2} = \frac{z^3}{1 - c^2}$ ,

$$\therefore \frac{x^3}{1 - a^2} = \frac{y^3}{1 - b^2} = \frac{z^3}{1 - c^2}$$

(2)  $\frac{x}{yz} = \frac{b}{y} + \frac{c}{z}$  and  $\frac{y}{zx} = \frac{c}{z} + \frac{a}{x}$ ,

$\therefore$  multiplying  $\frac{1}{z^2} = \frac{ab}{xy} + \frac{c}{z} \left( \frac{a}{x} + \frac{b}{y} \right) + \frac{c^2}{z^2}$

$$\therefore \frac{1 - c^2}{z^2} = \frac{ab}{xy} + \frac{bc}{yz} + \frac{ca}{zx} = \frac{abc}{xyz} \left( \frac{x}{a} + \frac{y}{b} + \frac{z}{c} \right)$$

and  $\frac{1 - c^2}{c^2} = \frac{z^2}{c^2} \cdot \frac{abc}{xyz} \left( \frac{x}{a} + \frac{y}{b} + \frac{z}{c} \right)$

$$\therefore \frac{\sqrt{1 - c^2}}{c} + \frac{\sqrt{1 - a^2}}{a} + \frac{\sqrt{1 - b^2}}{b} = \left\{ \frac{abc}{xyz} \left( \frac{x}{a} + \frac{y}{b} + \frac{z}{c} \right) \right\}^{\frac{1}{2}} \left( \frac{z}{c} + \frac{x}{a} + \frac{y}{b} \right) = \frac{xyz}{abc} \left\{ \frac{abc}{xyz} \left( \frac{x}{a} + \frac{y}{b} + \frac{z}{c} \right) \right\}^{\frac{3}{2}}$$

$$= \frac{z}{c} \cdot m \cdot \frac{x}{a} \cdot m \cdot \frac{y}{b} \cdot m \text{ where } m$$

$$= \left\{ \frac{abc}{xyz} \left( \frac{x}{a} + \frac{y}{b} + \frac{z}{c} \right) \right\}^3$$

$$= \frac{\sqrt{1-c^2}}{c} \cdot \frac{\sqrt{1-a^2}}{a} \cdot \frac{\sqrt{1-b^2}}{b}$$

4. If  $yz + zx + xy = 1$ , show that

$$\frac{x}{1-x^2} + \frac{y}{1-y^2} + \frac{z}{1-z^2}$$

$$\frac{4xyz}{(1-x^2)(1-y^2)(1-z^2)}$$

$$4. \frac{x}{1-x^2} + \frac{y}{1-y^2} + \frac{z}{1-z^2}$$

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

numerator =  $x + y + z - x(y^2 + z^2)$   
 $- y(z^2 + x^2) - z(x^2 + y^2) + xyz + yz + zx$   
 $= x + y + z + xyz - xy(x + y)$   
 $- yz(y + z) - zx(z + x)$   
 $= x + y + z + xyz - (xy + yz + zx)(x + y + z)$   
 $+ 3xyz$   
 $= 4xyz$

5. Show that  $\left(\cos \frac{\pi}{8}\right)^8 + \left(\cos \frac{3\pi}{8}\right)^8$   
 $+ \left(\cos \frac{5\pi}{8}\right)^8 + \left(\cos \frac{7\pi}{8}\right)^8 = \frac{17}{16}$

5.  $\cos^2 \frac{\pi}{8} + \sin^2 \frac{\pi}{8} = 1$ ,

$$\therefore \cos^4 \frac{\pi}{8} + \sin^4 \frac{\pi}{8} = 1 - \frac{1}{2} \cdot 4 \sin^2 \frac{\pi}{8} \cos^2 \frac{\pi}{8}$$

$$= 1 - \frac{1}{2} \sin \frac{\pi}{4}$$

$$= \frac{3}{4}$$

$$\cos^8 \frac{\pi}{8} + \sin^8 \frac{\pi}{8} = 1 - \frac{1}{8} \cdot 16 \sin^4 \frac{\pi}{8} \cos^4 \frac{\pi}{8}$$

$$= 1 - \frac{1}{8} \sin \frac{4\pi}{4}$$

$$= \frac{1}{2}$$

Now  $\left(\cos \frac{\pi}{8}\right)^8 + \left(\cos \frac{3\pi}{8}\right)^8$   
 $+ \left(\cos \frac{5\pi}{8}\right)^8 + \left(\cos \frac{7\pi}{8}\right)^8$

$$= 2 \left\{ \left(\cos \frac{\pi}{8}\right)^8 + \left(\cos \frac{3\pi}{8}\right)^8 \right\}$$

$$= 2 \left\{ \left(\cos \frac{\pi}{8}\right)^8 + \left(\sin \frac{\pi}{8}\right)^8 \right\}$$

$$= \frac{1}{2}$$

## SQUARES AND SQUARE ROOTS.\*

The tens and units figures of every perfect square will consist of one of the following 22 endings, viz :

00, 01, 04, 09, 16, 21, 24, 25, 29, 36, 41, 44, 49, 56, 61, 64, 69, 76, 81, 84, 89, 96.

Every perfect square will end with one of the following six digits, viz., 1, 4, 5, 6, 9, 0.

Any number ending in 2, 3, 7 or 8 cannot be a perfect square.

Since  $(24)^2 = 576$ , add  $100 = 676 = (26)^2$

$(23)^2 = 529$ , "  $200 = 729 = (27)^2$

$(22)^2 = 484$ , "  $300 = 784 = (28)^2$

$(1)^2 = 1$ , "  $2400 = 2401 = (49)^2$

Rule I. (a) To determine the square of any number between 25 and 50, find the corresponding number below 25, and augment its square by the number of hundreds indicated by its remoteness from 25. Or more conveniently (b), Take the excess above 25 as hundreds, and augment by the square of what the number lacks of 50.

Example,

$$(43)^2 = (43 - 25) \times 100 + (50 - 43)^2$$

$$= 1800 + 49 = 1849.$$

Rule II. Conversely, to obtain the square root of any perfect square between 625 and 2500. Ascertain what square is indicated by the tens and units figures and deduct the number from 50. The remainder is the square root.

Ex.  $\sqrt{1764}$   $64 = (8)^2$   $50 - 8 = 42$ .

Ex.  $\sqrt{1024}$   $324 = (18)^2$   $50 - 18 = 32$ .

Rule III. To square any number from 50 to 100, take twice the excess above 50 as hundreds, and augment by the square of what the number lacks of 100.

Ex.  $(89)^2 = 200(89 - 50) + (100 - 89)^2$   
 $= 7800 + 121 = 7921$ .

Ex.  $\sqrt{8281}$   $81 = (9)^2$   $100 - 9 = 91$ .

Rule IV. To square any number from 100 to 200, take four times the excess above 100 as hundreds, and augment by the square of what the number lacks of 200.

Ex.  $(180)^2 = 400(180 - 100) + (20)^2$   
 $= 32000 + 400 = 32400$ .

\* Notes of a lecture at Teachers' Convention, November, 1883, by J. H. Knight, P. S. Inspector, Lindsay.

Rule V. To square any number from 125 to 250, take one-half the excess above 125 as thousands, and augment by the square of what the number lacks of 250.

$$\text{Ex. } (244)^2 = 500(244 - 125) + (6)^2 \\ = 59500 + 36 = 59536.$$

$$\text{Ex. } (159)^2 = 500(159 - 125) + (91)^2 \\ = 17000 + 8281 = 25281.$$

CLASSICS.

G. H. ROBINSON, M.A., TORONTO, EDITOR.

EXCERPTS FROM *LATINE* FOR  
NOVEMBER, 1883.

TO PYRRIA. HOR. I, V. [MARTIN.]

SAV, Pyrrha, say, what slender boy,  
With locks all dropping balm, on roses  
laid,  
Doth now with thee in pleasant grotto toy?  
For whom dost thou thine amber tresses  
braid,

Arrayed with simple elegance?  
Alas! alas! How oft shall he deplore  
The altered gods, and thy perfidious glance,  
And, new to danger, shrink when sea-  
waves roar,

Chafed by the surly winds, who now  
Enjoyeth thee, all golden as thou art;  
And hopes, fond fool! through every change,  
that thou  
Wilt welcome him as fondly to thy heart!

Nor doth not know, how shift the while  
The fairest gales beneath the sunniest  
skies;  
Unhappy he, who, weeting not thy guile,  
Basks in the sunshine of thy flattering  
eyes!

My votive tablet, duly set  
Against the temple's wall, doth witness  
keep,  
That I, whilere, my vestments dank and wet,  
Hung at the shrine of Him that rules the  
deep.

ALIQUOT IDIOMATA EX LAELIO CICERONIS.

*Memoriae mandare*, to commit to mem-  
ory. I, 1.

*In sermonem incidere*, to fall upon a topic.  
I, 2.

*Omnibus esse in ore*, to be in everybody's  
mouth. I, 2.

*Aliquo uti multum*, to be intimate with  
one, I, 2.

*Conjunctissime vivere*, to live in the closest  
intimacy. I, 2.

*Positum in auctoritate*, depending on  
authority. I, 4.

*Necis quo pacto*, somehow or other. I, 4.

*Sunt ista*, that (that you say) is so. II, 6.

*Alio quodam modo*, in a somewhat differ-  
ent way. II, 6.

*Prudens in jure civili*, skilled in civil law.  
II, 6.

*Multa provisiva prudenter*, many instances  
of sagacious foresight. II, 6.

*Multa acta constanter*, many examples of  
resolute action. II, 6.

*Responsa acute*, repartees. II, 6.

*Quo pacto*, how? II, 7.

*Ut assolet*, as usual. II, 7.

*Diem obire*, to keep an appointment. II,  
7.

*Magis credo*, I rather think. II, 9.

*In pueris*, in the case of boys. II, 9.

*Cave anteponas*, beware of putting before.  
II, 10.

*Cum illo actum est praeclare*, his was a  
glorious fate. III, 11.

*Jam puero*, even in boyhood. III, 11.

*Ante tempus*, too soon. III, 11.

*Licet dicere*, one may say. III, 12.

*Ut in plerisque*, as generally. IV, 13.

*In quiete*, while at rest. IV, 14.

*Per visum*, in a vision. IV, 14.

*Fit idem*, the case becom. the same. IV,  
14.

*Eo magis cordi*, the more delightful. IV,  
15.

*Ad vivum resequare*, to take strictly. V,  
18.

*Pingui Minerva*, in a common-sense way.  
With plain mother-wit. V, 19.

*Quantum homines possunt*, as far as men  
can. V, 19.

*Haud scio an*, I am inclined to think.  
VI, 20.

*Exemplar aliquod*, a sort of copy. VII,  
23.

*Si videbitur*, if your please. VII, 24.

*Per se ipse*, by his own unaided efforts.  
VII, 26.

*Sibi plurimum confidere*, to have great self-confidence. IX, 30.

W. C. COLLAR.

## MODERN LANGUAGES.

JOHN SEATH, B.A., ST. CATHARINES, EDITOR.

NOTE.—The Editor of this Department will feel obliged if teachers and others send him a statement of such difficulties in English History, or Moderns, as they may wish to see discussed. He will also be glad to receive Examination Papers in the work of the current year.

### FRENCH.

#### PHRASES A CORRIGER.

1. Il y a quelques vingt-cinq ans, les Parisiens qui traversaient le Pont-Royal, s'arrêtaient, émerveillés, devant une magnifique frégate ancrée sur la rive gauche du fleuve.

2. L'on nous informe qu'une partie des murs de l'église de St-Cuthbert s'est écroulée, et l'on craint que l'église entière s'écroule.

3. Alors, dans une de ces heures presque voisines du désespoir, l'âme que Dieu a lentement appauvri, l'âme sur le point de se laisser aller au murmure, entend une voix, une voix qui la pénètre plus profondément que la flamme ne pénètre le bois qu'elle consume, une voix qui lui dit : *Est-tu assez malheureuse ?*

4. Modeste et belle comme les fleurs qu'elle aimait : mélancolique comme les feuilles d'automne, elle est partie au premier souffle qui les dessèche et annonce leur chute prochaine.

5. Que tous les enfants de saint Dominique se lèvent pour la lutte, et que, comme des guerriers puissants, ils se préparent à user dans le combat des armes dont les a pourvu avec tant de prévoyance leur bienheureux père.

6. Il y a quelques années, elle publia des écrits sous la signature de *Graxiella*, qui dénotaient un talent aussi exquis que bien cultivé.

7. Depuis la célèbre journée d'Austerlitz, Bonaparte ne fait plus que des fautes. Il

fait les Rois et les défauts ; il transforme les républiques qu'il a formées en monarchies.

8. Chez la femme l'amour est une vertu. Dieu veuille qu'elle s'en rappelle toujours.

9. Tous les jours on se convainc de plus en plus qu'on ne fera jamais assez de sacrifices pour l'agriculture et la colonisation, pour engager notre jeunesse à s'y livrer.

10. Plus tard le castillan d'un côté et le portugais de l'autre finirent par l'emporter (sur les autres dialectes parlés en Europe) en conservant néanmoins les nuances que leur avaient imprimé les autres dialectes.

11. Friedland coûte aux Russes 17,000 morts et blessés, autant de prisonniers et 70 canons . . . Mais la France paye trop chère cette victoire.

12. Quelle influence ont exercé, sur les événements politiques de notre province, soit les élus de la nation, soit les membres de la Chambre supérieure ?

13. Auparavant de lire cette adresse, ces deux messieurs exprimèrent le profond regret de l'absence de M. le maire, plongé aujourd'hui dans le chagrin par la mort de son fils unique.

14. Un magnifique pain béni a été offert par l'Union des Commis-Marchands, dont quelques membres ont fait la quête.

15. A mesure que ces articles se sont succédés, chacun s'est demandé quel était l'auteur de ces bijoux littéraires, dont plusieurs ont été reproduits par les journaux français des Etats-Unis et même d'outre-mer.

16. Le père de la jeune fille lui rappela qu'elle était sa fiancée ; la propre mère d'Albert, sa vieille mère qui espérait réjouir ses vieux yeux mourants par le spectacle du bonheur de son fils unique, lui rappela aussi les premiers amours et les premiers désirs de sa jeunesse.

17. Immédiatement après qu'elle eût reçu le sacrement des mourants, elle s'est entretenu avec ses sœurs Rosine et Adeline qui l'ont soignée avec un dévouement et une tendresse admirables.

18. M. l'abbé . . . lui récita les prières des agonisants, après lesquelles elle fit un signe pour qu'on lui donna son crucifix.

19. Les jours qui suivirent sa visite au

cimetière se passèrent dans une sainte union avec Dieu ; déjà elle avait reçue les derniers sacrements.

20. Le Kremlin, cette citadelle où les empereurs de Russie se sont défendus contre les Tartares, est entourée d'une haute muraille crénelée et flanquée de tourelles qui, par leurs formes bizarres, rappellent plutôt un minaret de Torquie qu'une forteresse comme la plupart de celles de l'Occident.—J. O. G. in *Journal de L'Instruction Publique*.

(Corrections next month.)

## NATURAL SCIENCE.

H. B. SPOTTON, M.A., Barrie, Editor.

### THE PHYSICAL GEOGRAPHY OF THE SEA.

ON the 7th of December, 1872, Her Majesty's ship *Challenger* left the port of Sheerness, on a voyage of scientific discovery, and was absent almost four years. She was fitted out in the most complete manner, with a view to the particular errand upon which she was bent, and the scientific men in charge of the expedition were among the most eminent that England could afford. The whole distance traversed was some 70,000 nautical miles, and the mass of facts obtained in regard to the physical geography and zoology of the sea was such that they have not yet been completely worked up. Many interesting points, however, have already been settled, and an account of them has been published by Professor W. B. Carpenter. To one or two matters of more than ordinary interest, we propose to direct attention here.

It has commonly been supposed by geologists, and has been distinctly stated by the late Sir Charles Lyell, that during the past history of our globe the land and sea have not always preserved the same relation to each other which they have now, that lands which are now covered by deep sea must more than once have been above the surface of the water; and land which is now high and dry must have been more than once buried in the depths of the ocean; in other words, that a sort of see-saw process has

been going on during the ages that have gone by since the earth first began to cool, the land alternately rising and sinking. The observations taken during the *Challenger* expedition have established that this theory requires a good deal of modification before it can be accepted as truth. It will be remembered that the soundings which were taken in the North Atlantic in 1857, preparatory to the laying of the great cable, showed that, for one hundred miles or so from the west coast of Ireland, the water deepens very gradually until it attains a depth of about six hundred feet; that then the bottom suddenly sinks, and that, at no very great distance to the west of this point, depths of twelve thousand feet are found, after which the bottom is almost level until the American coast is approached. As Professor Huxley says:—"If the sea was drained off, you might drive a waggon all the way from Ireland to Newfoundland." But as the American coast is approached, a steep incline is encountered, exactly as on the British side, and at about the same distance from shore; and after this sudden ascent is passed, the water gradually lessens in depth until dry land is reached.

Now the surveyors of those days thought themselves extremely lucky in hitting upon so favourable a position in which to lay the projected cable. They thought that the circumstances just detailed were altogether exceptional in character, but if there is one fact more clearly established than another by the observations of this expedition, it is that these circumstances regarding the nature and conformation of the sea bottom are not at all exceptional, but, on the contrary, that *they are the rule*. It has been shown that around all the continents there is a fringe of submerged land, covered by comparatively shallow water; that this fringe is, as a rule, about one hundred miles in width; that the deep sea proper does not begin till this fringe is passed, and that the depth of the ocean is, with a few exceptions, nearly uniform. It will be readily understood, then, that these borders of land which are covered by shallow water, must be regarded as part of the continental areas of the globe; and that these continental areas are vast elevations of land,

only the top. of which are depicted on our maps of the world. If we can, then, suppose the water to be entirely absent from our globe, it is evident that about three-fourths of the surface would be on a level with the present ocean floors, while the remaining one-fourth would consist of masses of land elevated to a great height above this level. It is evident, also, that the real outline of a continent is very different from its apparent outline. Take the case of Europe, for example. If the north-western corner of that continent were raised one hundred fathoms, Great Britain would cease to be an island. It would be joined to Denmark, Holland, Belgium and France, as well as to Ireland and the Orkney and Shetland Islands. Not only would the English Channel be laid dry, but nearly the whole of the North Sea also; while the Irish coast would be extended one hundred miles west of its present position.

We commonly say that three-fourths of the earth's surface is covered with water, and that the remaining one-fourth is land. This statement, however, does not convey a correct idea of the relative volumes of the dry land and the water. Professor Carpenter has shown that the total volume of ocean water is as nearly as possible thirty-six times that of the dry land, because the average depth of the ocean is about twelve times the average height of the land. This immense disproportion between the amounts of land and water utterly does away with Lyell's idea of an interchange between a continental area and an ocean floor. It is clear, from what has been said, that if the whole of the present dry land should be submerged it would only require one thirty-sixth of the present ocean floor to rise above the surface to counterbalance this submersion. There have been risings and sinkings of the land areas, and doubtless, also, risings and sinkings of the ocean floor, but the point now established is, that the elevated masses which form what Carpenter calls the "continental platforms," and also the depressed areas covered by deep sea, were formed as such when the earth began to solidify in the first instance. The deep ocean floor has never been above the surface.

It may be pointed out that the argument from the disproportion between the volumes of land and water is supported by other considerations. The strongest point of all, however, has been brought out by the observers on the *Challenger*. It is this: that the deposits which are now being formed on the deep sea floor have little or no connection with the land masses—they do not result from the disintegration of land. Deposits formed by the wearing away of the land were found only in the comparatively shallow water which immediately surrounds the continents, while on the deep sea bottom were found volcanic clay, formed out of pumice or lava which had floated out to sea, and after becoming water-logged had sunk; quantities of manganese, traceable also to volcanic action; globigerina-ooze, the chief ingredient in chalk; and fragments of iron, which, there is little doubt, are of meteoric origin. It is almost impossible to imagine the slowness with which these deep sea deposits are made. Professor Geikie says: "I know of no recent discovery in physical geography more calculated to impress deeply the imagination, than the testimony of this meteoric iron from the most distant abysses of the ocean. To be told that mud gathers on the floor of these abysses at an extremely slow rate, conveys but a vague notion of the tardiness of the process. But to learn that it gathers so slowly that the very star dust which falls from outer space forms an appreciable part of it, brings home to us, as hardly anything else could do, the idea of undisturbed and excessively slow accumulation."

Everything, then, seems to point to the conclusion that the high land masses and the deep ocean areas were so formed in the beginning, and that they have maintained substantially the same relations to each other from that time to the present, but that in each separately changes of elevation and depression have occurred and are still occurring. To quote again from Professor Geikie: "From all this evidence we may legitimately conclude that the present land of the globe, though composed in great measure of marine formations, has never lain under the deep sea, but that its site must always

have been near land. The present continental ridges have probably always existed in some form, and as a corollary we may infer that the present deep ocean basins likewise date from the remotest geological antiquity."

H. B. S.

"THE HISTORICAL AND SCIENTIFIC SOCIETY OF MANITOBA, formed for the purpose of collecting, arranging, and preserving a library of books, pamphlets, maps, MSS., prints, papers or paintings, a cabinet and museum of minerals, archaeological curiosities, and objects generally illustrative of the civil, religious, literary, and national history of the lands and territories lying to the west and north of Lake Superior. . . ."

We have received copies of the Proceedings of this society. These are in small pamphlet form and relate to "The Sioux Language," "The Causes of the Rising in the Red River Settlement, 1869-70," "The sources of North-Western History," "Navigation of Hudson Bay," "The Hudson Bay Route," "Winnipeg Country, its discovery and the great consequences resulting," and the "Annual Report, 1882-83."

It is gratifying to observe the steps that have been taken in connection with the formation of this society, to preserve from comparative oblivion "the memory of the early

missionaries, fur-traders, explorers, and settlers of this region; of obtaining and preserving narratives in print, manuscript, or otherwise, of their trails, adventures, labours, and observations; of ascertaining, recording, preserving, and publishing when necessary, information with regard to the history and condition of the said regions, and of promoting the study of history and science."

Most of the matter contained in these publications is interesting, and will, in course of time become more valuable. Of the literary form, in most cases, little can be said in praise; and the paper, printing, and proof-reading are unworthy of a backwoods office.

The Manitoba Historical and Scientific Society has our best wishes. We trust to hear that it has been established beyond a peradventure; but would suggest that the members can scarcely hope to receive the respect of outsiders, so long as those at the head of the institution continue to issue their "Proceedings" in such a wretched shape.

In the event of future improvement, we shall note the change with pleasure. Mr. W. H. Hughan, Winnipeg, is acting Corresponding Secretary, and any communications addressed to him "will be thankfully received and promptly acknowledged."

D. B.

THE intellectual activities should be guided by the moral requirements, and no school work is well done that is not successful in emphasizing this fact so vigorously that it becomes a part of the child's habit of thought to regard it in this light. The teacher needs to exemplify it in her own action, as well as inculcate it as teachable truth.

EVERY lesson should stand before the pupil's mind in a connected outline before it is left. Sometimes this should be so given at the time it is assigned, but more frequently after the pupil has grappled with it single-handed; but before it is left it must be distinctly outlined for him. It must be a living thought on a well-balanced skeleton.

MPRESS the lesson is a good way to ex-

press a need of the schoolroom. There is danger of lifelessness in the routine duties of the teacher, and if she be not ever thoughtful of her mission she will let matters of discipline and endeavours to drill the pupils, overshadow the necessity of a keen effort to impress the main thought of the lesson upon the pupil's mind.

ONE of the ends of good teaching is to enable the pupil to discriminate between the important and the unimportant phases of a lesson, as of truth in general. One cause of much failure in life is an inability to discriminate in these matters. He fails in life who magnifies an ant-hill into a mountain, or makes an extensive preparation to cross a ditch as to cross the ocean.

## SCHOOL WORK.

DAVID BOYLE, ELORA, EDITOR.

CONDENSED DIRECTIONS FOR  
TEACHING ARITHMETIC.

BY JOHN SWEET.

1. Train beginners from five to six years of age on combinations of numbers, not exceeding ten, in addition, subtraction, multiplication and division. Begin with counters such as small blocks of wood, shells, corn, beans, or pebbles, and use them for two or three months, until the pupils can make the combinations without the aid of objects. (Grube method.)

2. After from three to six months extend the combinations to 20.

3. Teach figures and the forms of written arithmetic, in connection with the mental work.

4. Children under ten years of age should be limited to operations in addition, subtraction, multiplication and division, in order to secure accuracy and readiness. Problems and analysis come properly when the reasoning faculties are more developed.

5. If a text book is used by the pupils, omit all puzzling and complicated problems, and all questions involving large numbers.

6. After the first year, teach decimals in connection with whole numbers, at least to the extent of adding and subtracting, and of multiplying and dividing them by whole numbers. Limit: first step, *tenths*; second, *hundredths*; third, *thousandths*.

7. In the second and third years teach common fractions, limited mainly to *halves*, *thirds*, *fourths*, etc., to *twelfths*. Illustrate simple operations in the four rules by means of apples, crayons, or lines upon the blackboard.

8. Use the blackboard yourself for the purpose of making explanations or models of methods.

9. Drill your pupils at the board, sending up one-half the class while the other half is engaged in slate work. Give both divisions the same exercises, and insist on good figures and neat work.

10. Give frequent drills in addition—the operation in which more mistakes are made than any other.

11. Fix every new operation, or principle, by long-continued and frequently repeated drill.

12. Do not take more than one hour a day for arithmetic.

13. Accuracy is vastly more important than rapidity.

## DIRECTIONS FROM A NOTE BOOK.

Devote a few moments daily to spelling the names of familiar objects, if the speller does not contain them.

Make a contract definite as to wages, holidays, institutes and all things.

Learn all you can of the methods and mistakes of your predecessor. Never criticise his work.

Go to the district as early as the Saturday before school opens. It demoralizes the pupils to gather at the door, and wait two or three hours upon the first morning of the term.

The disorders of the pupils are often due to the dulness of the teacher.

Do not have the arms folded in spelling, if the class stand. Clasp the hands behind the back. It is more healthful.

Always find time for map drawing.

Always speak kindly. Never let your temper or tongue fire up. Remember that you cannot have everything your own way.

Teach the pupils to add rapidly.

Have the pupils go out orderly, and say good night, in concert. Reply to their salutation.

Do not expect too much.

If a pupil does not know anything by nature, for pity's sake let him alone. Do not scold him for it.

Be very patient and thorough in arithmetic.

You cannot teach what you do not know.

Not only the intellect, but the heart, should be cultivated.

A word should be pronounced, in spelling, distinctly, and but once. One trial upon a word is sufficient.

Answer no questions during recitation.

Allow no whispering.

Have text books of your own, and do not borrow of the pupils.

Hold a book in the left hand.

Let each one have the same place in class at every recitation.

Save your voice, and govern with eye and carriage. Do not scold or grumble.

Keep paper in your pocket to jot down thoughts in relation to the work, as they occur.

Have the little ones read from printed words upon the blackboard.

Never command unless you can be obeyed.

Have patience and perseverance.

When you say *go*, or *do*, allow no questioning, but attend to your next work, as if you expected to be obeyed.

Love hath power that harshness hath not.

—*Educational Review.*

## SOME POINTS FOR YOUNG TEACHERS.

### QUESTIONING THE CLASS.

1. *Be brief*; lest you become loose and prolix, and so consume unnecessary time.

2. *Be concise*—omitting all unnecessary phrases, such as "Well," "Now then," "Let me see if you can answer this," "Now you may tell me," etc.

3. *Be clear*; that is, state your question so that your thought is promptly discernible, but let the significance depend quite as much

upon the relation to other questions as upon the language used.

4. *Be not too clear*, and so practically answer your own question.

5. Never ask a question which can be answered by *yes* or *no*.

6. As a general thing, your questions should require more than one sentence as an answer. Pupils gain no power from answering in monosyllables.

7. *Be prompt* in the utterance of your questions. Drawing, hesitating, slow enunciation breeds the same faults in your pupils.

8. *Be rapid* in questioning. Let no unnecessary time intervene between the answering of one question and the asking of the next.

9. *Never repeat the answers*. This is the commonest fault of teachers, and the most easily acquired. It is a waste of time, and indicates a lack of nerve.

10. *Call on different individuals*, oftentimes for the same answer, not committing yourself as to the accuracy of any of the answers until several have answered.

12. *Give a hard question* which has been answered by one pupil to some poorer pupil in the class, that you may assure yourself and he himself that the point is understood. This is called *individual review repetition*, and is the secret to genuine thoroughness.

12. *Never repeat the question*. If a pupil don't hear, he ought to. Punish him by giving the privilege of answering to some one who did hear.

13. *Repeating the questions and answers* in a routine manner are the two besetting sins of teachers. Let the pupils do the repeating.  
—*National Normal.*

### A GREAT MAN.

THAT man is great, and he alone  
Who serves a greatness not his own,  
For neither praise nor self;  
Content to know and be unknown,  
Whole in himself.

Strong is that man, he only strong  
To whose well ordered will belong,  
For service and delight,  
All powers that in face of Wrong  
Establish Right.

And free is he, and only he,  
 Who, from his tyrant passions free,  
 By fortune undismayed,  
 Hath power upon himself, to be  
 By himself obeyed.

If such a man there be, where'er  
 Beneath the sun and moon he fare,  
 He cannot fare amiss;  
 Great Nature hath him in her care,  
 Her cause is his.

— Owen Meredith.

## HISTORY AND GEOGRAPHY.

JOHN M. GREGORY, LL.D.

HISTORY and geography are natural associates and allies. They ought never to be separated. History is events. Geography is place. Events without place are merely stories. Place without events simple emptiness. Events imply places, but place alone means nothing.

History includes geography, and when well and properly taught gives the best and most lasting knowledge of the latter study. Geography pursued by itself is one of the most sterile of studies. It affords little mental exercise save to the memory, and upon that it takes no lasting hold. Any one will be convinced of this who will attempt to recall the geography lessons learned in childhood, or even five years ago.

In this estimate of geography, we leave out the so-called mathematical geography, which includes the astronomical facts of the form, size, motions and astronomical relations of our planet. And we leave out also the conventional art of mapping. This knowledge is of great value, and the use of maps is like the use of the dictionary, a life-long need of every intelligent reader.

In history are properly included all the movements of mankind, individuals and nations. The march of armies, the migrations of peoples, battles, conquests and the fates of rulers—these are conspicuous events in human affairs; but commerce, arts, literature, science, the progress of society—these, too, belong to history, and have their geographic areas and relations. To teach the

whole of history, in this broadest use of the term, one would teach the whole of geography.

The most successful teachers of geography are those who mix most of historic, commercial or scientific incidents with their instructions. The places are peopled with facts, or made picturesque with the description. But even this falls short of the efficiency of a systematic study of history or science as the principal aim, and the mastery of the geography as adjunct and subsidiary knowledge.

Isolated geography, taught independently of other studies, is "feeding on the east wind." Geography, studied as the territorial element of the great world-making, map-changing movements of man and his arts, sheds floods of light on the history of which it is the "local habitation" and the scene. No one forgets the geography of Jerusalem, of Waterloo, of Columbus's voyage, and of the Pilgrims' landing place, after having read with map before him, the great deeds which make these places memorable. To learn the geography in advance of the history, or of the commercial, social or scientific relations which render it interesting and important, is to mark on the shifting seas the track where some ship is expected to sail, or to stake out, in the wilderness, the site of some city not yet built.

Some of the broader features of geography may be learned while studying the construction and use of maps. The places of the zones, the lay of the continents, the positions of the oceans, and perhaps the lands of the more famous or more familiar peoples, may be noted so far as to enable the young student to refer more readily to his maps as he comes to need them in his historical studies.

So also physical geography will demand study after chemistry, geology and other sciences have prepared the learner to understand its grand groupings and generalizations. And for all these some preparation may be made in the oral lessons on common things given to children in primary instruction. The landscape with its hills and valleys, its rocks, rivulets and soil may

help to make familiar many of the simple notions and words used by the geographer.

It is difficult to see how this isolated and barren geography should have won and retained so large a place among the common school studies, unless it is because it furnishes so much work for the pupils and is so easy for the teachers. If the pupils must remain six hours in school, they must be furnished some employment of their time, and the work of looking up places on the maps and of drawing maps certainly serves to keep them busy many an hour. And the teacher who is too ignorant to teach the elements of physiology, physics or botany, or other sciences intimately connected with the daily life of men, may still read to a class the questions to be answered from the atlas.

The conclusion from all here written, is not that geography shall be studied less, but more; never, however, as a separate study, but always as a part of some other study with which it holds natural and necessary connection. It has been called a conglomerated science, borrowing its facts from astronomy, history, geology, botany, zoology, meteorology, and political science. May it not rather be said to be the local or territorial element of all these sciences, necessary to their existence and needful to their comprehension? More especially, it is a part of history, and with chronology constitutes the historical element of all the sciences.

Geography should therefore be a part of all studies, both in common school and college. The atlas and the dictionary alike constitute a part of the outfit of every student, and are needed on every study table. The time heretofore given to mere geographical facts, places without events or relations, may well be given to history and science with the map added. History has suffered as much from its divorce from geography as geography has from its isolation from history. Let the two be kept in close companionship, and we shall make both better historians and better geographers. Let history be studied on the map, and every event and place will thus be better known and remembered.—*Wisconsin Journal of Education.*

## EDUCATION DEPARTMENT, ONTARIO.

DECEMBER EXAMINATION, 1883.

*Admission to High Schools.*

### SPELLING AND FOURTH BOOK.

NOTE.—All candidates must take questions 1 and 2 of the paper on Spelling and Fourth Book; and as regards questions 3, 4, 5, 6, 7, each must select the series on which he will be examined, and confine himself to the set of questions based on the Fourth Book of that series. No answers can be considered that may be given on either of the series other than the one selected by the candidate for the examination.

1. Distinguish hail, hale; whine, wine; ascent, assent; e'er, ere, air; wax, whacks; tracks, tracts; wail, whale. [7.]
2. Accent the following words, and correct any errors in spelling:—secede, succede, decieve, wooddin, posthumous, ballance, allarm, combine. [8.]

### *Ontario Readers.*

3. Give the substance of the lesson entitled "The Voyage of the Golden Hind." [20.]

4. Xerxes, having lost in his last fight, together with 20,000 other soldiers and captains, two of his own brethren, began to doubt what inconvenience might befall him, by the virtue of such as had not been present at these battles, with whom he knew that he was shortly to deal. Especially of the Spartans he stood in great fear, whose manhood had appeared singular in this trial, which caused him very carefully to inquire what numbers they could bring into the field. Is it reported of Dieneses, the Spartan, that when one thought to have terrified him by saying that the flight of the Persian arrows was so thick as to hide the sun, he answered thus: "It is very good news, for then we shall fight in the cool shade."

Explain—*captain, brethren, befall, virtue, he was shortly to deal, singular, bring into the field, thought to have terrified, flight of the Persian arrows.* [15]

5. What is the subject of the lesson from which this passage is taken, and what is the name of its author? [4.]

6. Write the emphatic words in the sentence commencing at 'Especially,' and concluding at 'field.' [8]

7. Quote ten consecutive lines of poetry [ ]

*Royal Readers.*

3. Give the substance of the lessons entitled "Harold Skimpole." [20]

4. Then was committed that great crime, memorable for its singular atrocity, memorable for the tremendous retribution by which it was followed. The English captives were left at the mercy of the guards, and the guards determined to secure them for the night in the prison of the garrison, a chamber known by the fearful name of the Black Hole. Even for a single European malefactor, that dungeon would, in such a climate, have been too close and narrow. The space was only twenty feet square. The air-holes were small and obstructed. It was the summer solstice, the season when the fierce heat of Bengal can scarcely be rendered tolerable to natives of England by lofty halls and the constant waving of fans.

Explain—*singular atrocity, retribution, guards, garrison, malefactor, dungeon, air-holes, solstice, tolerable, lofty halls.* [15.]

5. What is the subject of the lesson from which this passage is taken, and what is the name of the author? [4.]

6. Write the emphatic words in the sentence commencing at 'It was the summer,' and concluding at 'fans.' [8.]

7. Quote ten consecutive lines from any poem in the twelve selected lessons. [10.]

*Canadian Readers.*

3. Give the substance of the lesson entitled "The Taking of Roxburgh Castle." [20]

4. The House of Commons is called upon to-night to fulfil a sorrowful, but a noble, duty. It has to recognize, in the face of the country, and of the civilized world, the loss of the most illustrious of our citizens, and to offer to the ashes of the great departed, the solemn anguish of a bereaved nation. The princely personage who has left us was born in an age more fertile of great events than any period of recorded time. Of those vast

incidents the most conspicuous were his own deeds, and these were performed with the smallest means, and in defiance of the greatest obstacles.

Explain—*House of Commons, recognize, civilized world, illustrious, ashes of the great departed, solemn anguish, fertile of great events, recorded time, defiance, obstacles.* [15.]

5. Give the name of the speaker and the person spoken of, in the above passage. [3]

6. Write the emphatic words in the sentence commencing at 'Of those,' and concluding at 'obstacles.' [8]

7. Quote ten consecutive lines from any poem in the eleven selected lessons. [10.]

ENGLISH GRAMMAR.

"The *almond blossoms on the tree,*  
*As emblems of thy charms were made;*  
The flowers of life, my sweets, like thee;  
Yet ere the Summer is gone, they fade."

1. (a) Analyze the first three lines of this stanza. [6.]

(b) Parse the words that are printed in italics. [26.]

2. Name four classes of adjectives that do not admit of comparison. [4]

3. Write the second person singular of each tense in the indicative mood, passive voice, of the verb *strike*, using the common form. [6]

4. Make a list of four words that are used sometimes as one part of speech, and sometimes as another. Quote or make examples to illustrate your answer. [12]

5. Correct the following sentences, where necessary:—

(a) Many people never learns to speak correct.

(b) James is more diligent than thee and your brother.

(c) Neither his conduct or his language have left me with that impression.

(d) Exactly opposite to each other stands a church and a gin palace.

(e) He had not ought to do that, because it ain't no use.

(f) What you must rely on is facts.

(g) It has not rained last week or this week.

(4) He turned away with the utmost contempt that he was capable of.

(5) They returned back again to the city from whence they came forth.

(6) On a sudden off breaks a limb and down tumbles both negro and racoon.

(7) The beaux in those days painted their faces as well as the ladies.

(8) When he has went I will let you know at once. [46.]

#### COMPOSITION.

1. Punctuate the following, dividing it correctly into sentences, and, when proper, substitute pronouns for nouns:—

A wolf roving about in search of food passed by a hut where a child was crying notwithstanding that the child's mother did the mother's best to quiet the child as the wolf stood listening the wolf heard the mother chiding the child and threatening to throw the child to the wolf so thinking the mother would be as good as her mother's own word the wolf hung about the hut licking the wolf's own lips in the joyful expectation of a capital supper towards evening when the child had become quiet the wolf heard the mother praising the child saying that if the wolf came for the child the wolf should be beaten to death off the wolf trotted home as fast as the wolf's legs could carry him. [16.]

2. Combine the following into two complete sentences, at the same time substituting pronouns for nouns, when proper:—

An ass found a lion's skin. The ass put the lion's skin on. The ass went into the woods and pastures. The flocks and herds were thrown into consternation by the ass. The ass then met the owner of the ass. The ass would have frightened the ass's owner. The good man, however, saw the long ears of the ass sticking out. The owner thus knew the ass. The owner had a good cudgel. The owner made the ass sensible that though the ass was dressed in a lion's skin, the ass was really no more than an ass. [16.]

3. Write a short composition on "A Spade." [20.]

4. Write a letter to your mother, describing a visit to your uncle's. [20.]

#### DICTION

NOTE.—The presiding examiner will read the passage three times; the first time to enable the candidate to collect the sense; the second, slowly, to enable the candidate to write down the words; and the third, for review. Value, 22. Two marks to be deducted for each word mis spelled.

These internal arrangements are so various and so complicated that pages of description might be written thereupon. There are myriads of rooms, cells, nurseries, provision-chambers, guard-rooms, passages, vaults, bridges, subterranean streets and canals, tunnels, arched ways, steps, smooth inclines, domes, etc., all arranged in a definite, coherent and well-considered plan. In the middle of the building, sheltered as far as possible from outside dangers, lies the stately royal dwelling, resembling an arched oven, in which the royal pair reside, or rather are imprisoned, for the entrances and outlets are so small that, although the workers on service can pass easily in and out, the queen cannot do so. Above and below the royal cell are the rooms of the workers and the soldiers which are specially charged with the care and defence of the royal pair.

#### ENGLISH HISTORY.

Twelve marks for each question.

1. Who were the Saxons? What changes did their invasion make in England? What changes did the Norman conquest make?

2. Name a good king of England and also a bad one, and tell some things the former did that were good for the people, and some the latter did that were bad for them.

3. What were the chief events in the reign of Henry VIII.?

4. What were the causes that led to the setting up of the Commonwealth?

5. What have been the chief events in the reign of Victoria?

6. Write short notes on any four of the following:—Magna Charta, Court of the Star Chamber, The Petition of Right, The Habeas Corpus Act, The Declaration of Rights, The Reform Bill.

## GEOGRAPHY.

1. Define—Latitude, Parallel of Latitude, Meridian, Peninsula, Lake, Water-Shed, River-Basin, Tide, Limited Monarchy, Republic. [10.]

2. Give the names and positions of the more important British possessions. [12.]

3. Name the Countries of Europe and their Capitals, and the River on which each Capital is situated. [18.]

4. Name the Countries, Capes, River-mouths, and Islands you would pass, and the waters you would pass through, in a coasting voyage from Halifax to Rio Janeiro. [10.]

5. What are the chief manufactures, the chief exports, and the chief imports of Canada? [10.]

6. Draw an outline map of Canada, marking its Capital, the boundaries of each Province, and the Capital of each. [12.]

## ARITHMETIC.

Ten marks for each question.

1. Multiply the *sum* of fifty-nine thousand four hundred and four, and forty-seven thousand six hundred and seventy-five by their *difference*, and divide the product by  $7 \times 13 \times 19$ .

2. Bought oranges at the rate of 10 cents the dozen, and sold them at the rate of five angles for 11 cents. How much did I gain on eleven boxes each containing 20 dozen?

3. A man bought a rectangular field 40 rods long by 25 rods wide, paying therefor at the rate of \$300 per acre, and then had it fenced at the rate of \$1.50 per rod. Prove that the land cost him exactly ten times as much as the fence.

4. Divide \$1200 among A., B. and C., so that A. may have \$70 more than B., and twice as much as C.

5. Divide the sum of  $\frac{2}{3}$  of  $8\frac{1}{2}$  and  $2\frac{1}{2}$  of  $5\frac{1}{2}$  by the difference between  $\frac{2}{3}$  of  $3\frac{1}{2}$  and  $\frac{1}{2}$  of  $2\frac{1}{2}$ .

6. Add together 1'302, 3'2589 and 40'93. Multiply the sum by .00297 and divide the product by 90'09. (Decimals, not vulgar fractions, to be used in doing the work, otherwise no marks to be allowed.)

7. A farmer sold a load of hay at \$16.25

per ton; the whole weight of waggon and hay was 2875 lbs; the waggon alone was found to weigh 1083 lbs. How much did the farmer receive for his hay?

8. A. can run a mile in 5 minutes, B. can run it in 6 minutes. How many yards start should A. allow B. in order to make their chances equal?

9. Three men can dig a certain drain in 8 days. They work at it for 5 days, when one of them falls ill, and the other two finish the work in 5 days more. How much of the work did the first man do before he fell ill?

10. Find the interest on \$275.80 for 91 days at 7 per cent. per annum.

## DRAWING.

Twelve marks for each question.

1. Draw a cross from the following dictation:—Draw a square in dotted outline, and by dotted lines divide it into nine equal smaller squares. Divide each side of the innermost square into halves. In each corner square draw a diagonal with its side to the centre of the large square. From each end of each of these diagonals draw a straight line to the nearest point of division on the sides of the inner square.

2. Draw a right-line moulding from the following dictation:—Draw two horizontal lines four inches long and one inch apart. Divide the intervening space into squares and draw their diagonals. Divide each half diagonal into two equal parts and join the points of division, so as to form smaller squares on the same diagonals as the larger ones. Add a horizontal line above and another below.

3. Draw a wheel from the following dictation:—Draw a square and its diameters and diagonals, all in dotted outline, and inscribe in the square a circle in unbroken line. Divide the semi-diameters of the circle into quarters, and through the outer ends of the first and of the third quarters draw, in full line, circles concentric with the first drawn one. Draw full-lined the portions of the diameters and diagonals between the innermost and the middle circle.

4. Draw the outline of a cube.

5. Draw the outline of a pick-axe.

EAST MIDDLESEX PROMOTION  
EXAMINATION.

NOVEMBER, 1883.

FIRST, SECOND AND THIRD CLASSES.

*Continued from page 495.*

COMPOSITION.

*2nd to 3rd Class. Time, 1 hour.*

1. Change "saw," to "did—see—," in: "he saw a bear in the market." [3]
  2. Change "got," to "did not get," in: "William got his sum right." [3]
  3. Put "why—" instead of "to change his hat" in: "Arthur went back to change his hat." [3]
  4. Make four words out of any of the letters in "team." [5]
  5. Write a composition of four sentences about "The School." In the first tell what the school is built of; in the second tell whether the play-ground is large or small, and whether there are trees planted in it; in the third sentence tell how many desks are in the school-room; and in the last sentence tell whether you come to school regularly. [26]
- In No. 5, 2 for title of composition, and 6 for each sentence correctly written. Note writing, spelling, capitals, and punctuation.

COMPOSITION.

*3rd to 4th Class. Time, 2 hours.*

1. Change the following so as to use an apostrophe in the italicised parts: (a) He spared to *years of manhood*; (b) He would not come; (c) *I will* tell you a secret. [6.]
2. (a) Write a sentence in which you need to use this mark ?  
(b) Another using a comma. [6]
3. Write answers in complete sentences to the following questions:  
(a) How old will you be on your next birthday?  
(b) About how far from the school-house do you reside?  
(c) Which subject do you like best to study? [9]
4. State four cases in which capitals should be used. [8]

5. Write a letter as if to a cousin in Winnipeg: Topics:

The heavy rains and flood this summer.  
The crops in Middlesex.

Ask something about the Canada Pacific Railway.

Ask whether Manitoba is as pleasant to live in as Ontario. [30]

Write not less than eight, or more than sixteen lines in the letter.

3 marks for introduction, 3 for conclusion, 24 for composition, general neatness, etc.

GEOGRAPHY.

*3rd to 4th Class. Time, 2 hours.*

1. (a) Draw a map of London Township. [6]  
(b) Show on the map you have drawn where London Township is joined by Lobo, East Williams, McGillivray, Biddulph, Nissouri, Dorchester, Westminster, Delaware, London East, London City, and London West. [11]  
(c) Show where the River Thames runs by or through London Township, and where the L. H. & B. R. R. runs through it. [4]
2. Draw the River Detroit: mark Detroit, Windsor, and Amherstburg; mark the two railways crossing it; and the county east of it. [7]
3. Draw the East shore of Lake Huron; mark the counties; locate the county towns; mark the mouths of the Saugeen, Maitland, and Au Sauble. (3+3+3+3) [12]
4. Name the five counties crossed by a straight line drawn from Sarnia to Hamilton. [10]
5. Trace the course of the water from Lake Simcoe to Lake Ontario. [9]
6. Bound North America. [5]
7. Draw a line representing the West coast of South America; mark on the line the Western boundaries of the several countries, and write their names. [3] [6]
8. Where are the following cities located: Kingston, Montreal, Boston, San Francisco, Dublin, Berlin, Moscow, and Calcutta? [8]
9. What and where are, Vancouver, Panama, Amazon, Blanc, Sicily, and Baltic? [12]

10. Locate Welland Canal, Suez Canal, Canada Pacific Railway. [6]

11. Where are the stars in the day-time? What gives the moon its brightness? What causes an eclipse of the sun? [9]

12. Define lake, peninsula, desert; capital and republic. [15]

Count 120 marks a full paper.

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GRAMMAR.

*3rd to 4th Class. Time, 2½ hours.*

1. Analyze:

(a) The order was given to reduce sail.

(b) At the same moment he seized a light hen-coop.

(c) A shake of the head was the only reply.

(d) Did any one hear a cry?

(e) What's that floating on the water?

(f) The single word, "Hurrah!" burst from our throats with all the power of our lungs.

(g) To which a human form was seen to be clinging with the tenacity of a drowning man. [28]

[Three marks for correct division of sentence into noun-part and predicate; an additional mark for the correct sub-division of the noun-part.]

2. Parse all the words in sentences (c) and (d) except "the" and "a." [20]

3. Compose:

A sentence containing (a) A pronoun in the 3rd plural, objective.

Another containing (b) A noun in the possessive plural.

Another containing (c) A verb in the future tense.

Another containing (d) An adjective in the comparative degree.

Another containing (e) An adverb in the superlative degree. [20]

4. Define: plural number; neuter gender; relative pronoun; regular or weak verb. [12]

5. When is the comparative degree used? When the superlative? [3]

6. In the word "weighed,"

(a) How many syllables?

(b) How many letter sounds?

(c) Which letters are silent?

(d) Which letters are vowels?

(e) Which are consonants? [5]

7. Correct the following mistakes:

(a) The teacher learns us to add without counting. [2]

(b) I have came regular and punctual every day since holidays. [6]

(c) Did you lo-s a pencil? [2]

(d) I asked him for the lend of his knife. [2]

8 Correct, and give your reason:

(a) Me and Willie are cousins. [4]

(b) Albert spoke to Willie and I. [4]

(c) Is Jane and Mary the girls that brings the flowers. [8]

(d) Us four can carry the bench. [4]

[2 for correction, 2 for reason.] Total, 120 marks.

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DRAWING, HYGIENE AND TEMPERANCE.

*3rd to 4th Class. Time, 2 hours.*

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HYGIENE AND TEMPERANCE.

*Time, 1½ hours.*

1. (a) What difference is there between the air as it is inspired (breathed in) and as it is respired (breathed out)? [6]

(b) What produces the change? [6]

(c) What are some of the injurious effects of breathing your own breath over again or, as in the school-room, breathing the air that has come off other persons' lungs? [6]

(d) By what means can a sleeping-room be supplied with fresh air, particularly when it is occupied? [6]

2. Trace the changes undergone by the food and its progress from its entrance to the mouth until it supplies strength to the arm. [24]

Or, if you cannot answer the whole question, answer as many of these parts as you can:

(a) What changes take place in solid food before it reaches the stomach? [4]

(b) Trace food from the stomach to the heart. [4]

(c) After it enters the heart what must be done with it before it is fit to be sent into the arteries? [4]

(d) Where is the blood taken by the arteries? [4]

(e) What is the use of the veins? [2]

(f) How many cavities has the heart, and how is the blood distributed from each? [6]

3. (a) In what compounds or under what names may alcohol be obtained? (Mention four.) [2]

(b) Mention two uses of alcohol in chemistry or medicine. [4]

(c) What effect has alcohol on the red corpuscles of the blood? On the fibrine of the blood? What may be the results of the effects? [3]

(d) Why does the partaking of alcohol, notwithstanding the first sensation of warmth, leave the body less protected against cold? [4]

Or, show in what way the warmth felt after swallowing alcohol is allied to the "hot-ache" felt sometimes in one's fingers after snow-balling. [8]

DRAWING.

Time, 45 minutes.

1. Draw a right-angled triangle, having a vertical side 2 inches long, and a horizontal side 1 inch. [6]

2. Draw six capital letters having only vertical and horizontal lines; height 1 inch. [12]

3. Draw a chest or trunk, lid closed, mark key-hole and handle. (12 + 2 + 4) [18]

4. Dictation drawing:

(a) Draw two parallel lines, 4 inches long, and 1 inch apart. [3]

(b) Mark them off into four squares by drawing cross lines. [2]

(c) In the left-hand square draw the diagonals; bisect the sides and make another square by joining the points of bisection; the new square bisects the four semi-diagonals; make a third square by joining the bisections of the semi-diagonals. (2 + 4 + 4) [10]

(d) Repeat them in the other three original squares. [6]

S. S. No.

REPORT OF THE PROMOTION EXAMINATION, NOVEMBER, 1883.

One copy to be sent to the Inspector. One copy to be hung up in the school. One copy may be sent to each parent.

NAME	REMARKS.									
	Reading.	Spelling.	Writing.	Arithmetic.	Comp. Sta.	Geog. Phy.	Grammar.	Draw. R.	Hygiene and Temp.	Total
(Classes Separate)	Class III.	50	87	50	120	120	120	50	72	720
	Class IV	50	87	50	120	40				347
										360 for Prom. to IV.
										170 for Prom. to III.

The — pupils promoted to Part II. First Book, were

The — pupils promoted to Second Class were

I have tried fairly and honestly to conduct the Examination, and to examine and mark the pupils' papers with the above results.

TEACHER.

HOW TO TREAT BOOKS.

BY DUANE DOTY.

The suggestions and directions here offered relate entirely to the mechanical treatment of books. It is well known to parents and teachers that school books are so badly handled that they do not last half the time that they should do good service. Beyond an occasional suggestion that school books ought to be covered, teachers seldom give pupils any instruction in relation to the proper care of books. Soiled leaves, broken binding, "dogs' ears," gnawed covers, or covers perforated with pencils, or covered with worse than prehistoric inscriptions, or grotesque essays on the side of a tea chest, are common in schoolrooms. School libraries consisting of books of reference and valuable works in every department of learning are getting to be numerous. Pupils have access to the books of these libraries, and it is very necessary that the best possible care

should be taken of such books. We know of no better way to secure this care than by giving minute instructions as to the use of books, and having these instructions printed and pasted on the inside of the cover of every library book. Obedience to these directions should be insisted upon, and penalties for any neglect or carelessness enforced. The following summary of directions from experience has been found valuable, and which has been adopted for use in a number of libraries, is presented for any suggestive value it may have.

## DIRECTIONS.

1. Always handle books with the greatest care and delicacy, but never touch them with damp or soiled hands.
2. Always take a book from the shelf by the back, but never pull it from the shelf by the binding at the top.
3. Always place a large book upon a table before opening and consulting it, but never lean with elbows or arms upon the pages of an open book nor place anything upon it.
4. Always open a large book in the middle, pressing each half flat upon the table before turning the leaves, but never hold a book against the edge of a table.
5. Always open a book from the front, not from the ends or covers, but never crack and spoil the binding by opening it farther than to bring both sides of the cover into the same plane.
6. Always turn the leaves of a book rapidly from the top with the middle or fore-finger, but never by pushing them with the thumb or finger, wet or dry.
7. Always hold a small book in the left hand, the thumb and little finger upon the pages, and three fingers upon the back of the cover, and never sit by a stove while reading a book, for it warps the cover and dims the lettering.
8. Never write, make extracts, or take notes with pen or pencil upon paper laid upon the pages of an open book, or upon the cover of a library book.
9. Never place any pen or pencil marks upon the blank leaves or margins, nor turn down the corners of any leaves.
10. Always put a book right end up into its place in the bookcase, but never allow it to drop from the bookcase or consulting table to the floor.
11. Always keep books, when not in use, in neat rows on the shelves of the bookcases, the books of sets together, but never leave scraps of paper, pencils, or anything else, in any book.
12. Always use a light, soft cloth for wiping books, and a light, soft duster for dusting them, but never attempt to dry by a fire a book that has been wet, as it will blister the cover.
13. Always return a book the moment you have finished reading or consulting, so as not to deprive others of its use.
14. Always report at once any damage to a book, and also any typographical or other errors discovered in it.
15. General directions concerning books.— Never lean upon books in bookstores or libraries. Cover borrowed books. Never loan borrowed books, papers or magazines, nor leave them within the reach of small children. Promptly return borrowed books and magazines. Cut leaves with a paper cutter, but never with a sharp knife or a dull finger.

Pupils of grammar and high schools should be made familiar with some such rules, and libraries would gain much if their patrons and readers would commit to memory the points contained in the directions herewith given.

## SCHOOL COMPOSITIONS.

Few tasks in school life are more appalling to boys and girls than the weekly "composition" which they are required to hand to their teachers. As a rule, even advanced scholars would rather grapple with a dozen pages of Livy or Legendre than with that one poor blank sheet, which they must cover with their own facts and fancies.

A well-known American editor lately visited the school which he had left as a boy thirty years before. "It was 'composition day,'" he writes, "and as one essay after another was read, I could hardly persuade

myself that a day had passed, and that these were not my own classmates. The boys read the same stilted periods on 'The Fall of Rome,' 'The Triumphs of Genius,' 'Liberty,' and 'The Future of America;' and the girls overflowed with precisely the same sentiments about violets, and fairy dells, and crimson sunsets, and the lost Pleiad."

"Now," whispered the old dominie to the editor, "you shall hear the clever boy of the school. I anticipate a great career for this lad." The composition was on the Indian Problem, or Free Trade, or some other profound subject, on which it was impossible that a boy of thirteen or fourteen could have a theory or argument to advance, except those which he had heard from others. These were produced with a flood of high-sounding, irrelevant words. "The career," said the editor, "I would prophesy for such a boy would be that of an imitator, who will make his trade on the brain-capital of other men."

After this boy, a quiet, round-faced lad stepped on the platform and read a description of chickens. The lad had a poultry-yard of his own, and gave his observations on the habits, food, and marketable value of the breeds he knew. The little paper was full of useful facts, and showed a keen capacity for observation, and a dry humour. "There is the lad who has the stuff in him to make a man of weight," I said to the dominie.

Boys and girls should remember that while studying their text-books they are only the recipients of the thoughts of others, but in the school composition they should become producers of ideas. Let them, therefore, carefully avoid reproducing second-hand opinions or facts, and give an account of the simple realities of their every-day life and their own thoughts upon them. The poorest essay of this kind will call into action the original power of their brains as no other mental effort can do.—*Youth's Companion.*

## TEACHERS' ASSOCIATIONS.

HALDIMAND.—The regular semi-annual meeting was held in the Public School, Cayuga, on Friday and Saturday, the 9th and 10th Nov.

After the reading of the minutes, Mr. Wm. Egbert, Principal of Dunnville Public School, was unanimously chosen President, in room of A. Nugent, B.A., who has left the county.

Notice of motion was made by J. A. Murphy, seconded by R. C. Cheswright, "That in the opinion of the teachers of Haldimand, it is inexpedient, at the present time, to abolish the office of Minister of Education, and substitute therefor the office of Superintendent of Education." This motion was subsequently carried after some discussion.

"How to make Teachers' Associations more useful" was then introduced by the County Inspector. He suggested "that (1) the schools where the association was held should go on as usual for half a day and the whole association should be present, and criticise the good and bad features of what they saw, afterward; (2) that the teachers form themselves into a class in order to illustrate practically the teaching of some subject; (3) to have critics appointed to deal with the subjects, taken up; (4) that they read certain works between each meeting

and have the said works criticised by the association or certain members thereof; (5) that the teachers give criticisms of schools visited; (6) and the inspector do likewise; (7) that there should be a greater and more regular attendance of teachers; (8) who should take an active part in the work, and that (9) parents and trustees should be present in greater numbers, and (10) that teachers name some subject for discussion at subsequent meetings. Messrs. Hume, Cheswright, Moran, Elliot, Egbert, and Green, took an active part in discussing this paper.

The Vice-President, Miss Hiseler, then gave the opening address, in the absence of the President, Mr. Nugent, whom she complimented highly and deservedly, and then went on to speak of the high calling of the teacher, and the advancement made in methods of teaching within a few years. She threw out valuable hints as regards school government, and schoolroom decoration, and concluded by enumerating the advantages of the "Promotion Examinations" and the success of their introduction.

Mr. J. A. Murphy, Principal of the Cayuga Public School, then taught a class in literature, and his manner of teaching was discussed by Messrs. Cheswright, Elliot, Moses and Miss Harrison.

Mr. J. Elliot, of Caledonia High School, followed with a valuable and interesting paper on "Common Errors in Pronunciation." He referred to the difficulties of English pronunciation, and drew his illustrations from common mistakes made in ordinary conversation. Among errors noted were those (1) due to catch-ss or improper articulation, such as "in" for "ing" (2) suppressing vowel sounds as "histy" for "history;" and, (3) pronouncing silent letters, such as "t" in "of en." After referring at length to other errors he concluded by giving a list of miscellaneous words commonly mispronounced.

The Convention adjourned to meet again in the Court House, where a musical and literary entertainment was given in the evening, which was very largely attended by the members of the Convention and prominent citizens from different parts of the county. The programme was an extensive one, and consisted of choruses, songs, recitations, and readings. Among those who particularly pleased the audience were Messrs. R. Haddow, B.A., K. M. Hamilton, and J. McEchren, Mrs. Mitchell, Miss Bella Brown, Miss Isa Black, and Miss Flowers. The chief point of interest, however, to the large audience present, was the presentation to the county Inspector, Mr. Moses, of a beautiful gold watch, chain and seal, by the teachers of the county, as a slight token of their appreciation of his services. Mr. Moses made a suitable reply to the address, and referred among other things to the willingness of the people generally to carry out any suggestion in their power for the advancement of education.

On Saturday morning, Mr. Cheswright took up the subject of Fractions, so perplexing to young minds, and showed clearly how it could be made interesting and plain to them. It should be taught objectively by taking, for instance, an apple and cutting it in halves and quarters, and asking them the names of these pieces, etc. Let them do the work and always think they were doing it themselves. There was a tendency to abolish all rules, and make the pupil deduce the rule, but this could only be done to a limited extent. Altogether, the lesson was one of the best delivered in the county for a long time.

The Reader question then came up. The Committee appointed by the County Council, reported in favour of Gage's series. Report adopted.

Mr. Morgan took up the subject of the relation of trustees and parents to the school, and showed how one half the teaching power was wasted, because the trustees and parents threw nearly the whole burden on the teachers, did not visit either the school or the teacher; in the majority of cases had no personal acquaintance with him, and

only got a one-sided exaggerated idea of what was going on in the school, and made other suggestions of a practical nature.

Mr. L. A. Kennedy, B.A., principal Caledonia High School, gave a very practical lesson on "How to teach reading." He gave illustrations of good and bad reading. He discussed the correct position of the reader, and stated that the lesson should be on a familiar subject. Bad pronunciation should be corrected as it occurs.

A committee was then appointed to carry out a programme for the next meeting of the association, which will be held in Dunnville, due notice of which will be given. The committee consisted of Messrs. Kennedy, Moses, Hume, Caruthers, Alexander, Miss Davis and Miss Flowers.

Votes of thanks were tendered to the different parties who had read papers, delivered addresses, or taken part in the entertainment in the evening. The Association adjourned after singing the "National Anthem."

ELGIN.—The semi-annual meeting of the Elgin Teachers' Association held its opening session on Friday, Nov. 9th, at the Collegiate Institute, St. Mary's, with the President, Mr. Millar, in the chair. In the absence of the Secretary, Mr. C. F. Maxwell was appointed Secretary *pro tem*. A committee, consisting of Misses Kirkpatrick, Robinson and Axford, and Messrs. Quance, McLean and Sinclair, was named to bring in a report on the election of officers.

The regular programme was begun by a paper on the superannuation of Teachers, by Mr. W. Ellison. He took objection to the system on the following grounds: First, the compulsory nature on a certain class of teachers. Second, its accepting High School teachers. Third, the inadequateness of the remuneration. Fourth, not giving the family of a teacher or relatives compensation in case the teacher died before reaching a certain age. He suggested that the female teachers be included. Second, that High School teachers be included. Third, the present system of requiring a fee of \$4 per annum, be allotted according to the certificate or the salary received. Fourth, that better provision be made for the relatives of teachers. Fifth, that the remuneration be increased.

After some discussion it was resolved that in the opinion of the Association, the payment of the fee should be optional with all teachers.

Mr. A. F. Ames, B.A., of the Collegiate Institute, next followed with a paper on Euclid, showing in a clear and lucid manner his method of solving deductions.

## AFTERNOON SESSION.

Mr. Butler, B. Sc., County Inspector, took up the subject of Arithmetic. By reference to solution of entrance examination questions, he pointed out some of the mistakes which pupils made, and against which every teacher should guard his pupils. He stated that efforts should be made to get the pupils to take a practical view of the solution of problems. He thought that the unitary method was carried too far, and that it would be a gain of time to teach proportion which would thus shorten the work. He advised the teaching of mental arithmetic to a much greater extent than is done at present.

Mr. N. M. Campbell, Model School teacher, partly endorsed, partly differed from the views of Mr. Butler.

Mr. Butler, in supporting his views, said that a young man, who took a brilliant course in the Toronto University, told him that he gained marks over his fellow-pupils in Upper Canada College by his knowing proportion, while they did not, because he was enabled to thus shorten his work by knowing two methods. Therefore, Mr. Butler thought it should be taught.

Mr. McLean, City Inspector, first took up the subject of the Reading Books.

After a long discussion on the merits and defects of the various series, Mr. N. M. Campbell moved, seconded by Mr. Leitch, That we defer taking action in the matter of selecting a set of Readers, and ask the Department to withdraw one of the sets now authorized.

Mr. Butler moved an amendment, That we adjourn. Carried.

## SECOND DAY.

The reports of the Finance Committee, Librarian and the Committee on the Election of Officers occupied part of the morning session.

After discussion, it was moved by Mr. Ford, seconded by Mr. Campbell, That about \$50.00 be expended for library purposes. Carried.

It was moved and seconded, That the President appoint a committee of five to act in conjunction with the Treasurer and Librarian to make a selection of books for the library. Carried.

The committee consists of Messrs. N. M. Campbell, Young, Cottingham, Hammond, Quance, together with the Treasurer and Librarian.

It was moved by Mr. Campbell, seconded by Mr. Shepherd, That a vote of thanks be tendered to the entertainment committee, consisting of Mr. Butler and Misses Hickox, Parlee and Philp, for the excellent evening's programme. Carried.

The report of the committee on election of officers was now brought in. It advised the appointment of the following officers:—President, Mr. W. G. Shepherd; Vice-President, Mr. I. Cottingham; Cor. Sec., Mr. C. F. Maxwell; Rec. Sec., Mr. G. Littlejohn; Librarian, Thos. Leitch; Treasurer, Mr. Butler. The report was approved and adopted.

The President appointed the following Executive Committee:—Messrs. Gunne, Killachie, Mills, Campbell, Higley, Quance and McLean, and Misses Hickox, Watts, Ayerst, Rumbell, McCausland, Kirkpatrick and Robinson.

Mr. Hammond, Sparta, took up the subject of History. He said that a good way to make pupils take a dislike to history was to say to a class, "Your lesson for to-morrow will be the first two or three pages," and when they came to school next day stand them on the floor if they did not know it. The lesson should be explained beforehand, and in the lesson everything that bears on the subject should be introduced. He would not dwell in detail on the history of the early Saxon kings, with the exception of a prominent one like Alfred. He would deal more minutely with the Norman kings, lay stress on King John's reign, owing to the great Charter being gained in this reign. The rise and development of the Commons must be particularly explained, and the causes which tended to this be fully traced. The rights of kings to the throne should be clearly shown.

Discussion on the subject was engaged in by Messrs. Butler, Higley, Shepherd, Campbell and Killachie.

Mr. Mills, of New Sarum, next took up Written Work. He handled his subject well in regard to geography, dictation, arithmetic, composition and grammar. He advised that a great deal of composition be done, as it materially assists the pupil in his other work.

Messrs. Hammond, Gunne and Grout then discussed the subject. Mr. Orr, Wallacetown, next followed with some valuable remarks on dictation. He would read the dictation lesson himself, thus giving the pronunciation, and would illustrate the use of the words by a sentence. He thinks that the best plan to correct exercises is for the teacher to collect the books and correct the mistakes himself, owing to the tendency of pupils to overlook their own mistakes or for a friend to shelter them. An animated discussion followed by Messrs. Mills, Littlejohn and Gunne. The name of Mr. Rutherford was substituted for that of Mr. Gunne, by request of the latter, on the Executive Committee. The meeting then adjourned.

LANARK.—The semi-annual meeting of the Lanark Co. Teachers' Association was held in the Collegiate Institute building, on Friday and Saturday, 26th and 27th October, with a good attendance of teachers. After the President's opening address, Mr. J. F. Noonan read an essay on "Composition," in which he recommended the teaching of this subject even to pupils in the first reader. The essayist very clearly explained his method of teaching composition; his plan met with the warm approval of the teachers present. In the afternoon, Mr. T. O. Steel introduced the subject: "Teachers' Associations, County and Township." After dealing with the object of Teachers' Associations, Mr. Steele pointed out some of the defects in their working, and advocated the formation of Township Institutes. The opinions advanced were agreed with by all, and we shall probably see several of these associations formed during the coming year. Mr. N. Robertson, of the Perth Collegiate Institute, then followed with a lesson on "Punctuation," in which he fully explained the uses of the colon and the dash.

A lecture on "Canada, Her People and Teachers," by F. L. Michell, County Inspector, opened the evening session. The lecturer traced the progress of education from the earliest time to the present, and predicted a bright educational future for Ontario, whose system is yet merely on trial. He also dwelt strongly on the importance of the proper intellectual, physical, and moral education of the youth of the country. Mr. Goth, Reeve of Beckwith, and Edward Elliott, Esq., of this place, followed with a short address.

An admirably written paper, entitled "Change and Choice of Text Books," was then read by J. A. Clark, M.A., of Smith's Falls. Each book of the rival sets of Readers was taken up, selections given, the merits and defects pointed out. The discussion on this paper was resumed on Saturday morning, when Mr. Steele moved the following motion:—"That it is the opinion of this Association that the Royal Readers, possessing literary excellence of the highest order, are especially adapted for study by teachers, but that the Canadian Readers, as regards grading, simplicity of style, attractive typography, and amount of matter contained, are better adapted to our Public Schools; and we therefore recommend their adoption for use in the schools of the County of Lanark." This motion was carried; however, those members of the Association who had ex-

amined the "Royal Canadian" readers, which are issued by the "Canada Publishing Co.," and now before the Minister of Education for authorization, expressed themselves as preferring that series to either of the sets mentioned in the motion.

The question of Minister of Education vs. Chief Superintendent was next brought before the Association. The following motion was unanimously carried: "That it is undesirable to make any change in the present construction of the Education Department, by substituting a Chief Superintendent and Council of Public Instruction, for a Minister of Education; inasmuch as the greatest improvements in the working of our educational system have been made under the present administration."

On motion of Mr. McCarter each teacher was requested to send to the Secretary, before the end of the year, a list of such books as he would wish to be added to the association library.

"The Study of History in Schools" was then introduced to the Association in an able lecture by Mr. D. M. Ross of the Lanark Village P. S. He strongly condemned the system of teaching history pursued by many teachers, viz:—that of cramming the child with a mixture of dates and events regarded simply as events without any reference to cause and effect. He illustrated his method, by showing how he would teach the Hundred Years War, the Crusades, and other historical events. In the discussion which followed Mr. Burwash moved the following: That it is the opinion of this Association that English History cannot be properly taught in our Public and our High Schools, and at the same time the pupils be prepared to pass examinations on papers including all periods of the history; we would, therefore, recommend that suitable portions be selected for the Departmental Examinations." Carried.

The first subject taken up on Saturday afternoon was "Style in School Exercises," by S. S. Burwash, B.A., of Carleton Place. The many practical suggestions of this paper cannot fail to benefit all who heard it, especially the younger members of the profession.

A short practical address by the President on "Elementary Writing," a subject which is sadly neglected in many of our schools, closed the last session of the last day. The next meeting will be held in Almonte, at a time to be fixed by the Management Committee.—*Perth Expositor.*

## CONTEMPORARY LITERATURE.

THE ENGLISH GRAMMAR OF WILLIAM COBBETT, by Alfred Ayres. New York: D. Appleton & Co. 1884. 18mo. cloth. Price \$1.00].

MR. AYRES has done well after *The Orthopist* and *The Verbalist* to give us an edition of Cobbett's Grammar, a work which Bulwer-Lytton declared to be the only amusing grammar in the world, and which Hazlitt affirmed to be as interesting as a story-book. Cobbett's sturdy egotism, his intense love of fighting, his unflinching clearness, his rough sarcasm and forcible style are seen in every page of the book, and add much piquancy to a subject many boys and not a few teachers find even at this late day distasteful. As might be supposed the value of the book is not uniform. Even with the help of Mr. Ayres the etymological portion is quite out of date, though it must not be forgotten that it was designed for people who wish to learn to write and speak English without a master. The syntactical part is still excellent. The blunders of Dr. Johnson, of Dr. Watts, the Errors and Nonsense of a King's Speech, which Cobbett took such fierce delight in exposing, may still be of service to such lads as young James Paul Cobbett, for whose special benefit the letters and lessons were penned. The chapters on Putting Sentences Together. The Six Lessons, intended to prevent statesmen from using false syntax, are still delightful reading. Our modern Solons and unconscious rivals of Sir Boyle Roche might be none the worse for an occasional perusal of this dainty volume.

Mr. Ayres has with rather sparing hand pointed out some errors into which Cobbett himself fell, and has in particular made the book one long lesson on the correct use of *who*, *which*, and *that*. He has added a good index and in various ways rendered the famous old grammar more worthy of public favour. In its present shape, and notwithstanding all its faults and deficiencies, it is a

hundred times more helpful in teaching a boy to write and speak the English language with propriety than our authorized text-book. After reading Cobbett and observing the results of drill upon Mason, we are constrained to enquire how long the midsummer madness of drilling upon analysis and derivation, and gerund-grinding are to usurp the place of English in our schools. Far better for all practical purposes to go back to Cobbett at once.

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THE NEW GYMNASTICS FOR MEN, WOMEN AND CHILDREN, by Dio Lewis, A.M., M.D. Nineteenth Edition, revised and greatly enlarged. New York: Clarke Brothers.

HERE we have a manual of gymnastics embracing 286 pp. The old gymnasium, with its ponderous dumb-bells, its 100 lb. cannon shot, its trapeze and vaulting bars was, in the opinion of Dr. Lewis, defective. It presupposed the very muscular development and muscular activity, which it is the object of a gymnasium to call into being. "The new gymnastics are suited to all—old men, fat men, feeble men, young boys and females of all ages—the classes most needing physical training." Some of the advantages claimed for the new system are variety of movement, frequent change of exercise, graceful centrifugal motion as opposed to stiff centripetal, employment of *light* apparatus in place of *heavy*, and, lastly, the stimulating influence of music.

Time was when systematic physical training was entirely neglected in our schools. At the present day it finds a place in some, but not nearly all. Its importance can hardly be over-rated. The clubs, rubber-balls, bean-bags, dumb-bells, wands, rings, together with many as yet unheard-of agencies for the physical training of our children, will yet find a place in our schools as the

allies, not the rivals of grammar and dictionary. The "New Gymnastics" is an eminently practical treatise. The exercises are designed equally for the use of individuals and classes, and all the movements are so clearly explained that a special teacher of gymnastics is unnecessary.

Dr. Dio Lewis, Blaikie, and Watson are writers on physical culture, whose books should be read by all teachers.

**A CLASS-BOOK HISTORY OF ENGLAND.** Illustrated with numerous wood-cuts and historical maps. By the Rev. David Morris, B.A., London "Twenty-seventh Thousand. London: Longmans, Green & Co., 1883.

A GOOD school History of England is, as yet, a thing to be desired. We should be delighted to be able to say, after an examination of this, one of the latest compilations, that such a history has been written. That the materials for a good history are there we do not deny. The compiler has been most diligent in collecting matter—there is more in it than can be held by any head, great or small. His facts and dates are all put down in order, and are indisputable; but he has unfortunately forgotten or neg-

lected to infuse the breath of life. One page is the same as another in point of interest, and we look in vain for anything calculated to arouse enthusiasm, stimulate thought, or make the school-boy suppose that the kings of England were aught but names around which conveniently to group dates, facts, and bloody battles to be memorized. It is the same old school history with which we are all so familiar—a history which devotes twelve lines to the Magna Charta, and a whole page to Piers Gaveston and the details of the revolt of the Barons—a cram-book for examination purposes, with prominent names and dates in heavy type. In a work so evidently designed for purposes of reference the absence of all index is noteworthy.

Improvement we are glad to remark. The maps (a most important feature) are excellent, and far beyond what one usually finds in school histories. Numerous wood-cuts illustrate the manners, dress, customs, and architecture of the various periods.

The compilation is a complete one, and we have little doubt that it could be made useful by teachers as a note-book from which to select, or upon which they might base the real teaching of history.

## EDITORIAL NOTES.

OUR readers will not fail, we trust, to read the article reproduced from our contemporary *The Dominion Churchman*. It represents a type of thought that does not often come to the surface now-a-days. It will afford matter for reflection.

WE cannot refrain from expressing our sympathy with Principal Spotton, of Barrie Collegiate Institute, in the annoyance he must feel in having the good name of his school besmirched by the connection of some of its pupils with the recent examination frauds. His professional brethren and the public will, however, require no assurance that the taint is confined to a few thought-

less lads, and with us regret that it is in the power of a few weak youths to wound the reputation of gentlemen of honour and schools of repute.

MR. JOHN DEARNESS, Public School Inspector of East Middlesex, has been appointed a member of the Central Committee in lieu of Mr. Alfred Baker, M.A., Registrar of Toronto University, whose term of office had expired. Mr. Dearness has shown himself a capable and painstaking Inspector, and he will bring to the Committee much sagacity and practical knowledge of educational affairs. We fear, however, that his connection with a publishing house, in the preparation

of one of the series of Readers now awaiting authorization, will be regarded by some as an objection to the appointment. Mr. Dearness, we doubt not, will strive to act with perfect fairness in every matter concerning his trade relations, but in such circumstances, he can hardly hope to escape adverse criticism. He has wisely weakened the force of any such criticism by refusing to take his seat at the Central Board, while the Reader question is under discussion. The public, we think, need be under no apprehensions that possessed of such a spirit as this act indicates, he will conspire against the public good.

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#### THE READER QUESTION.

THE new Minister of Education for Ontario, the Honourable G. W. Ross, has signalled his entry upon office by an expressed determination to solve the Reader problem by having only one series, and vesting the copyright of it in the Education Department. This common sense course must commend itself to the approval not only of the teaching profession, but also of the public, and we hope that the Minister, in spite of the very great difficulties that beset the project, will be able at an early day to announce the perfect success of his scheme. In that event the profession and the public will owe him no small debt of gratitude for delivering them from the exhibition of unseemly trade rivalries that have for the past year arrayed the schools in hostile factions, led by mercenary strategists and exposed the people to a licensed system of plundering, organized and maintained by grasping monopolists.

THE MONTHLY has always taken the position that in order to prevent monopoly in school books the Education Office should hold the copyright, that only one series of Readers should be authorized in the Province, and that they should be as cheap as possible; and it will continue to urge measures at once so reasonable in themselves and so salutary to all engaged in the work of education. It has often been our disagreeable duty to animadvert upon the action of the Depart-

ment in authorizing certain text-books, its tacit consent to the foisting by interested parties of unlicensed manuals upon the schools, and in permitting the flagrant violation of the regulations by officials acting as the agents of publishers. We are not disposed now to exult over the consequences of the neglect of disinterested counsel, but the rather to rejoice that an effort is being made to correct the blunders of the past, and to rescue our school system from the quagmire into which it had fallen. We are glad to think that the new Minister has grasped the situation, and has given opportune proof of the value of practical acquaintance with educational affairs. If he will succeed in leading the Education Department out of the Serbonian Bog he will deserve the applause of the whole country, and he will have the support of all good men in the profession. We trust, however, that in his anxiety to touch *terra firma* he will not mistake an *ignis fatuus* for a friendly light.

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#### SCHOOL ENTERTAINMENTS.

WE are glad to learn that many of the Public Schools, High Schools, and Collegiate Institutes terminated the year's work with musical and literary entertainments. In some of the schools the programme was of an ambitious character, and affords most gratifying evidence of the development of culture and good taste throughout the country. These reunions in addition to affording opportunities for the discovery of latent talents and the cultivation of gifts too often neglected in the schoolroom, furnish grateful inter-ruption to the monotony of school life. They establish new relationships between teachers and pupils, and bring the school into agreeable contact with the outer world. They create a bond of sympathy with the school which the right and necessary to support it by tax-paying seldom occasion. Reunions are often oases of joy amid intellectual saharas. Much labour is required to reach them, but it is labour that, if well directed, pays a hundredfold.

## TRUSTEE ELECTIONS.

We regret to notice that the public apathy with regard to the appointment of School Trustees is even more apparent this year than usual. The want of interest exhibited by the ratepayers in filling important public trusts is deplorable and at the same time inexplicable on any theory gratifying to the lover of free institutions. No one conversant with the composition of our School Boards, even in large centres of population, can be satisfied with the working of the present *laissez-faire* system. Too seldom do we find the right men in the right place. Competent, liberal, and cultivated men everywhere shrink from seeking a position which must be obtained by a contest at the polls, where niggardliness counts for more than knowledge, and pushing presumption elbows out modest merit. Too often also the politician sees the goal of his ambition through the avenue of the trustee board, and makes the board room the area for vaunting his economy, for playing the petty tyrant, for thwarting the plans of the liberal, for making a point in favour of his shallow creed, and for playing into the hands of his political allies. The mean man has fine opportunities for exercising his meanness in the school board, and he is generally found there in full activity. Such a character should be unable to get entrance there; and budding politicians should be taught to look elsewhere for the means of preferment. The present system has had a fair trial and has failed miserably. Educationists desire a change, and we hope the legislature will set about discovering a remedy.

## A GRIEVANCE.

THE return of the Departmental Examinations brings with it a crop a little more bountiful this year than usual of complaints of ill-advised Questions, and the lack of harmony and congruity in the papers set for the various standards. The climax of absurdity thus far seems to have been reached in the grammar paper set at the late Entrance Examination for the High Schools. The pas-

sage for analysis and parsing is said to have floored the candidates, puzzled the masters, taxed the ingenuity of a High School Inspector himself, and forced the confession from the editor of one of the metropolitan dailies that in its present shape the passage is inexplicable. Mr. Puzzle must surely be satisfied with such a triumph. But there are many other people of far more importance than Mr. Puzzle, who are not satisfied, who are in fact very indignant, and who regard the satisfaction of Mr. Puzzle as more or less of a public calamity. The periodic recurrence of his vagaries and absurdities is, they think, a source of annoyance and of much positive injury to the schools; and they aver that in future Mr. Puzzle should be prevented from setting papers. Certainly such a paper as that before us proves carelessness, if not incapacity, somewhere.

Since the custom of placing the examiner's name upon the paper has been discontinued by the Department, it has been impossible accurately to apportion the blame for ignorance and carelessness in the matter of setting questions. We would venture to suggest to the Minister that a good workman need not be ashamed of his work, and that anonymity in examination papers is regarded amongst scholars as an evident fear of criticism. He will, we hope, restore the old method, and thus in a large measure secure proper care in the preparation of the papers, or at least the exposure of incompetency and neglect.

## THE TEACHER AND THE INCOME TAX.

A VALUED correspondent writes to us respecting the unfair burden that is imposed upon teachers by the income tax, and urges us to lend the influence of THE MONTHLY to assist in the abolition of what he regards as a hateful impost. He urges that when the teacher on a small salary pays taxes upon his house, that it is unfair to tax him for his income also. He sees no good reason why the clergy, the judiciary, and the members of the civil service should be exempt, and teachers be compelled to pay the uttermost

farthing. We sympathize with our correspondent, and agree with him that the law in itself seems harsh, and that the administration of it by the average assessor is a mere mockery of justice. Either the law should be abrogated or the administration of it should be made uniform and equitable. There should be no tax exemptions. Teachers as a rule understand this, and of all men in the community they are perhaps the most ready to support the burdens of the state, because few understand better than they what citizenship means, and the duties which it imposes. But it is grossly unfair that the teacher, a citizen whose services to the state are invaluable, and whose remuneration is often meagre and grudging, should be compelled to pay a burdensome tax, when his neighbour, whose services to the state are but slight, but whose ability to pay is great, is allowed to escape. Such glaring inequalities should be remedied. The teaching profession deserves better of the state than to be handicapped in the struggle for a competency. We commend the subject of the Income Tax and the administration of the law respecting it to the notice of the Minister of Education. He will earn the gratitude of many hard-worked and ill-paid public servants if he will rectify a grievous abuse.

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#### EXAMINATION FRAUDS.

THE recent official investigation into the examination frauds in the County of Simcoe, discloses a system of corrupt practices there that we would fain hope has no parallel in other parts of the Province. It comes out in the enquiry that the Examination Papers for the Entrance and Intermediate had been surreptitiously obtained for 1879, 1880 and 1881, and circulated widely amongst Candidates. It would appear from this enquiry and other investigations held not long since in the same county that fraudulent practices at examinations have been rife for many years, and that, as one witness alleged, it would be necessary to go back to 1875 to ascertain the full extent of the mischief.

The whole affair is most humiliating to the

profession, and most distressing to all who have the well-being of our school system at heart. As the matter is still *sub judice*, we shall offer no remark upon the conduct of those who are implicated, or state what punishment in our opinion should be meted out to their wrong doing. It is obvious, however, to all versed in educational affairs, that "The Intermediate" and "Payment by Results" are primarily responsible for many of our school scandals. It is none the less clear that the action of the Department in habitually condoning fraudulent practices at examinations and other violations of school law, or visiting with merely nominal punishment grave wrong-doing, has been a fruitful source of professional misconduct. The public conscience in questions involving school examinations has, we fear, become quite indurated, and the moral sense of the youth blunted by the Departmental treatment of well established cases of fraud and official turpitude. It is high time for the Education Office to abandon a system prolific of evil and of damage to the school system; and if it is determined not to punish wrong-doing, to remove as far as possible temptation from those who succumb upon the first solicitation. Else, if our system of multiplied examinations is to be continued, it will be impossible for honest men, constrained by their professional duties to have relations with rogues, to save themselves and their schools from the breath of slander.

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#### THE UNIVERSITY QUESTION.

SINCE our last issue the question of the desirability of further State aid to the Provincial University, has been under discussion. The metropolitan and local press has teemed with articles and communications that leave little more to be said upon the subject. To a very large extent the same positions as were taken by the combatants upon the University question twenty years ago, have been taken now, and the battle is being fought out by some battalions at least along precisely the same lines. As the smoke

clears away it is easy to see that the issue of the struggle will be precisely the same as before, the strengthening and development of a national system of education based upon Christian principles, but entirely independent of denominational control. It is becoming evident from the discussion that the people are becoming more and more pronounced in favour of leaving secular education to the State and the teaching of dogma to the churches. There are not wanting signs, too, that the heads of at least one of the more prominent denominational Universities look with favour upon this division of educational work, and are prepared at the proper time to discuss a federation of the colleges with one University at the head. To secure this desirable end all engaged in the work of the secondary schools should lend their energies. The Provincial University is the keystone of our educational system, and if that be weakened

or destroyed the whole fabric may in time tumble to pieces. Anything that will strengthen and give it permanence must give strength and permanence to the Public and High School System. But it is not impossible, we hope, so to modify it and change its present relations as to bring within its pale all the energies of existing colleges, and at the same time to conserve for them a large measure of their autonomy. The difficulties in the way of doing this are, we think, unduly exaggerated, and would disappear if calmly and frankly considered in a conference of those more immediately interested. A Royal Commission might do much to elucidate the question and reveal community of views that are not yet quite apparent. Meantime we commend to the attention of our readers the views of Dr. Goldwin Smith upon the University Question as reproduced in our *Contemporary Opinion*.

## CONTEMPORARY OPINION ON EDUCATIONAL TOPICS.

### THE CHURCH AND SCHOOL TEACHERS.

*Dominion Churchman, December 13th, 1883.*

[COMMUNICATED.]

In one of your contemporaries the immense amount of good that can be accomplished by a State-paid secular teacher, if a good Churchman, is clearly shown. The editor goes on to say: "The clergy in many places find the teacher or teachers of the Public Schools the main-stay of the Baptists, Methodists or Presbyterians, and perhaps the great influence against which they have to contend; while they find it impossible, even where the Church population overpowers all others, and where no opposition exists, to secure a Church teacher, simply because they are so few in number in the profession."

What is true of Nova Scotia, and probably New Brunswick is abundantly true of Ontario. Leaving out the case of primary education for the reason given below, and considering that most important branch, secondary or High School education, it is worth while enquiring how many masters of Collegiate

Institutes and High Schools give the weight of their talents, their influence and their authority as far as possible to the Church. The inquiry is a difficult one, because since there are no statistics published relative to the "Credo" of either Public or High School teachers, one must be guided wholly by his own observation and experience. If difficult, however, in the case of the High School teachers, it is doubly difficult, nay, almost impossible, in the case of the Public School instructor; and therefore, important as the latter is, he must be excluded from the inquiry. The following facts show what the writer has done by way of a confessedly incomplete and inadequate solution of the question.

1. The ratio of the Church population to the whole population is 363,539 to 1,923,228 (statistics of census, 1881) or nearly one to five. The representation among the schools should in fairness be in this proportion.

2. The Collegiate Institutes, to the best of the writer's knowledge, are thus officered; and standing in advance of the High Schools, and built in what may be fairly called centres of wealth and culture, certainly deserve notice first. For a certain reason the "Credo" of

the assistant and departmental masters is not considered in detail.

Name of place.	Creed of Principal.	Church assistants.
St. Thomas.	Methodist.	None (%)
London.	Anglican.	None (%)
St. Mary's.	Baptist.	None.
Prantford.	Presbyterian.	None (%)
Galt.	Presbyterian.	None.
Guelph.	Presbyc.ian.	None.
Collingwood.	Methodist.	None.
Barrie.	Doubtful.	None.
Toronto.	Presbyterian.	None.
St. Catharines.	Presbyc.ian.	None.
Hamilton.	Presbyterian.	None.
Whitby.	Doubtful.	Doubtful.
Peterboro'	Anglican.	Doubtful.
Cobourg.	Meth. dist.	None.
Kingston.	Presbyterian.	Doubtful.
Ottawa.	Doubtful.	Doubtful.

Regarding assistant and departmental masters it may be stated (1) that they are, in too many cases, beardless undergraduates or graduates of Toronto University, of no settled "Credo," and of no profession in life, making teaching a stepping stone to something higher, mere birds of passage; (2) that all the better departmental positions are, to the best of the writer's knowledge, filled by Presbyterians or Methodists, preference being given to the former.

If the High Schools be considered, it will be found that on the main line of the Grand Trunk, between Sarnia and Lancaster, there are out of twenty-four High Schools four with an Anglican Principal, unless indeed some recent changes have been made; on the Great Western Branch with its branches, out of thirty-three there are only five; on other branches of the Grand Trunk in the western peninsula, none; on the Canada Pacific (Toronto Grey and Bruce) none.

3. Of these few who have Churchmen for principals, a more difficult matter is to decide who are active, vigorous, living Churchmen, who are merely indifferent and lazy, and who are positively injurious, joining hands with every "one-horse" sect against her, while decrying every attempt at true Church life as either formalism or hypocrisy, selling their birthright, body and soul to dissent, and "more Plymouthistic than the Plymouth Brethren themselves."

How much the utter neglect of the fact, the stupendous fact, that the secondary, the life education of the youth of the country is in the hands of the dissenters—how much this has contributed to retard the growth of the Church of England, remains to be seen in the future. Does not a heavy responsibility rest upon the members of the Church to see that the ranks of the educational profession be recruited from her? Why should the best positions be filled by gentlemen who, no matter how well qualified mentally, are by their "Credo" in honour bound to be at

least hostile to the Church? The teaching of every earnest, thinking man, no matter how careful he may be, will inevitably be leavened by his religion, especially in the subjects of English history and English literature. And if he be a successful and therefore popular teacher, much the more will his views be adopted. In one case the writer knows that an appointment as mathematical master was made, subject to the stipulation of the Principal, "that he should in no case be called upon to teach either English literature or history, even in the absence of the proper teacher," the reason assigned being the applicant's Churchmanship, not any incompetency. Surely next to the blessing of Separate Schools, wherein the youth of our country may be taught the doctrines of our Church side by side with secular literature and science, the youth of our Church might hasten to fill, next to the office of the priesthood, the most important and onerous profession of secular education, especially when they can thus give both directly and indirectly their work to the Church, and thus help to elevate her from the position of third in our Province to her former proud standing and prestige.

#### UNIVERSITY CONSOLIDATION.

UNIVERSITY Consolidation is not so dead but that it may be worth while once more to state definitely what is proposed under that name. What is proposed, as the best plan, is that the denominational or local colleges should come to Toronto, and there, with University College, be federated under a common University to be called the University of Ontario. The University would institute all the examinations and confer all the degrees and honours. Each of the colleges would, like the colleges at Oxford and Cambridge, have its own domestic government, hold its own estates, and maintain whatever system it pleased of religious instruction and moral discipline within its own walls. The Professoriate of the University would conduct the higher instruction, while the mere rudimentary instruction would be conducted within each College by Tutors or College Professors, to whom would also be assigned the individual superintendence of the student. The University Professoriate would be made up of that of University College, and those of the other colleges combined, the means of maintaining the College Tutoriate being in each case reserved. A fresh arrangement for the appointment of Professors would of course be necessary, and if some variety in the modes of appointment were introduced,

this would not be a loss, but rather a gain. A change would also be necessary in the composition of the Senate. Graduates of all the federated Colleges alike would at once take rank, according to their seniority, as graduates of the University of Toronto.

This is the best plan, nor does its realization present to the minds of those who are accustomed to dealing with these matters, any insuperable difficulty, though there would be need of temper in the negotiations, and of care in organizing the system. Another plan is that the Colleges, remaining where they now are, and each undertaking as at present the whole of the instruction,

shall enter into federal union for the purposes of examination and graduation. This would be a gain so far as it went: it would secure the effectiveness of the examinations, and restore the value of degrees. But it would not give us a University worthy of the name; and the difficulty of working the system amidst the jealousies which would arise about the appointment of examiners, the choice of subjects for examination, and the regulation of the standard, which the stronger colleges would be always wanting to raise and the weaker to lower, might prove greater than at first sight may be supposed.—*Bystander, in The Week.*

## EDUCATIONAL INTELLIGENCE.

MR. ANDREW STEVENSON, B.A., late of Pickering College, succeeds Mr. Thompson as Commercial Master of the Upper Canada College.

MR. ARTHUR, B.A., Modern Language Master, Whitby Collegiate Institute, has been appointed to a similar position at St. Mary's Collegiate Institute.

IN Port Perry High School, Mr. Stone of Cannington becomes Mathematical Master, and Mr. F. O. Paige, formerly of Vankleek Hill and Strathroy, is English Master.

MR. ORR, B.A., late Mathematical Master, Whitby Collegiate Institute, now takes the Modern Language work of that school, and Mr. E. V. Carson, B.A., Trinity, takes the Mathematics.

MR. W. R. MILLER, Principal of Goderich Model School has resigned his position to accept an Insurance Agency. Mr. A. Embury, of Brockville, has been appointed to succeed him.

THE Stirling Public School has now a new staff of teachers, all the former staff having resigned. The teachers now in charge are Mr. Wallis (recently of Brussels, Ont.), Principal, Mr. Walker, Miss Ryan, and Miss Smith.

IN the County Model School, at Madoc, Hastings County, there were during the last session nineteen students in training. Of

these nine failed, two received conditional certificates, and the remainder were successful.

MR. J. E. WETHERELL, M.A., Head Master of St. Mary's Collegiate Institute has been appointed Head Master of Strathroy High School at a higher salary. Mr. I. M. Levan, B.A., Modern Language Master, has been promoted to fill his place in St. Mary's.

OWING to the resignation of Mr. Geo. Kirk, the Board of Education, Cobourg, has engaged Mr. McDiarmid, formerly of Morrisburg, as Head Master of the County Model School. Mr. Kirk has become one of the ever-increasing army of ex-teachers, and is now a merchant at Port Hope.

THE Minister of Education has informed the legislative committee of the Ontario Teachers' Association that it is his intention to take immediate action to introduce Bible reading into the schools. It is proposed to select passages from the Scriptures, one for each day in the year, and a circular containing these will be sent to each teacher in the Province.

AT the first meeting of the Belleville Board of Education, Mr. Wm. Johnson, Inspector of Weights and Measures, was elected chairman. In his inaugural address, he spoke strongly in favour of a Chief Super-

intendent instead of a Minister of Education, and in praise of the determination of the Minister of Education to have but one series of Readers for Ontario.

THE Council of the Ontario School of Art have decided that twelve scholarships be granted annually to pupils of the Public Schools of Ontario, and six scholarships to the pupils of the High Schools or Collegiate Institutes of the Province, entitling them to free tuition for three years in the Ontario Art School. The pupils will have to pass the examinations prescribed by the Council of the College.

MR. A. DEWAR, Inspector of North Huron, has been compelled by severe and continued illness, to resign his position. His place has been filled by the appointment of Mr. D. M. Malloch, Principal of the Clinton Model School. Mr. Malloch has in turn been succeeded by Mr. W. R. Lough, late assistant in Clinton High School. Mr. H. S. McLean, late Principal of the Lucknow school takes Mr. Lough's place in Clinton.

MR. W. MCBRIDE, M.A., Head Master of Richmond Hill High School, has been appointed Head Master of Stratford High School, in place of Mr. C. J. McGregor, M.A., who retires from the position and profession, after nearly thirty years service. Mr. McBride's place in Richmond Hill has been filled by the appointment of his brother, Mr. John McBride, B.A., Head Master of Port Rowan High School; and he, in turn, has been succeeded in the latter school by his former assistant Mr. A. G. McKay, B.A.

AN investigation into certain alleged examination frauds in the County of Simcoe,

was held at Barrie by Dr. Hodgins, the Deputy Minister of Education, on the 2nd and 3rd inst. From the evidence as reported, we find that the examination papers for teachers' certificates, and the Intermediate have been for years surreptitiously obtained from Inspector Morgan's office, and bought and sold by interested parties.

MRS. CULLEN, for the past seventeen years head mistress of the girls' department of the Ontario Model School, and Miss Hunt, teacher of the third division of the same department, have been obliged to resign their positions as they have contracted consumption. Miss Scott, of the Ottawa Young Ladies' College, will take Mrs. Cullen's place, and it is thought that Miss Meehan, who has been Miss Hunt's substitute for some time, will receive her position.

THE examiners appointed in the various faculties for the current academic year in Toronto University are as follows:—Law—J. F. Smith, LL.B., and A. H. Marsh, LL.B. Medicine—Drs. Sheard, Eccles, Fraser, Aikins, Cascaden, O'Reilly, and Conventon. Medicine and Arts—Chemistry, Dr. Ellis; Biology, H. Montgomery, B.A. Arts—Classics: W. Dale, M.A., A. Carruthers, M.A., and G. H. Robinson, M.A. Mathematics and Physics: Edgar Frisby, M.A., F. Wright, M.A., and W. J. Loudon, M.A. English and History: E. B. Brown, B.A., and Dr. Keys, B.A. Modern Languages; J. L. McDougall, M.A., Herr Von Pirch, and D. R. Keys, B.A. Mental and Moral science: J. W. A. Stewart, M.A., Father Teefy, and R. Y. Thompson, M.A. Oriental Languages: F. R. Beattie. Meteorology, G. F. Kingston, M.A.

## TO OUR READERS.

1. Matters connected with the literary management of *THE MONTHLY* should be addressed to The Editor, P. O. Box 2675. Subscriptions and communications of a business nature should go to The Treasurer, Mr. Samuel McAllister, 59 Maitland Street, Toronto.

2. The Magazine will be published not later than the 20th of each month. Subscribers desiring a change in their address will please send both the old and the new address to Mr. McAllister not later than the 15th of the month. Subscribers failing to receive the magazine after the 25th of each month, should communicate at once with him.

3. The Editor will be glad to receive school and college news, notices of meetings, and concise accounts of conventions.

4. Correspondence on all questions relating to education is solicited. No notice will be taken of anonymous communications.

5. Subscription, \$1.50 per annum, post paid. Club rates—Five copies per year at \$1.25 each; ten copies at \$1; twenty copies at 85 cents, net, post paid. Send money by registered letter or P.O. order. Be careful as to the address. Letters intended for us sometimes go elsewhere, and are not recovered without delay and annoyance.

6. The publishers are desirous of obtaining copies of *THE MONTHLY* for the years 1879 and 1880. Any one returning the vols. of these years may obtain complete vols. of 1882 and 1883, bound in paper. Persons having copies of 1879 and 1880, or portions of them, to dispose of will please communicate with Mr. McAllister.

7. Circulars respecting *THE MONTHLY* may be had on application to the Publishers.

8. We have several important changes and improvements in contemplation, designed to render *THE MONTHLY* more interesting and valuable to its patrons. Amongst other things we promise more attention to the work of the Inspector and the Public School Teacher. We begin a News Column with the January number. Natural Science also will receive special attention.

We are again compelled to hold over much interesting matter.

We have to thank Messrs. Copp, Clark & Co. for a copy of their invaluable Canadian Almanac for 1884. It is in every respect a most useful and interesting publication.

We are in receipt of a number of school announcements for which the senders have our thanks. The school calendars are interesting and give much valuable information of a local character.

*Grip* of last week depicts the Minister of Education and the Premier on a toboggan coming down a steep incline, across which lies the "Reader's log." "Will they get over it" is the legend. Time will tell.

*The Artist* (a fortnightly, devoted to painting, sculpture, music and the drama, Boston, Mass., \$2.00 a year) is a bright, gossipy, clever serial of much practical use to art students, amateurs and the dilettanti. It has occasionally a very good etching.

We are indebted to Mr. Commissioner Eaton, of the Washington Bureau of Education for a number of valuable reports upon educational topics. We hope to give an extended notice of them at an early date.

We regret the demise of our contemporary, *The Canadian Illustrated News* of Montreal. For thirteen years it made a gallant struggle for existence,

but it never paid the publishers. It filled a place of no mean rank in our literature, and deserved a better fate. The ascent for Canadian literature is very steep.

*The American Educational Year Book and University Catalogue* (Vol. V., 1883) published by C. H. Evans & Co., St. Louis, contains descriptions of all the colleges, seminaries, academies; normal, commercial, law, theological and other schools in the United States, with lists of superintendents, educational periodicals, and a great variety of other information indispensable to every one who wishes to be well acquainted with the schools and school systems of our neighbours across the lines.

The latest issue of *The Humboldt Library* [J. Fitzgerald, 20 Lafayette Place, New York: 10 teachers \$1.00 a year] is No. 51. "Money and the Mechanism of Exchange," by the late W. S. Jevons, M.A., F.R.S. We hope many teachers will find time to read this treatise. Mathematical masters will find it very helpful in dealing with certain parts of commercial arithmetic. It would not be amiss if every bank director, new and old, were compelled to pass a satisfactory examination upon this book before he was entrusted with the handling of another's money.

*Vick's Floral Guide* for 1884, [James Vick, Rochester, N.Y.], itself a beautiful annual, is a welcome guest to the man who cares for cultivating flowers, content to breath his native air in his own ground. Although the botanist calls most "flowers" monstrosities, the young student will find in this elegant and beautifully illustrated catalogue some help in distinguishing plants. He may also learn the appearance of the delectable marjoram and lavender, and may render himself able to pluck the never-to-be-forgotten caraway, hoarhound and savo'y without risk of blundering into catnip, hyssop and wormwood.

In our October number, we mentioned a number of our educational exchanges in which we thought our readers might become interested. We propose from time to time to give such further information respecting them as may enable those in quest of school journal literature to make a satisfactory selection. We begin with *The Journal of Education*, Boston, a weekly publication, \$3.00 a year; in advance \$2.50. It has now reached its nineteenth volume. It is a very able school journal and always contains the pith of American thought upon educational topics. *The School Bulletin of Syracuse N. Y.*, monthly, \$1.00 a year, aims at giving the school thought, opinion and news of New York State. It takes note of current events. Its selections are numerous and generally very good. *The Teacher* (Philadelphia, monthly, 50 cents a year) is more or less of a trade organ, for Messrs. Eldridge & Brother. It is beautifully printed and altogether inviting. It is also largely made up of cuttings, but the original articles are often quite valuable. Its recent platform was truly admirable. *The American Journal of Education*, St. Louis, monthly, \$1.00 a year, is always full of news about schools in Arkansas, Alabama, Georgia, Kansas, Louisiana and neighbouring states. Its special boast is that it "has secured an increase of wages to teachers in Missouri, of nearly \$20 a year." It thinks this is better than "wasting its time and space in parsing intricate sentences or solving difficult problems in mathematics or puffing individual teachers." *The Central School Journal*, Keokuk, Iowa, monthly 75 cents a year, has a very large circulation in the west. It is now in its seventh year, and has recently been enlarged and improved. It advocates the introduction of manual labour into the Public Schools as an essential means to child-training. All these journals are devoted to the theory and practice of teaching. They are eminently practical and confine themselves chiefly to Public School work. They are all in the small newspaper form.