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The Canada School Journal

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CANADA SCHOOL JOURNAL HAS RECEIVED

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

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

DOMINION LEGISLATION FOR THE YOUNG.

Among the few measures of a purely benevolent nature before the House of Commons, two relating to children, young persons and women, deserve notice. The first, introduced by Mr. Bergin, M.P., is an elaborate bill of 75 sections, with corresponding schedules, designed "to regulate the employment of children, young persons and women in the workshops, mills and factories of the Dominion of Canada." The first part of the bill regulates hours of labour. Those for children must be only for the first half of each day, or for the whole of alternate days; those for young persons and women shall be from 6.30 a.m. to 6.30 p.m., less two periods of one hour each allowed for meals and rest. Saturday is to be a half day. Where no children or young people are employed the hours for women shall be from 6.30 a.m. to 9 p.m. except on Saturday, when they shall be from 6.30 a.m. until 4 p.m. The time allowed for meals and rest to be four hours and a-half, and on Saturdays two hours. The four usual holidays, and eight half-days in the year, are to be allowed. Provision is made for improved ventilation, drainage, light and air, and treatment in case of infectious disease, as directed by a medical inspector of factories and mills. Precautions are also prescribed in regard to cleaning machinery while in motion, the fencing of fly and water wheels, vats, etc., and the fixing of grindstones securely. The provisions in regard to the attendance of factory children at school are as follows:—

"A. Every child employed in any factory or workshop shall attend the public or common school nearest the residence of such child, unless the parent or guardian of such child shall be a supporter of a separate school, when, and in such case, the child shall attend the separate school of which the parent or guardian is a supporter, as follows:

"1. Every child, when employed in a morning or afternoon set, shall, in every week during any part of which he is so employed, attend on each work day for at least one attendance; and

"2. Every child, when employed on the alternate day system, shall, on each work day preceding such day of employment, attend for at least two attendances:

"3. An attendance shall mean the morning or afternoon period of school hours as fixed by the laws of the Province in which the factory or workshop is situate:

"Provided that

"(a) No child shall be required to attend school on Saturday, or on any holiday or half holiday allowed under this Act in the factory or workshop in which the child is employed:

"(b) A child who has not in any week attended school for all the attendances required by this section shall not be employed in the following week until he has attended school for the deficient number of attendances, unless his non-attendance has been caused by sickness or other unavoidable cause certified by the school teacher.

"B. After the passing of this Act the owner, manager, superintendent, secretary, overseer, or person in charge of every mill or factory shall, before employing any child therein, obtain from a school teacher a certificate according to one of the forms and according to the directions given in the schedule marked D to this Act annexed, that such child had attended school for at least twenty days and not less than one hundred and twenty hours during one month preceding the employment of such child; and a like certificate shall be obtained on the Monday of each week during which the employment of such child shall be continued in that mill, or factory; and such owner, manager, superintendent, overseer, or person in charge shall keep every such certificate so long as such child shall continue in his employment for two calendar months after the date thereof, and shall produce the same to any Inspector or Medical Inspector when required during such period.

"C. In case of the employment of any child contrary to the provisions of this Act, or for a longer time than is hereinbefore limited and allowed, or without a due compliance with the provisions of this Act, touching the education of children or the certificates of the Medical Inspectors, Police Magistrates, or Justices of the Peace, the parent or parents of such child, or any person having any benefit from the wages of such child, shall be liable to a penalty of not more than five dollars, nor less than one dollar, unless it shall appear to the satisfaction of the Police Magistrate or Justice of the Peace that such unlawful employment has been without the wilful default of such parent, or person, so benefited as aforesaid."

The other bill, introduced by Mr. Richey, of Halifax, is designed to grant protection to children and to prevent juvenile crime. It provides that "persons having the care of children under sixteen years of age shall not allow them to be employed for exhibitions of a dangerous or immoral kind." These exhibitions are defined to be "rope or wire walking, dancing, begging, or peddling, or as a gymnast, contortionist, rider or acrobat," or for "singing, playing on musical instruments, except in churches, schools, etc." The bill further provides that no minors under sixteen years of age shall be allowed to remain in saloons or such places, or in dance houses, dancing clubs or concert saloons, unless accompanied by their parents or guardians. In the case of dancing classes only written permission of the parent or guardian to the manager is sufficient.

Two other bills have been introduced by the Hon. Minister of Justice to facilitate the working of the recent Ontario Acts relating to the Penitentiary Reformatory for Boys, and the Mercer Industrial Refuge for Girls.

CORPORAL PUNISHMENT.

We would not go so far as to recommend the abolition of corporal punishment in schools. It has its uses in some cases

as a reformatory agent. There is no doubt, however, that the most successful disciplinarian whips least. This view received very clear endorsement in a recent discussion on corporal punishment in the Cincinnati School Board, during which statistics were furnished to prove that "the newest teacher whipped most and the best teacher whipped least." Of all the forms of corporal punishment, probably the most dangerous is the too common one of boxing a child's ears for slight misconduct or neglect of duty. Mr. E. H. Buxton, an energetic member of the London School Board, has recently directed special attention to the matter. He addressed a letter on the subject to Dr. A. Gardiner Brown, one of the surgeons of the London Hospital, to which he received the following reply:

In answer to your letter on the subject of "Boxing Ears," I may say that in 1879 I saw seventeen cases of diseases of the ears at the London Hospital and elsewhere, which undoubtedly were referable to this cause. The condition set up in the ear varies with the force of the blow and the strength of the patient; from a red and tender state of the drum to active inflammatory mischief ending in more or less complete destruction of the organ. The cases were mostly males, and I am persuaded that there are many others due, though not attributed, to the same cause. Those who have the care of the young, cannot be too strongly impressed with the mode of punishment in question. I would, therefore, suggest that some regulation be adopted by the School Board for London, warning teachers not to "box" their scholars' ears, imposing as the penalty, if it be continued after the second or third admonition, either suspension for a time, or dismissal. The actual case in point is that of a boy (æ. 11), from whose ears you witnessed the operation of removing a polypus, due to injury at one of our Board Schools, inflicted by "boxing" his ears for "dulness"—a nice remedy for such a complaint.

Well may the surgeon say, "A nice remedy for such a complaint"! How any teacher who claims to be a rational being, can whip for dulness, is beyond comprehension.

GEOGRAPHICAL NOTES.

SKETCH OF EFFORTS TO EXPLORE A NORTH-EAST PASSAGE.

The history of the efforts to explore the north-eastern Arctic Seas of Europe are most interesting. They were chiefly connected with the discovery and exploration of the island commonly known as Nova Zembla, or New Land,—a counterpart of the Island of New Foundland, on the north-east coast of America.

Nova Zembla consists of a vast island cut in two—one-third lying southward and two-thirds northward between the 70th and 77th parallels of north latitude, and between the 51st and 69th meridians of east longitude. They are together nearly 400 miles in length and about 50 broad. The islands are separated by a remarkable strait or passage, with sharp windings, over 60 miles in length by about one mile in width. It is bounded on either side by high hills and steep precipitous cliffs. The former are noble fields towering in majestic solemnity from 3,000 to 4,000 feet above the sea level.

Nova Zembla was first discovered in 1553, by Sir Hugh Willoughby, whose sad fate has always caused a shudder. Having sighted Nova Zembla, he sailed further north and then south, and finally put into a Lapland bay, where he was frozen up. Although he and his officers made heroic efforts to obtain

relief, they failed to do so, and the entire company of sixty-five souls slowly perished at their posts, one by one, from cold and hunger.

The next explorer despatched from England was Steven Borrough, who, in 1556, sought to discover a north-east passage to China. He reached Nova Zembla, but failed in his immediate object.

Between 1570 and 1580, Oliver Brunel, Commander of the Dutch Arctic Expedition, proceeded along the coast to the mouth of Obi river; from thence he reached Nova Zembla. He made several expeditions, but none of any practical value. Subsequently Pet and Jackman, following Borrough, discovered some straits near the island in 1580; but owing to the severity of the winter, their expedition was a failure.

The next explorer was the famous Dutch navigator, William Parents. His discoveries in 1594 and 1596-7 were substantial ones; and the positions marked on his charts, three hundred years ago, have been found correct at this day.

The next explorer was the well-known Henry Hudson, who in 1608, with a small vessel, a crew of ten men and a boy, undertook to sail to China and Japan across the north pole! He reached Nova Zembla, but could get no further, and had to return. Subsequently Capt. Wm De Vlamingh, a Dutch whaler, sailed even far north of Nova Zembla, and must have sighted Franz-Josef Land. Cornelis Rould, another Dutchman, sailed in 1698, north of Nova Zembla, and sighted land.

In 1676, Charles II. sent Capt. Wood on an expedition, but after reaching Nova Zembla he lost a vessel and had to return to England. In 1760, Loschkin, a Russian captain, sailed around Nova Zembla, but he spent three summers in the effort.

In 1768-9, Rosmysloff, a Russian naval officer, went to Nova Zembla, in search of silver ore. He failed to find it, but made a thorough examination of the coast, and made a valuable report on the fauna, flora, and geology of the country.

In 1807, Count Rumanzoff despatched another expedition in search of silver ore. It also failed to find any; but much geographical knowledge was obtained by the explorers.

During the years 1819—1824, the Russian Government despatched expeditions to make surveys of the Nova Zembla coasts. The later ones, under Lieut. Lutke, were highly successful. These expeditions were continued down to 1838 with varying success, when they were abandoned. From that time to the present, exploring expeditions to those seas have been despatched from various countries. The record of their adventures and discoveries are deeply interesting, and many thrilling incidents of peril, heroism and bravery are also recorded of them. For practical results, however, the later ones mentioned in our last paper on this subject are the most interesting and valuable.

The following remarks on *The Duty of Teachers as Citizens*, are selected from the address of Mr. Rankilor, President of the National Union of Elementary Teachers in England, delivered at the late meeting in Brighton:

DUTY OF TEACHERS AS CITIZENS.

And now permit me to ask whether the time has not arrived

when the practical experience of teachers should be brought to bear more directly upon the formation of public opinion, at least so far as the great question of national education is concerned. Is it not true that our work as educators has been restricted so rigidly to the schoolroom and the child, that we appear almost to have lost sight of our duties and privileges as citizens? The Act of 1870 most wisely developed a latent but powerful educational force. The establishment of School Boards gave to every ratepayer a direct personal interest and influence in national education, and Mr. Forster may well feel proud of the satisfactory results already achieved by means of the machinery which his statesmanship set in motion. The future usefulness of School Boards will, however, be greatly impaired and their progress retarded, if the test of fitness for membership is in the future to be a political rather than an educational qualification; a promise to "keep down the rates," rather than a determination to give to the working classes a wisely liberal education. Much mischief has been wrought by the plausible and too often uncontradicted platform nonsense uttered by ill-informed candidates, and in all such cases the intervention of the experienced teacher is both a necessity and a duty. We regard the education of the country as of supreme importance; we rejoice that it is no party monopoly, and gladly recognise the fact that it numbers amongst its best friends eminent men of all shades of political opinion. The progress made since 1870 has been steady and continuous, and we sincerely hope that no unwise changes will be permitted to arrest it. It is quite true that the education estimates have largely increased; but when we remember that the additional money is paid only for full value previously received, and that, according to Mr. Forster, the increase is due to "the teaching of the lowest elements—reading, writing and ciphering—to those children who have been swept by the Education Act into the schools," the extra cost really affords good ground for national satisfaction rather than complaint. But, further, the money thus expended is immediately reproductive, and that in a far higher degree than the millions so readily voted for other and more questionable purposes. The country is certainly passing through a period of great commercial depression, and retrenchment in the national expenditure is both desirable and necessary. But an appeal to the constituencies on this question would show, I am sure, that in their opinion the education grant is the last to which the pruning knife should be applied. Is it not somewhat strange that the first reactionary note should be sounded by the Vice-President of the Council, and re-echoed by Mr. Matthew Arnold in his last report? "Popular education," says the Inspector, "has had its moment of high favour in this country, and nobody has asked questions about its cost, so long as the prosperity of the country was increasing by leaps and bounds. I confess I am afraid of the cold fit following the hot one, in a season of less prosperity. I am afraid of a storm of discontent and obloquy raised against our very expensive system of elementary schools, and of the outlay upon them being as much overshrunk as it is now, I think, overswollen." Teachers who are brought more or less into daily contact with the working classes in our large towns do not share Mr. Arnold's fears. The cold fit, which the Inspector so greatly dreads, has not yet afflicted the overburdened ratepayer, and the reason may easily be divined—he gets full value for his money. There are those, doubtless, who consider that the so-called working classes are being over-educated, and thus rendered unfit for the duties of their station. Such objectors forget that in this country class overlaps class, and that no sharp dividing line can in any case be drawn between them. They lose sight of the fact that the poorest children attending our elementary schools "have been born with the full faculties of moral, intellectual, and religious beings; that they are as capable, when instructed, of studying the works of God, of obeying His laws, of loving Him, and admiring His institutions, as any class in the community; in short, that they are rational beings, capable of all the duties, and susceptible of all the enjoyments which belong to the rational character"; and that, consequently, "no education is sufficient for them, which leaves any portion of their highest powers waste and unproductive" (Combe). "I have no sympathy whatever," says Dr. Chalmers, "with those who would grudge our workmen and our common people the very highest acquisitions which their taste, or their time, or their inclinations, would lead them to realise; for, next to the salvation of their souls, I certainly say that the object of my fondest aspirations is the moral and intellectual, and, as a sure consequence of this, the economical advancement of the working classes,—the one object which, of all others in the wide range of political speculation, is the one which should be the dearest to the heart of every philanthropist and

every true patriot." We are, I fear, approaching another educational crisis, but, thanks to this organisation, we are fully prepared to meet it. The views of the N. U. E. T. on various subjects have already been brought prominently before candidates for Parliamentary honours, irrespective of party colour; and although pledges have very properly not been required, we may fairly assume that many members of the new House of Commons will be disposed to consider favorably any educational measure which has the support of this Union. It is somewhat amusing, though not very surprising, to find objections raised to legitimate action of this kind. A newly developed political force, intelligently directed, is doubtless an important factor in determining the result of an election, and might even upset all the previous calculations of aspiring candidates and their friends. But I doubt whether even this pathetic consideration will induce teachers, who pay their quota to the local and general taxation of the country, practically to disfranchise themselves by remaining passive spectators of a contest which they have the power materially to influence, and in which their best interests are involved. And why is such an act of self-sacrifice expected from us? There no doubt remains a considerable amount of misconception as to the nature of the relationship which exists between ourselves and the Education Department. Not a few well-meaning, and, in their sphere, influential individuals, still regard us as the charity children of the Department, the flower, it may be, of the "lower classes," taken in hand in a spirit of the purest unselfishness, by a paternal Government to whose service we should consider ourselves ever bound by ties of the deepest gratitude. Now this poetical fancy may be very touching, but it is "an airy nothing" nevertheless. A retrospective glance will show that free College training, certificates bearing a money value, pensions, etc., were inducements which the Lords of the Committee of Council on Education were compelled to offer, because they could not otherwise secure a sufficient supply of candidates. Anything like patronage was conspicuous by its absence, and the teacher was welcomed as the friendly ally of the Government in its crusade against ignorance and vice. But in 1862 this pleasant relationship was rudely interrupted, and, if the severance had been absolute instead of partial, it would not have been an unmixt evil. But, unfortunately, freedom from Civil Service privileges did not carry with it immunity from Civil Service disabilities, and this is the anomaly that we wish to see removed. And how may this be done? By transferring to a Representative Educational Council, incorporated by Act of Parliament, the sole power to grant diplomas to teachers. The advantages of such a change are manifest. The certificate, which has been unnecessarily degraded to a mere license to teach, would be restored to its original and proper position as a permanent stamp both of scholarship and practical skill in the art of teaching. Its value would be a fixed quantity, measurable by managers of schools and by the public, and not liable to variation in the interests of "supply and demand." Annual endorsements, distasteful alike to inspectors and teachers, would cease; and, further, a diploma thus granted might easily be graded to meet the requirements of higher as well as of elementary schools, thus opening up a much-needed career for teachers within their profession.

—A case of considerable importance to teachers was decided in Listowel at the April session of the County Court. One of the teachers of that town resigned a few days before the midsummer holidays in 1879, and continued to teach until the close of the session. The Board refused to pay her for the vacation, and the Education Department on being appealed to declined to interfere with the action of the local authorities. The lady, however, believing that she had law and justice on her side, entered an action against the School Board and won her case. We congratulate her, and Ontario teachers generally, on her success.

—An exchange makes the following sensible suggestion:

As a substitute for "Friday Afternoon Rhetoricals," over which the teacher presides, we would suggest properly conducted literary

societies. These could be organized in every county and graded school, and would accomplish much more for the development of independent thinking among the students than the present method. In such organizations let all the officers be selected from the students. Let the teacher be a member of the organization, with the same privileges as the other members. Let the pupils in every instance elect the officers. Expect the president to keep order and to be posted in regard to parliamentary rules. Require all the pupils to become members. Encourage originality in the exercises and discussions of business pertaining to the society. Hold the sessions Friday afternoon or any convenient time. Those who adopt the plan will find it far better than the present system of rhetorical.

—The *Ohio Educational Monthly* contains some common-sense remarks upon educational journalism :

The great difference in the qualifications of teachers is, no doubt, the cause of the many attempts to establish school journals to meet their varied wants. Every attempt has its influence. No school journal that has ever been started has been so weak that it has not been worth its subscription price to some of its readers. The saddest thing in school journalism is the fact that the journals are so short-lived. Some one has said that the average age of school periodicals is about three and one half years. In view of this lamentable fact we are compelled to exclaim mentally when a new educational or teachers' journal comes to our table, "BORN TO DIE!" This sad exclamation applies to the beautifully printed, vigorous, and good, as well as to the poorly-printed and feebly good.

—We call attention to the article by Mr. Richard Lewis, on Mark Antony's Oration, in the Practical Department. As an analytical and elocutionary study it will be of great value to teachers of Fifth Book classes and to those preparing for examination. It will be followed by others of a similar character.

—We take much pleasure in announcing that Mr. W. J. Gage, of the firm of W. J. Gage & Co., publishers of the CANADA SCHOOL JOURNAL, school text books, and other educational works, has gone to Europe on his marriage tour. His wife was Miss Ina Burnside, youngest daughter of Mr. David Burnside, Fellow of the Educational Institute of Scotland.

—The names of the successful candidates at the Ottawa Normal School, at the recent professional examinations, were accidentally omitted from the present issue. They will appear next month.

Contributions and Correspondence.

PUBLIC SCHOOL TEACHERS IN MANITOBA.

BY THE REV. W. CYPRIAN PINKHAM, CHIEF SUPERINTENDENT OF SCHOOLS, MANITOBA.

The number of letters from all parts of the Dominion asking about the examination, salary, and prospects of teachers in Manitoba, is so large that it seems desirable to give such information as may be of use to the members of the profession who are thinking of removing to the Prairie Province.

At the present time the supply of teachers is fully up to the demand; still as year by year the number of schools increase in a very marked manner, and teachers, for various reasons leave the ranks of the profession, openings constantly occur. Trustees can only engage those who are duly authorized by the Board of Education to teach. The Protestant section of the Board of Education has adopted a

regulation under which the Superintendent endorses, at sight, the certificates of good standing obtained in other Provinces of the Dominion, so that immediately on his arrival here a teacher can become qualified for any vacancy in our public schools which he may be able to find. But the endorsement only enables the owner of the certificate to teach until the next general examination of teachers, at which he must present himself. During the past year examinations were held in August and December. The next examination commences on the second Tuesday in August, and will be held at such places as may be decided upon (Winnipeg will certainly be one of such places), of which due notice will be given. Every candidate who proposes to present himself for examination must send in to the Superintendent, at least six weeks before the day appointed for the commencement of the examination, a notice stating the class of certificate for which he is a candidate, and a description of the certificate he holds, if any; together with a certificate of good moral character, from some clergyman or Justice of the Peace.

There are three classes of certificates, and two grades in each class. First class certificates are valid during the pleasure of the Board. Candidates in this class must furnish satisfactory proof of having taught (anywhere) for three years. Second class certificates are valid, grade A for four years, grade B for three years from the date of issue. Candidates must furnish proof of having taught for at least one year. Third class certificates are valid, grade A for two years, grade B for one year from the date of issue. To be eligible for examination in this class, the candidate, if a female, must be sixteen years of age, and if a male eighteen years of age. In order to obtain certificates, candidates in all three classes must obtain, for grade A, 67 per cent. of the total marks on all the subjects of examination in the class, and 40 per cent. out of the maximum of marks awarded on each subject; and for grade B, 40 per cent. of total marks, and 25 per cent. of marks awarded on each subject.

Candidates of all classes are examined in Reading, Spelling, Writing, Composition, English Grammar, Geography, English and Canadian History, School organization and management, and Arithmetic, the questions for third class candidates being as a rule less difficult than those for second and first. The additional subjects in the second class are Book-keeping, Algebra (to the end of Simple Equations), and Euclid (books I. and II.); and those in the first are Book-keeping, Algebra (Colenso's part 1st, or corresponding part in Todhunter's or Loudon's), Euclid (books I, II, III, IV, VI, with definitions of book V.), Mensuration, Natural Philosophy, Physiology, Botany, Chemistry, and English Literature.

It will be seen that the present programme does not embrace as many subjects as teachers in Ontario, for instance, are examined in. Yet the result of our examinations show that the present standard is not unworthy of being compared with that of other older Provinces.

The following gentlemen constitute the present Board of Examiners, from whom candidates cannot fail to get ample justice, viz: Rev. James Robertson (Chairman), the Superintendent, Secretary, Rev. Prof. Bryce, M. A., Prof. Hart, M. A., Canon O'Meara, M. A., J. F. German, M. A., E. Morrow, M. A., A. Campbell, B. A., S. P. Matheson (Deputy Warden St. John's College), S. Pritchard, Prof. R. Bourne, M. A., S. C. Biggs, B. A., A. C. Killam, B. A., W. Black, B. A., A. M. Sutherland, B. A., and J. H. Bell.

The salaries of the teachers during the past year ranged between \$83.33 (the salary paid to the Principal of the city school) and \$25 per month. The average salary in rural districts is \$400 per annum. It is often difficult to get good accommodation; not unfrequently the teachers in the newer districts of the Province have to walk a pretty long distance; but circumstances are not harder for teachers than they are for clergymen and others, yet those who

are unable to endure inconveniences and hardships had better remain where they are. But for the young and vigorous; for those who, in addition to good mental and moral training, are gifted with a good temper, courage, tact and common sense, there is a grand future in Manitoba. There will always be vacancies for such teachers, and if their circumstances should be somewhat harder than they are likely to be in the older provinces, it is much better in the long run. "It is in the stress of the storm that heroes are born."

THE THREE R'S.

BY DAVID ALLISON, LL.D., CHIEF SUPERINTENDENT OF SCHOOLS,
NOVA SCOTIA.

The Doctrine of "the Three R's," which, at least in its modern cis-Atlantic application, amounts to this, that public provision for instruction beyond the limits of the strictly elementary branches is an unjustifiable invasion of private rights, is either true or false. If the former, we will find ourselves hard pressed to make satisfactory defence of that part of our system which the theory concedes to us. "I will thank any person," says Edward Everett, "to tell why it is expedient and beneficial to a community to make public provision for teaching the elements of learning, and not expedient nor beneficial to make similar provision to aid the learner's progress towards the mastery of the most difficult branches of science, and the choicest refinement of literature." If the doctrine is false, as I believe it to be, it is well to understand just where its unsoundness lies. Its essential vice consists in assuming as real and discernible a distinction which has no basis in the nature of things. When a wealthy tax-payer protests his unwillingness to provide more than a good English education for his poorer neighbors' children, he either concedes his own point, or uses words without meaning. For what is a good English education? Who will say that up to a certain point it is right to forward the work of education at the public expense, but to carry it beyond that point in this way infringes on private or proprietary rights? Especially, who will undertake to define and fix that point? What is that precise quantum of primary knowledge, the cost of imparting which may be fairly assessed on property? And what is primary knowledge? Is the term *Elementary education* itself perfectly clear and self-explanatory? A glance at the celebrated English Education Act of 1873 (or perhaps I should say of 1870) may help us to answer. The Act is termed the "Elementary Education Act," and an "Elementary School is defined to be one in which Elementary education is the principal part of the education given, and at which the fees do not exceed ninepence per week!" It is a plain fact that a term which, from its elastic character, does not admit of fixed definition, cannot be used with advantage as the basis of a theory of public morals. The more the subject is studied, the more deeply rooted, I am assured, will the conviction become that the right to provide education at the public expense is a comprehensive one, finding its natural and sufficient limitation in the intelligent adjustment of means to capabilities.

THE NECESSITY OF ELOCUTION.

BY T. O'HAGAN, BELLEVILLE.

There are many reasons why elocution should be to us a matter of great concern. In the first place, this is an age of discussion, and grave questions are day by day pressing themselves upon us for a solution. The history of events is also fast accumulating, the treasures of science and art are being enriched, and the world makes an imperative call upon everyone to aid in the diffusion of

knowledge. Now, voice, the most wonderful of Heaven's gifts to man, is the great instrument for the communication of knowledge; it is the outlet and passage-way of the soul, the great medium for the conveyance of thought and feeling. He who is but a receptacle of knowledge ill fulfils the true end of education. A man is estimated not for what the world gives to him, but for what he gives to the world. The subject of elocution has to deal with the application of knowledge. In proportion as we acquire knowledge comes the demand for its proper conveyance and destination. Of what use is the ship laden with gold and precious stones, if her timbers yield to the billows and she be lost in the deep? So, too, with the mind; in freighting it with merchandise, we should remember that our work does not culminate with a sublime structure and an abundant cargo. We must not only impart knowledge, but also see to it that this knowledge has a means of being conveyed to its proper port. Herein lies the necessity of elocution. True, some of the richest fruits of philosophy, science, and the arts have been given to the world by men and women the most reticent, but the great highway for the communication of thought will ever be through that God-given gift, the human voice, which can ascend from earth to heaven, and bring before waiting audiences thoughts of God and of eternity. Whether science or art, the family or the nation, the Church or State, politics or theology, philosophy or religion, its influence is felt in all. It is a canvas upon which we may paint thought and feeling which others may read. If language is the literature of the soul, it is by means of the voice that soul is brought to the surface, and made tangible and portable. Mrs. Sigourney, speaking of education, says, "The true order of learning should be first what is necessary; second, what is useful; and third what is ornamental. To reverse this arrangement," she adds, "is beginning to build at the top of an edifice." What would you think then of a teacher freighting the minds of his pupils without a single thought as to the means by which each mental cargo may be handled, exchanged and conveyed to its proper destination? Does the teacher who simply aims at filling the hold of his pupil's mind with merchandise fulfil the true ends of education? I think not. The necessity for a thorough and high cultivation of the voice must therefore be abundantly apparent to all. I contend, too, that the work of elocution should commence in the early stages of the child's education, and we should endeavour to present the practical bearings of the subject upon our scholars so that they may be also stimulated to do their share of the work. One of the most common mistakes made in the teaching of reading is, that no attention is paid to the pupil's voice outside of the reading class. Every class should be a voice class in which the voice is used. To hope to train the voice otherwise is like a weak and futile endeavour to express ourselves correctly for twenty or thirty minutes, while during twelve times that period we have been setting at defiance both language and rule. A prudish manner of expression should undoubtedly be avoided, but correctness of language as well as correctness of utterance are at all times pleasing both to the educated and to the uneducated ear. Another fault common in the education of the voice is the habit of forcing loud and boisterous tones rather than intelligent responses—a tendency on the part of teachers to obtain sound without much reference to sense. The worst phases of this are found in the harsh, fierce utterance of the first letters of the alphabet, and in spelling and early reading lessons. Again, the body of sound is rarely correct. The *a e i o u* of speech is neglected. Unnatural tones are left uncorrected. A mistake, too, is frequently made in taxing in an unusual manner sources of vocal power which do not by any means constitute the fulcrum of power of the voice. I refer now to the habit of using so largely head and throat tones, instead of chest tones. Thousands are constantly exhausting physical force in speech, which might be

saved if the proper organs were brought into play. But perhaps you will confront me with the question, what if the teacher is not prepared to criticise the voice of the pupil? Even admitting the force of this difficulty, every teacher can at least apply the principle of correcting bad habits as far as he knows, and this itself will accomplish much good. We should early endeavour to train the ear, to discriminate between what it likes and what it dislikes; and when this is accomplished, the point of a higher and closer discrimination is not far distant. Once you have trained the pupil to be his own critic, the teacher's work is largely done. In recitation the voice should never be diverted from the simplest and finest tones of its ordinary use. We should aim to encourage a naturalness of tone in the grammar recitation, in the reading class, and on the playground. Was there ever committed to human care and management any instrument capable of such delicate variety and harmony as the voice? Just listen for a moment to the prattle of happy childhood; is it not pure as the morning breeze, sporting as the winged songster, and variable as the mountain stream that laughs itself into the valley? As a physical faculty the exercise of the human voice concerns itself. It tends to a healthy development of all the physical powers. In fact, if properly directed voice, culture becomes a most practical source of health and grace to the whole being. There is no relation of life upon which the voice may not be taught to reflect. In the social circle it becomes the current of revelation from the within to the without. The business man lays his voice by the side of his wares, and the eye of the purchaser harmonizes with the ear in its judgment. The public man presents himself first to the eye and ear of his audience. If his words be favorable, he sustains the position of a stranger who approaches you with a strong letter from a friend; if unfavorable, there is at once a barrier thrown between you and him. The culture of the voice should be also taught as a matter of cleanliness, as well as a matter of courtesy. If we owe our neighbor the morning salutation, we equally owe him that salutation in a pure tone of the voice. It should also be taught as an agency of moral culture. A voice of dignity and eloquence will attract to purity and truth, to virtue and religion. I believe that a new era is dawning in the history of education with reference to the human voice; more attention will be devoted to its proper cultivation; and as the human heart glows in a higher benevolence and the mind of man expands to a wider range, I believe that the voice will be found the finest to reflect the Divine image in tones such as make up the melody of heaven.

THE DANGERS OF HABITUAL HEADACHE, AND OF INTELLECTUAL EXERTION OF THE EXHAUSTED BRAIN.

The following paper, by Dr. Treichler, of Bad Lenk-Bern, was read in the section of Psychiatry and Neurology, at the fifty-second meeting of the German Association of Natural Historians and Physicians, held at Baden-Baden, 1879. (Pp. 32a, 325 of *Tageblatt*.)

School Hygiene, the youngest step-child of medicine, has, till now, only sought to ward off bodily mischief; yet, as school is chiefly concerned with brain activity, it is very probable that a rich material lies here before Psychology and Psychiatry, and a wide field of work in watching over it and raising their warning voice, that the activity and exertion of the brain be normal, and that it be not allowed to become the cause of serious illness in later life.

Learned men have been very egotistical in this respect; they observe the mischief in their own and other people's children, but they are so engrossed by their own special studies and callings that they allow the health of these young people to suffer irreparable harm; and this is especially to be lamented in the case of young women, who are far more heavily weighed than men, by the restrictions of fashion and prejudice.

According to my experience, habitual headache has considerably increased with boys and girls: it destroys much of the happiness

and cheerfulness of life, produces anæmia and want of intellectual tone, and, what is worse, it reduces many a highly gifted and poetic soul to the level of a discontented drudge. Physicians and Psychologists have paid far too little attention to this affection as well as to School Hygiene, and it would be a good work for the German Scientific Association to inaugurate a change in this respect. Although it is more difficult to collect precise statistical data on habitual headache than on myopia, yet the result of various investigations, at Darmstadt, Paris, and Neuenburg, goes to prove that one-third of the pupils suffer from it. Undoubtedly the principal cause is intellectual over-exertion, entailing work at night, and the insisting by parents on the too earnest taking up of a variety of subjects—music amongst the rest.

The pathological anatomical changes in the worst cases of this unhealthy condition I consider to be a disturbance created by anæmia in the nutrition of the ganglion cells of the cortex of the cerebrum. It is well known that a badly nourished brain is much more quickly fatigued by intellectual exertion than a brain in a normal condition, just as in the case with the muscles.

A second cause of habitual headache is a passive dilatation of the blood vessels of the brain, also connected with serious disturbances of nutrition, whereby the perivascular space round the capillary vessels is contracted, and the getting rid of used-up matter greatly impeded. Modern pathology now looks on progressive paralysis, in its earliest state, as a vasomotor disturbance of nutrition of the cortex of the cerebrum, in which the vessels of the pia-mater get into a palsied condition of dilatation, and we have degeneration of the cortex of the brain produced by stagnation of the current of lymph. If I am correct in this pathological anatomical definition of the two diseases, it is plain that they have a distant resemblance and affinity to each other, and that physicians ought by no means to ignore them. In habitual headache, the palsied condition of the brain vessels is transitory; in progressive paralysis it is usually irreparable.

A second great evil, in the more advanced schools, consists in intellectually overloading of the pupils, and in their being compelled to take up too many subjects, also in working on at night when the ganglion cells are thoroughly exhausted. This must produce the same condition in the brain as would be produced in the muscles, if, after a long day's march, a mountain climber were to continue walking far on into the night, and were to repeat this day after day.

I might here prove that the method of instruction, now-a-days, is not only a cause of disease, but also perfectly useless, because, instead of increasing knowledge, it produces mental confusion, and becomes simply a labour of the Danaides, or like carrying water in a sieve. I believe, Psychology can prove the correctness of what has been here said, if we consider the experiences given us by learned men who have suffered from senile brain atrophy, and also that, in giving a rational amount of time to work, and to the exercise of thought and memory, the gain for the pupil will be far greater than that attained by the present method.

What we call thought and impression made on the memory, are undoubtedly processes of molecular motion in the protoplasm of the intellectual brain cells, although it still remains a riddle how such a process of motion is in us transformed into thought.

When these ganglionic cells begin to be diseased by senile atrophy, the memories and scientific problems of youth are still clear, and can be reproduced, while the same ganglionic cells can no longer comprehend and work at new, though much simpler scientific problems, and while, with regard to a thing of yesterday, the memory is uncertain. From this we may draw the following conclusions:

1. That what the ganglion cells, when in their full health and vigour, have grasped, remains; so that, after the lapse of half a century, and with the beginning of disease, it may still be reproduced.

2. That the ganglion cells, diseased by old age, are, in reference to the accomplishment of work, like greatly exhausted ones, and have lost the power of understanding and abidingly taking in new and difficult ideas. The ganglion cells, therefore, can only take in new ideas, as an intellectual acquisition, so long as they are powerful, are not exhausted, and are nourished with healthy blood. The boundary line is drawn here quite as exactly as is the quantum of nourishment for the stomach of an invalid.

3. That the constant addition of fresh subjects in the teaching programme, making night-work necessary for the pupil when the ganglion cells are already exhausted, entirely defeats its object of

enriching the intellect, because new ideas cannot then be really grasped, and confusion is produced as to what has been learnt in the day. The great object of the school, therefore—earnest intellectual discipline, and the formation of the desire for continuous cultivation of the mind—is thereby frustrated.

Confusion in the intellectual powers of an overwrought pupil and his final gain, must be the same as that which would occur in a counting-house, where there were only means for the despatch of 100 letters a day, the daily number requiring attention being from 130 to 150. Confusion in the transaction of business and decreased gains would be the result.

CORRECT METHOD OF READING JOHN I: 1.

To the Editor of the Canada School Journal.

SIR.—I noticed in the last issue of your Journal an article from Mr. R. Lewis, elocutionist, as to the correct method of reading the first verse of the first chapter of John's Gospel. With all deference to Mr. Lewis, I must beg leave to differ from him in the way he renders the following passage: In the beginning was the Word, and the Word was with God, and the Word was God. Mr. Lewis is correct in his analysis, viz.: what was in the beginning—the *Word*; what that was—*God*; when it was—in the *beginning*. According to the above analysis, we get the following capital idea—In the beginning the *Word* was *God*, "with God" being simply a secondary idea, or subordinate phrase to the capital thought. For if (according to Mr. Lewis's analysis) the *Word* was *God* in the beginning, it must certainly have been *with* God, and therefore can take only the inferior emphasis. Evidently the writer had an object, and only one, in view, and that was to establish Christ's divinity from the beginning. And is not this primary thought brought out by giving the superior emphasis, 1st, to beginning, 2nd, to Word, 3rd, to God, and thus present the main thought—in the beginning the *Word* was *God*? And this rendering clearly sets forth the fact, that the *Word* was not only with God, but was *God* from the beginning. By emphasizing *was* and *with*, as suggested by Mr. Lewis, we raise a question as to the time when the *Word* was *God*, which is not necessary, as that is fully brought out by emphasizing *beginning*. Therefore the emphasis placed upon the verb *was*, and the preposition *with*, locate the time when the *Word* was *God*, and leave the impression upon the mind that the *Word* and *God* were one at the beginning, but not at the present time. And this, in my opinion, was not intended by the writer. Take for example the following—In the beginning of this century, the British Empire was a strong nation, and was monarchical in her form of government. By emphasizing the verb *was*, you will see at once that we raise the question as to the time when she was a strong nation, and the inference drawn is, that she was strong, and was monarchical in form of government at the beginning of the century, but is not at the present time. I cannot understand how Mr. Lewis can consistently place the emphasis upon *was* and *with* according to his own analysis. The superior emphasis must follow the dominant thought—in the beginning the *Word* was *God*. The unity is asserted by emphasizing *Word* and *God* in the last clause of the verse, for the *Word* was *God* and *God* was the *Word*, consequently there cannot be anything effected to make the association stronger between *Word* and *God* by emphasizing the preposition *with* in the phrase "with God." Mr. Lewis says that "the common method of reading this passage is the right one, and is supported by the authority of Rev. J. H. Howlett, author of 'Instructions on Reading the Liturgy,' and is in strict accordance with the commentaries of Barnes, Scott and others on the passage." I am not aware that either of the commentators mentioned ever possessed any knowledge of elocutionary analysis, but on the other hand they were not distinguished as pulpit orators. Therefore their authority can have but little weight as to the correct method of reading the passage. I have too much respect for Mr. Lewis as an elocutionist to think for a moment that he would sacrifice his opinion for that of any man who had not made the subject of elocution and rhetorical analysis a careful study.

J. M. H. HARRISON, A.M.

Woodstock, April, 1880.

Mathematical Department.

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

A CELEBRATED THEOREM.

Every mathematical student at some period in his course has attempted, successfully or otherwise, a solution of the theorem, "if the bisectors of the angles at the base of a triangle be equal, the triangle is isosceles." Recently our attention has been called to the theorem by Dr. Allison, Superintendent of Education for Nova Scotia. In a letter he says: "In both Potts' and Todhunter's Euclids I find this theorem. Potts gives it as an exercise with the following hint or annotation: 'If two equal straight lines be drawn, terminated by two lines which meet in a point, they will cut off triangles of equal area. Hence, &c.' To my view this hint is worse than enigmatical: it is positively misleading, asserting as it does a mathematical untruth. Todhunter offers a *reductio ad absurdum* solution. For your next issue I will send you an elegant original solution by Alex. McKay, Esq., of the Dartmouth High School. Todhunter observes that the history of the theorem may be found in the Lady's and Gentleman's Diary for 1859. If you can publish this extract in your next issue you will much oblige, &c."

Feeling satisfied that many of our subscribers, besides Dr. Allison, will be interested in this question, we give the following

EXTRACTS FROM THE LADY'S AND GENTLEMAN'S DIARY.



1. Let ABC be the triangle, and O the intersection of the bisectors BD , CE . Then in the triangles ABD , AEC , we have $EO = BD$, the angle BAC common, and the bisector AO of this angle common also. Hence, in the following manner we may show that these triangles are equal in all respects. If on BD we describe a segment of a circle containing an angle equal to BAC , and on the common base BD so place the triangles BAD , EAC that the point A may occupy the positions A' and A'' on the circle, the bisectors $A'O' = A''O'' (= AO)$ will evidently cut BD in O' and O'' , and will intersect on the circumference at F , making $BF = FD$. It also follows that $A'FH = A''FH$, and consequently that the arc $A'H = A''H$. The arcs $A'D$, $A''B$; and consequently their chords, are therefore equal; and by adding equals to equals we find arc $A'B = A''D$, and hence the chord $A'B = A''D$. But $A'B = AB$, and $A''D = AC$. Hence $AB = AC$. [In the preceding it is not so evident how the fact "It also follows that $A'FH = A''FH$ " is arrived at. We therefore suggest that from the preceding statement the proof may be finished as follows: As any line FA'' revolves from B towards H it continually increases, but the part FO'' continually decreases; hence $O'A''$ continually increases. Hence in only one position can it equal $A'O'$. But it is equal to $A'O'$ when FA' , FA'' make equal angles with the tangent at F . Hence

FA', FA'' make equal angles with the tangent at F , and the arc $FA'' = FA'$. But $FB = FD$; therefore $BA'' = DA'$, and angle $A''DB = A'BD$, &c.—MATH. ED. C. S. J.]

2. The property holds when BD, CE are perpendiculars from B, C . For $AB.CE = \text{twice area} = AC.BD$; therefore $AB = AC$.

It also holds when D, E are the middle points of AB, AC . For $AB^2 + BC^2 = 2BD^2 + 2AD^2$,
 $AC^2 + BC^2 = 2CE^2 + 2AE^2$;
whence $AB^2 - AC^2 = 2AD^2 - 2AE^2 = \frac{1}{2}AC^2 - \frac{1}{2}AB^2$; or $\frac{3}{2}AB^2 = \frac{3}{2}AC^2$; $\therefore AB = AC$.

3. Analytical Solution. The squares of the bisectors of the angles of a triangle are

$$CE^2 = ab - \frac{abc^2}{(a+b)^2}, \quad BD^2 = ac - \frac{acb^2}{(a+c)^2}.$$

$$\text{Hence } b - \frac{bc^2}{(a+b)^2} = c - \frac{b^2c}{(a+c)^2}.$$

$$\begin{aligned} \text{Or } (b-c)(a+b)^2(a+c)^2 &= bc\{(a+c)^2c - (a+b)^2b\} \\ &= bc\{a^2c + 2ac^2 + c^3 - a^2b - 2ab^2 - b^3\} \\ &= bc\{a^2(c-b) + 2a(c^2 - b^2) + c^3 - b^3\} \\ &= (b-c)bc\{-a^2 - 2a(b+c) - c^2 - bc - b^2\}. \end{aligned}$$

And it is evident from the negative signs throughout the final result that the two sides of this equation can only be equal when both vanish, which requires $b = c$.

4. The solution to the question involves a principle which it may be worth while to state more explicitly. It is as follows: *When two triangles have their bases, their vertical angles, and the bisectors of these angles all equal respectively, the triangles are equal in all respects.* Were this property admitted into elementary geometry as "well known," it would simplify many demonstrations relating to the construction of triangles when their vertical angles and their bisectors are among the data.

5. Another proof:

Lemma. In any triangle if angle CAB be less than CBA , then will the bisector AD be greater than BE .



By Euclid, VI., 8, we have

$$\frac{AB+BC}{AB} = \frac{AC}{AE}$$

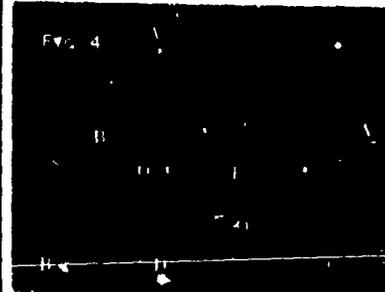
$$\text{Also } \frac{AB+AC}{AB} = \frac{BC}{BD}$$

But AC is greater than BC , hence for a double reason AE is greater than BD . Similarly, EC is greater than DC . Hence $AE.EC$ is greater than $BD.DC$. But by a known property $AD^2 = AC.AB - BD.DC$; and $BE^2 = BC.AB - AE.EC$. But $AC.AB$ is greater than $BC.AB$ and $BD.DC$ is less than $AE.EC$. Hence for both reasons AD is greater than BE , or the less bisector is drawn from the greater angle.

Proposition. Hence if the bisector AD equal BE the triangle is isosceles. For if the angles at the base be not equal, let CAB be the less. Then AD is greater than BE by the Lemma. But AD by hypothesis is equal to BE . Hence the triangle must be isosceles.

6. In the proof given in § 1, preceding, it is not necessary that BD and CE should bisect the angles at B and C , but only that these equal lines should intersect on the bisector of A , and hence the process is equally valid for the more general theorem: *If any two lines, drawn from the base angles of a triangle, meet on the bisector of the vertical angle and are equal to each other, the triangle is isosceles.*

7. The proposition may also be established by showing that, *Every non-isosceles triangle has the bisectors of the angle at the base unequal.* To prove this, let (Fig. 3) angle CBA be greater than CAB , and $\therefore CBE$ greater than CAD . Make $EBF = EAF$, and a circle will evidently pass through the points E, A, B, F . But chord AF is greater than BE , because angle ABF is greater than EAB . Therefore, a fortiori, AD is greater than BE . Hence since every non-isosceles triangle has the bisectors unequal, and since every isosceles triangle has the bisectors equal, it follows that if the bisectors be equal the triangle is isosceles.



8. Or thus: Let BC', CB' be the equal bisectors. Describe a circle about $A'BC'$; make angle $CB'A' = A'BC'$; join $A'C$. Then the triangles $AC'B, A'CB'$ are identical. Let the bisector AO meet the circle in D ; join DA' . Since the arc $B'D$ is equal to the arc DC, DA' bisects the angle $B'A'C$, and the bisectors $AO, A'O'$ are equal, because the triangles $AOO', A'O'O$, being equiangular, and having the side $AO' = A'O$, are identical. Let $AO', A'O$ intersect in E . The triangles DOO', DAA' are similar, because angle $DOO' = ADB' + DB'C = AA'B' + DCB' = AA'B' + B'A'D$. $\therefore DO : DA' = DO' : DA$, and \therefore the triangles $DOA', DO'A$ are similar. Hence angle $DOA' = DO'A$; and $DAO' = DA'O$. Consequently the triangles $AEO, A'EO'$ are similar, and because $AO = A'O'$, they are also equal. Hence $EO = EO'$, and angle $EO'O = EOO'$. But $EO'D = EOD$. $\therefore DOO' = DO'O$, and $DO = DO'$, and also $DA = DA'$. \therefore angle $AB'D = A'CD$; but angle $DB'C = DCB'$, and consequently $AB'C = A'CB'$. $\therefore AC = A'B' = AB$.

9. It appears that the question was first proposed in Terquem and Geron's "Nouvelles Annales de Mathematiques" for 1842, where two solutions are given, the first being similar to that given above in § 1, but the second is different:—Two circles are described through the points ADC, BEU respectively (Fig. 8), and their intersection O upon CK produced gives the relation $OC, OK = OE^2$ in both cases, where the point O is proved to be the middle point of the two arcs AOD, BOE and the equality $AC=BC$ immediately follows. Ten years later, Professor Sylvester drew attention to the same property in the Philosophical Magazine for November, 1852. He there gave two demonstrations, one by Mr. J. H. Smith, of Jesus College, Cambridge, the other by himself, to which he added a generalization of the enquiry to the n -sectors of any given angles. In the course of this discussion Mr. Sylvester came to the conclusion that, with regard to this particular question, "no other proof than that of *reductio ad absurdum* was possible in the nature of things;" and he based his opinion on "the necessary non-existence of real roots, between prescribed limits, of the analytical equation expressing the conditions of the question." This principle, however, does not hold good with regard to theorems. The "necessary non-existence of real roots" may indicate the impossibility of constructing a problem within prescribed limits, but that it cannot apply to the non-existence of any direct proofs of a theorem was ably shewn by Dr. Adamson in the Philosophical Magazine for April, May and June, 1858. Dr. Adamson's paper is well worthy of attention, for, besides containing a clear exposition of the leading principles of geometrical reasoning, it indicates direct solutions to the property now under review.

The preceding gives all the information, in regard to this theo-

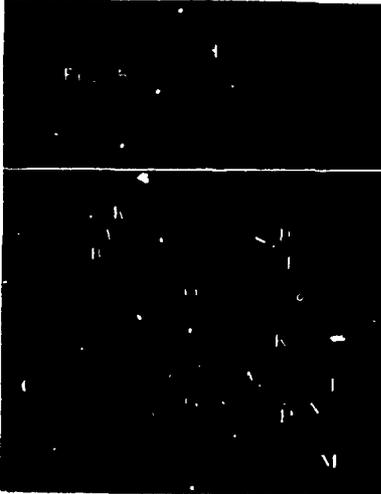
rem, afforded by the Lady's and Gentleman's Diary. We proceed to give the solutions forwarded by Dr. Allison.

SOLUTIONS BY ALEX. MCKAY, ESQ.,

Principal of the Dartmouth High School, Nova Scotia.

1. *Proof.* If two straight lines bisecting two angles of a triangle and terminated at the opposite sides be equal, the bisected angles shall be equal.

Let LCF be the triangle of which the angles LCF and LFC are bisected by the equal lines CD and FA . The bisected angles shall be equal.



If not let $LC > LF$. Make $LM = LC$. Join MO and produce to K . Because the perpendiculars BO, EO and GO are equal (IV. 4) and $\angle BAO > GFO$ (I. 16), $\therefore FO > AO$ (I. 19, Ex. 8) and $\angle OFM > OAC > CKO$. $LB = LE$ (I. E. Cor.), $\therefore ME = CB \therefore \angle LMK = LCD$ (I. 26) $\therefore MK = CD$ (I. 26). $MO > OF$ (I. 19, Ex. 8). Now if $KO >$ or $= AO$, then $MK > FA$, $\therefore CD > FA$. But $CD = FA$, which is impossible; then

$LC = LF$. But if $KO < AO$, make $OK' = OK$ and $\angle OK'A' = OKA$, $F'P \parallel K'A'$ and $A'N \parallel K'F$. $\angle AKO > \angle KAO$, $\therefore \angle A'NP > \angle A'PN$. $MA' > A'P > A'N$ or $K'F$, $\therefore MK > FA$, $\therefore CD > FA$; but $CD = FA$, which is impossible. $\therefore LC = LF$ and $\angle LCF = LFC$.



2. *Proof.* Let ABC be the Δ and BE, DC and AF lines which bisect the angles. These lines meet in O (Ex. 8, p. 56) and the perpendiculars GO, HO and KO are equal (IV. 4).

Case 1.—Taking BC as the base, $DB > GB$ and also $EC > KC$. If $AB > AC$ then $BO > OC$, and $\therefore \angle GDO > KEO$ and $GO = KO$, then (I. 19, Ex. 8) $OE > OD$, $\therefore BE > CD$; but it is also equal, which is impossible, $\therefore AB = AC$.

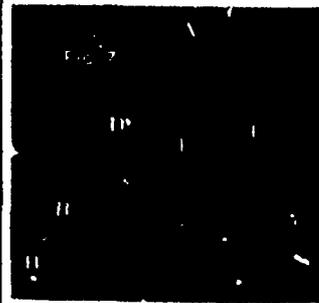
The same proof holds when either D and G , or E and K coincide.

Case 2.—Taking AB as the base, $AE < AK$ and $BF < BH$. Then if $CA > CB$ make $\angle LBA = \angle FAB$ and $\angle MBN = \angle LAN$. $AN = BN$ and $LN = MN$ (I. 26). $FA > MA$ or BL . $BL > BE$ (I. 19, Ex. 8), $\therefore FA > BE$, but $FA = BE$, &c.

The proof is precisely similar when AC is considered as the base, and $FC > HC$, but $DA < GA$.

SOLUTION FROM THE NORMAL SCHOOL, TRURO, N.S.

Let the bisectors BE, CD be equal. Then the triangle is isosceles.



Let BE, CD intersect in F . Then because the angles ABC, ACB are together less than two right angles, their halves FBC, FCB are together less than one right angle. Hence BFC is an obtuse angle. $\therefore CF$ is greater than $\frac{1}{2} CD$ (Hamblin Smith, Ex. 2, p. 29, and Ex. 27, p. 118);

$\therefore CF$ is greater than $\frac{1}{2} BE$. Hence BCE is acute (H. Smith, Ex. 9, p. 56), also DBC is acute. Now if BD is less than EC , make $DH = EC$; then HC is less than BC (I., 24). [For it may be shown that if BD be less than EC , angle BDC is less than CEB .] But HC is greater than BC , an inconsistency. Hence EC is not greater than DB ; and it may be shown to be not less. Hence $EC = DB$, and angle $DBC = ECB$.

We are compelled to leave over our correspondence for next month.

Practical Department.

OUTLINE NOTES ON QUESTIONING.

BY JAMES HUGHES, INSPECTOR OF SCHOOLS, TORONTO.

- I. KINDS—1. *Tentative* or Preliminary; 2. *Teaching* or Instructive (Socratic); 3. *Testing*.
- Tentative*—(a) Probe to find previous knowledge; benefit to pupils and teacher.
 - To gain attention.
 - To form basis for lesson and connect with past lessons.
 - Teaching*—(a) Lead in making discoveries; Guide.
 - Be Logical,
 - From effect to cause.
 - “ cause to effect.
 - Step by step.
 - Testing*.
 - Reviewing—
 - Repeating—
 - Thorough (Find out how little, not how much pupils know.)
 - Only on work taught or assigned.
 - Never should be neglected.

GENERAL RULES.

- Never ask in *Rotation* or *seriatim* order.
- Never indicate the pupil to receive the question until it has been stated.
- Do not repeat a question for the inattentive.
- Let questions be simple or pupils guess or keep silence.
- Make simpler, if not understood.
- Vary form if pupils cannot answer.
- Questions should admit of only one correct answer.
- Suit the difficulty to the advancement of class.
- Do not indicate the answer by emphasis, tone, countenance, form of question, or part of a word, &c.
- If using elliptical questioning, let omissions be definite.
- Do not insist on book form or set form of words, except verses of Scripture and definitions in certain subjects.
- Avoid a set form of words in asking questions.
- Do not use book questions.
- Give every QUESTION to every pupil; then ask one for ANSWER.

HOW.	OBJECTS.			
	TENTATIVE	TEACHING.	TESTING.	
			REVIEWING.	REPEATING.
1. Always state QUESTION to whole class.				
2. For Individual answers?	Chiefly.	Chiefly.	Exclusively.	Sometimes.
3. For Simultaneous answers?	Rarely.	No.	No.	Yes.
4. Elliptical?	No.	Allowable, especially with Juniors.	Only with Juniors.	Yes, with any class
5. Suggestive?	No.	Rarely. Only when unavoidable.	No.	Rarely.
6. Alternative? (admitting of only two possible answers)	No.	Rarely.	No.	Rarely.
7. Written?	No.	Capital method of assigning work.	Yes when circumstances permit.	No.
8. Rapidly?	No.	No, but promptly after an answer is given.	Yes.	Yes.

ELOCUTIONARY STUDIES.

BY RICHARD LEWIS, PROFESSOR OF ELOCUTION, TORONTO.

MARK ANTONY'S ORATION.

(Julius Caesar, Act III., Sc. II.)

It is impossible to deliver this masterpiece of composition without a full comprehension of all the circumstances which led to it, the relations of the orator to the actions, to the momentous events of the history, to Caesar, whose character and integrity of purpose he is about to vindicate, and to the difficulties and perils of his position as he stood there before an assembly prejudiced against him, both as a patrician and as the advocate of a supposed enemy to human liberty. The construction of the speech is a rhetorical study. But its deeper value lies in its profound appreciation of the mental condition of the multitude, and the skill with which the orator deals with the prejudices and the sympathies of his hearers, and makes them the ministers of his designs. The character is historical, and the history must in some measure guide the reader; but the oration in its masterly conception and conquest of difficulties is Shakespeare's; and its analysis for delivery is a psychological as well as an elocutionary study of the highest order. The reader who comes to that study with only classical, philological or historical lore, will fail in realizing its spirit. Imagination is as necessary as judgment and learning, rightly to interpret all great points.

Fully to understand the oration the reader must first study the whole tragedy. It is, however, the interview between Antony and the murderers of Caesar in the first scene of Act III. which reveals to us his feelings and purposes after the assassination. The speech he utters when he beholds the bleeding body of his murdered friend, eloquent and defiant, exhibits his devotedness and indifference to death. When he takes the hand of each conspirator and addresses them in turn,—when he apostrophizes the spirit of Caesar,

"Pardon me, Julius! Here was thou bay'd brave heart," he gives evidence that he is an orator far surpassing Brutus in the highest elements of true eloquence, impassioned feeling, power of

imagination and the command of fitting language. But the magnificent apostrophe which he utters when left alone—when his pent-up feelings burst out like the burning torrent of a volcano, betrays at once all the scorn, hatred, sorrow and thirst for vengeance which he had concealed from the conspirators, and indicates to us how he will use the privilege granted him to "speak in the order of the funeral." Cassius, who understood him better than Brutus,

"Who, only in a general honest thought,
And common good to all made one of them,"

had warned Brutus against granting Antony this privilege. He "liked it not." But Brutus, judging men by his own integrity of purpose, consented to allow Antony to speak, binding him only to the condition,—

"You shall not in your funeral speech blame us,
But speak all good you can devise of Caesar."

With this knowledge of the history of the great oration, we are prepared to study the laws of its delivery.

The third scene of the act makes us acquainted with the feelings of the multitude. Brutus has in a manner convinced their judgment—or perplexed it; but he has failed to move their feelings. A change of government is always agreeable to a people, they grow tired of their rulers and believe that any change will bring advantages. This, at any rate, marks an ignorant people; and hence Brutus, assuming the character of a Liberator, wins the general approbation. Shakespeare introduces four citizens, who each may be regarded as representatives of the popular feeling. Antony, who has been standing by during the latter part of the speech of Brutus and has heard the acclamations of the people, and especially the implied threat of the fourth citizen—

"What does he say of Brutus?"

"Twere best he speak no harm of Brutus here," and the general sentiment expressed by the first and third citizens—

"This Caesar was a tyrant.

"Nay that's certain,"

"We are blest that Rome is rid of him"—

understands the conditions on which he must commence; and all these considerations must guide the reader as he commences. There must be no attempt at oratorical display. Antony is gentle, humble, even obsequious as he begins his address.

"Friends, Romans, COUNTRYMEN,—LEND me your ears."

Almost every word, however, has its purpose and is well studied. Antony, the haughty patrician, calls them, the common herd, his friends, that word must be uttered with studied grace, bordering on tenderness. But "Romans"—that word rouses patriotism and natural pride, and lifts them up to one grand height, orator and hearers, which in a moment sweeps away factious feeling and social prejudices. It must be delivered with more force than "friends." It is a word of fire and demands a fuller and firmer tone, for it half wins them to his cause. But it is not enough. There are wide divisions still between Roman and Roman; so Antony crowns the triumphs by making them kith and kin with himself. Patrician and plebeian blood may separate them as Romans, but "countrymen," completing the bond of common interest and sympathies, must be uttered with a warmth which is not even assumed by Antony. Yet he instantly recollects the difficulties before him. He knows the wavering, fickle crowd, and lest he should be suspected of presuming too much upon his patrician claims, he again obsequiously asks them, as if in real homage to their power, to "LEND him"—only lend a great favor, their ears.

I have given this analysis to indicate, as I see it, the spirit in which the address must be opened. The reader must beware of being "oratorical"—and especially must he beware of expressing scorn or irony when he utters the words "honorable men." He

must first convince the multitude that Cæsar was not ambitious before he may violate his judgment and "let slip the dogs of war."

"I came to-bury Cæsar, not to-praise him.*

* The hyphen between words indicates that they are to be more closely combined in time.

The evil/ that men do—lives after them ;
The-good/ is oft interred with their bones ;
So let-it-be/ with Cæsar. The noble Brutus
Hath-told you-Cæsar/ was/ ambitious.

If it were so (slight expression of doubt), it was a grievous fault; and grievously hath Cæsar answered it."

This last line must be read in a deeper pitch and have an expression of solemnity and sorrow; for there lies the bleeding evidence of the penalty, and that appeal is the first inroad upon their animosity, the first appeal to their feelings.

But again return to the tone of obsequious respect; and the flattering compliment to the conspirators must be delivered as if the speaker believed what he said. Let the reader also, by a change of pitch, but not of time, indicate the brief digression, and the relation of the interrupted parts, "and the rest," with "Come I." The parenthetical clause must be delivered in a tone one degree lower.

But now he commences the course of triumphant argument by which he convinces his audience that Cæsar was not ambitious.

He-hath-brought many | captives | home
to Rôme,

Whose ransoms did | the general coffers fill."

The important word here is "general"; that while others appropriated the ransoms of captives to their own private coffers, Cæsar gave them to the public treasury, an evidence of liberality and patriotism. Inexperienced readers will emphasize "fill" or "coffers"; the first indicating that others only partly filled them, and the second that others put them into a different kind of receptacle. But Antony exalts Cæsar's munificence by saying: he gave his ransom to the general good.

"Did this | in Cæsar | seem ambitious?"

Some readers give the falling inflection to this question. If Antony is supposed to believe that his audience would answer in the negative, the falling inflection would be correct. But this is his first argument in favor of Cæsar,—he is not on safe ground yet; Cæsar may have shown that liberality to bribe the people. Besides which the falling inflection would be too imperative in tone; the rising expresses homage to their judgment; it appeals to them, and for these reasons I prefer it.

"When | that-the-poor | have-cried, Cæsar
hath wept: (with feeling and tremor.)

"Ambition | should be made of sterner stuff."

While the humanity of Cæsar is described in tremulous sympathy, the succeeding line, expressive of heavy censure on those who so unjustly murdered him, must be delivered with adequate solemnity and sternness.

"You all did see | that | on—the—Lupercal
I thrice | presented him—a kingly crown,
Which he did | thrice refuse: was this ambition?"

This is the climax of the arguments. He had been murdered for aspiring to a kingly crown, and he had thrice refused it, and that gave indubitable evidence that he was not ambitious. It is true that Casca, in his blunt way, had said that "to his thinking, he was very loath to lay his fingers off it" when the crown was offered to him. But Casca testified that the people approved. "The rabblement shouted and clapped their chopt hands, and threw up their sweaty night-caps, &c." Hence the question, "Was this ambition?" should be given with a falling inflection on each word, with a full expectation of an answer in the negative. I may also add that the rising inflection recommended in the previous question gives greater effect to the altered inflection of this final question.

Antony has now achieved a triumph. He reads his success in the faces before him; probably whispers and tones of approval reach him; and so now when he names Brutus, on one word, 'sure,' he throws the emphasis and gives to the final words the rising inflection, which always expresses doubt or incompleteness,

"Yet, Brutus says he was ambitious;
And sure, (prolonged) he is an honorable man."

The first great end of the oration has been achieved, and now, with consummate tact, knowing that success is only weakened by any effort to make it more successful, he re-awakens their affections—for they loved Cæsar—by tender rebukes and appeals which complete the triumph of defence.

"You all did love him, once not without cause;
What cause withholdeth you then to mourn for him?
O judgment! thou art fled to brutish beasts,
And men have lost their reason."

The last two lines of this passage must be delivered with an expression of apparent sorrow. The speaker looks upward apostrophizing Judgment, but in this appeal, in while there is a rebuke conveyed, it is a flattering compliment to the passions of the multitude. They have judgment, but now carried away by misrepresentation and injustice 'men have lost their reason.'

There is also great skill exhibited in his temporary silence. He affects to mourn over the murdered Cæsar, and while silent, probably with his hands or his robes covering his face, he listens to the citizens, as they express their changing views on what he has spoken. The reading of their parts is as much a dramatic art and feature of the scene, necessary to its best effect, almost as the speech itself. It must be characteristic, rough and unpolished in style, varied in tone, and imitative of the utterance of such an assembly. This very contrast to the exalted and polished delivery of Antony will give the best effect to the change which must instantly mark the delivery of his first words as he recommences:

"But yesterday | the word-of-Cæsar | might
Have stood | against-the-world:—now | lies he | there,
And none so poor | to do him | reverence."

The evident meaning of this passage is that he who was master of the world is now fallen so low that the meanest of that multitude will refuse to do him reverence. While the first two lines must be delivered with impassioned pride, in the fullest rotund and swelling tones, the second two lines are given with an expression of rebuking mournfulness. But in the delivery of the first two lines that follow,

"O masters | if I were disposed to stir
Your hearts and minds | to mutiny and rage,"

The orator sweeps along with impassioned force as if he were going to stir them to avenge this cruel murder. Perhaps he was; but reflecting probably that this would be premature—that he has mightier arguments to advance; or perhaps seeing in the faces before him some still unfavourable expression, inimical to his final design, he skilfully changes his manner and tone to scorn and irony,

"I should do Brutus wrong and Cassius wrong,
(emphasize "wrong" first and then "Cassius")
Who, you all know, are honorable men;
(let the word "honorable" be delivered in slow mocking
tone, with the full circumflex intonation)
I will not do them wrong: I rather chose
To wrong the dead (solemnly), to wrong myself | and you,
Than I will wrong—such HONORABLE men."

In the delivery of the next passage the speaker again changes his manner, passion apparently is subdued, and with the exquisite skill of the practised orator who knows well how to make his next point tell, he refers, as it were incidentally, to the "will" whose importance is enhanced by this careless reference to it,

"But here's a parchment, with the seal of Cæsar,
I found it in his closet; 'tis his WILL."

The last three words are full of effect, in strongest contrast with the preceding by their very emphasis. Every ear must catch those important words, and all that follows must be given with distinctness, fervor, and point.

"Let but the commons | hear this testament,
(Which pardon me I do not mean to read;)"

This line must be read with an air of affected earnestness, as if he did not mean to read it, and which he does read afterwards with the best effect for his purposes.

"And they would go | and kiss dead Cæsar's wounds,
And dip their napkins | in his sacred blood;
Yea, beg a HAIR of him | for memory,
And, dying, mention it within their wills,
Bequeathing it as a rich legacy | unto their issue."

The last three lines must be delivered slowly and with dignified and impressive effect, to enhance the importance of the will and to awaken the deepest interest in its contents.

But the remainder of the oration is so splendid in its eloquence and impassioned force, and in the skill of consummate oratory, that its review will justify another article.

BLACKBOARDS.

BY C. CLARKSON, PRINCIPAL HIGH SCHOOL, SEAFORTH.

Every school nowadays has one or more blackboards. It were waste of time at this late date to dwell on their usefulness, to demonstrate their capacity for multiplying the teacher's effective power. But there are blackboards and blackboards. My own experience, and the observations I have made in various schools, lead me to the conclusion that much benefit is lost by the very common neglect of a few particulars which in some way get entirely overlooked. I shall touch on a few of these points, and mention some of the practical remedies which I have found to be satisfactory on actual trial by myself and others. If any of these hints prove useful to some younger brother in the profession I shall be gratified, though I am not so sanguine as to hope that any of the veterans in our noble army will see fit to adopt any of the simple improvements suggested.

I. *Position.* The board should be placed in front of the class. This seems patent enough; yet go into many of the largest and best school buildings in this province, and it does not seem so simple after all; for in many central schools, collegiate institutes, etc., we find fine large blackboards placed at the sides or the rear, while near the teacher's desk is an insignificant apology, a mere remnant of a board, the only one easily visible by the school, and the only one conveniently and quickly available by the teacher. This of course is a direct discouragement to the use of this valuable aid. The fundamental error is in the seating of the room, and may generally be corrected at a very small expense. The seats in an ordinary class room, say 20x30, 18x24, or similar dimensions, ought to face the long wall, not the short one. The blackboard privileges thus secured far outweigh in my opinion any slight disadvantages (and I know of none) which might possibly be incurred. All the pupils are brought nearer the teacher and nearer the board, and the convenience and efficiency are so much increased that I have never known any one wish to go back to the old arrangement after trying the one indicated. The room is often greatly improved by the change as regards light, by facing the pupils to the east or the north, and thus avoiding the bright glare which is so fruitful a source of shortsightedness in our schools. It is a further advan-

tage to a *live* teacher to have his own desk placed at one corner, so as to leave the whole face of the board entirely unencumbered. To a piece of torpidity which hibernates perennially in its chair and hears lessons, this would of course be a great annoyance, since the machine might be put to the inconvenience of standing on its feet, and even walking about occasionally.

The board should be placed within two feet of the floor, and extend to the height of seven or eight feet from the floor. In many schools the whole of the blackboards are between three and four feet from the floor. The consequence is that a majority of the pupils are unable to use more than a foot or two of the lower edge. I have seen several large and expensive schools with every blackboard three feet six inches from the floor. In some of the junior classes, where the accommodation is most particularly required, only one or two pupils in the class could reach the board so as to use more than a few inches at the bottom. I know a \$10,000 ward school in which not 5 per cent. of the pupils could reach the boards, though these are sufficiently numerous, and otherwise judiciously placed. One easy remedy is to place a narrow platform, 2 or 2½ feet high, under such boards. The better way is to have the board extended down. The fundamental error seems to be the educational heresy that the blackboards are all made for the teacher's use, whereas experience proves that there is no more efficient means of teaching classics, mathematics, science, almost anything in fact, than by sending a whole class to the board at once to do the same exercise, then getting them to point out each other's mistakes, and to receive the benefits of all the corrections; thus not only saving the time of the class and the labor of the teacher, but actually accomplishing more in a few minutes than could be done in hours by the individual method. Every school should, if possible, have accommodation for all the pupils at the blackboards simultaneously. No class will go to sleep over such exercises. To most pupils they afford great pleasure.

II. *Use.* The blackboard as commonly used is injurious to the health, especially to that of the teacher. I have often wondered how this has escaped the authors of books on teaching. We have abundant warning as to the unhealthful effect of stone-cutting, needle-grinding, grain-shovelling, etc., but I have never read a line or heard a sentence of caution as regards blackboards. I have watched teachers of infant classes, masters of public and high schools, tutors and professors in college, teaching their classes or lecturing to their students chalk in hand, speaking continually amid a dense cloud of floating chalk-dust, which at every breath passed directly to the delicate lung cells. What wonder that asthma is almost universal among aged teachers? Can the prevalence of consumption, bronchitis, &c., be considered remarkable among those who are breathing chalk-dust so constantly? The ordinary plaster of Paris crayons greatly aggravate the evil. To one engaged in teaching arithmetic or mathematics several hours a day, the consequences are inevitable. The prevalent mistake lies in the supposition that water applied to a blackboard will spoil it, whereas a good board is greatly benefitted by being well washed every day. If large slabs of slate could be secured, such as are used in some of the schools of Germany and of the United States, the dust nuisance would be avoided. It may be greatly abated by the careful use of the sponge. I have for ten years past constantly used a large sponge, or a ball of woollen cloth, which does not require wetting more than once, or at most twice a day. A very few drops sprinkled skillfully over the surface are sufficient to keep the dust down. No time is lost waiting for the board to dry, for one end is generally ready for use by the time the brush has reached the other. There is no reason in the nature of things for constantly inhaling this deadly dust, and suffering the consequences. If the damp sponge is kept at hand, the face of the

board kept free from accumulations, and brushes well dusted every day, the evil may be reduced to very small compass. The matter is worth the attention of all concerned.

As an indirect means of abating the dust, I may mention the use of *chalk* instead of plaster. Carpenter's line chalk is not quite so handy, but it is far less dusty than common crayons, and if cut into angular fragments with a knife is very convenient. Many blackboards are too rough, and wear the chalk far more than is necessary. Very little flour of emery or ground pumice stone is necessary in the coating. If care is taken to exclude every particle of oil or grease from the composition, a very small quantity of emery or pumice will give the board the requisite grittiness of surface. It would pay any teacher to recast a rough board with a smoother finish, rather than suffer the effects of chalk dust. New boards may be polished with a smooth piece of hardwood or metal. Let any teacher observe, two hours after dismissal, the thick covering of chalk dust which settles down on the desks and seats of an ordinary school-room on the afternoon of a cold day when the windows have been kept closed, and reflect whether the unavoidable impurities of school-room air are not sufficient without the addition of preventible ones.

HOW I MANAGE MY CLASS.

MRS. E. WALLACE.

The object of education is to develop and direct all the physical, mental and moral faculties; to produce a symmetry of growth and a harmony of action among all a child's powers, to give them force, direction, endurance and independence; we cannot, therefore, be too careful of the influence we exert, the habits of thought and action we aid them in forming, the practical use we enable our pupils to make of all they learn at school, and the impressions we make upon them in the management of our classes.

We have really as much to do with fitting them to fill well the different spheres in life as their parents.

We should teach them to be self-reliant and inventive, to utilize all the means within their reach, to economize time, strength, material and energy, and, in short, to make the very best use of all they hear, see and handle.

By carefully studying the different dispositions, their natural propensities to good and evil, we may, by encouraging the good, and teaching them to control and overcome the evil, help them to maintain the energy and rank of all their intellectual and moral faculties, qualify them to perform their various functions, and balance them so that they will act in concert.

As the heat and light of the sun, the winds and rains of heaven, promote the growth and strength of nature in trees and plants and bring out all their fair proportions, so we, as educators of youth, should guide, control and influence their minds so as to develop a healthy and vigorous growth.

We should not be satisfied with being in our respective rooms at a quarter to nine o'clock, mechanically going through the items marked out on our time-tables day after day, and dismissing with the doxology or the benediction when four o'clock comes, really manifesting more interest in the closing exercises than in any other portion of our work during the day. No need for wonder if there are frequent cases of truancy arising from a dislike for school, and a general lack of interest on the part of the pupils, where the teacher is not thoroughly in earnest in his work, and fully aware of the responsibility of his position.

I study my pupils, and, unnecessary as it may seem, by my

actions invite them to study me. In this way we soon become acquainted and understand each other.

By my becoming interested in them personally, manifesting pleasure or pain as their actions deserve, they exert themselves to please me both in their lessons and general deportment.

I make it a point to reprove kindly, pointing out their errors in a serious light, trying to make them understand that wrong-doing in every form reacts upon themselves; and that they are alike the real sufferers whether they neglect their lessons or are guilty of a misdemeanor.

If necessary, I punish severely, but not for a first offence, and never without first convincing the offenders that I would be guilty of wrong, unworthy the trust reposed in me by their parents and School Board, if I allowed such conduct to be repeated without punishment.

I find that a few minutes spent *every morning* in talking with the little ones (mine is an eighth division) about "being good" has a beneficial effect. I do not recommend formal lectures on morality, but simple conversations about seeming *little* errors to shun, little works of love and duty to perform, the kind of impulses it will be safe to follow, and those from which to turn away. It is then we form plans for carrying out the day's work. I allow the children to give their own ideas, or rather *I lead them to express mine*; and believing that they have had something to do with to-day's plans, they feel a certain responsibility for carrying them out, and their importance in their own eyes in securing the success of to-day's lessons sets them to work in good earnest. This is not the only result—it forms the habit of thinking and planning for themselves, which will be worth a great deal to them in after life. And should not this be the direct aim of all our teaching? Should we not teach them to look beyond school-days for the harvest of their work in the school-room? School lessons should be only the means to an end away in the future.

We have all noticed how constantly and earnestly a new pupil watches us. He is quite indifferent to the appearance of his future class-mates; but he is measuring us in every turn we make, and before four o'clock comes he has made up his *little* mind as to how he can manage us. This is especially true in the case of troublesome pupils.

And this is the very best time we will ever have to make a good impression, to secure the respect and love of that pupil. Meet his inquiring scrutinizing looks with a smile, or a kind word, or a short explanation. Do not *exact* any work from him; tell him he may just look on to-day and see how nicely we get along in our room, and judge for himself how he is going to like to work with us.

Give him to understand that it will depend upon himself entirely whether we will keep him or not.

Find out which studies he takes most interest in, and before four o'clock comes have your mind made up as to how you can best meet him in his inclinations, disposition and temper. Let him see that, as one of your pupils, he is at once an object of interest to you. I find this a good plan, especially with wilful, troublesome boys; and it takes no time from the regular work of the class.

It is great help to have everything done in order, such as taking slates, books, pens, etc., and replacing them in a fixed way. The children should not be allowed to think that anything may be done carelessly in school. It saves the teacher a large amount of trouble and noise, and assists very materially in forming habits of neatness and despatch, which become rules of action for them in future years.

If it be true that "the boy is father of the man," how important that a good foundation for systematic work be formed in youth. How many more bright, pleasant homes we would see, particularly among the lower classes, if people knew how to make good use of

the means they have. So, many fail as men and women because they lack system and judgment. They seem to have no idea of executing anything without a waste of time, strength, and material. Now I hold that it is, and that it should be felt to be, a teacher's *privilege* to assist in remedying this lack—a privilege for which we will be held accountable. We, too, are gaining by the exercise of care in this respect, for in doing so we are gaining power over, and respect and love from both parents and children, without which our labor is in vain. Those of us who have asked the children to bring materials for learning to sew will readily see the need of reform in some homes.

We often make a serious mistake of finding fault with mere accidents. A slate falls, and we show very plainly by our looks, and too often in words not over kind, that we are annoyed. The offender knows that he had no intention of annoying, and a sharp reproof or a demerit mark at such times has the effect of discouraging good effort, and actually breeding repeated carelessness—"We must learn to control ourselves, if we would successfully control others."

In securing attention and interest, I find it essential to present the different subjects in a variety of ways. Going over the same course session after session, especially in the lower grades, is rather uninteresting to us, but the children, we must remember, are the ones to be benefited, and the work is new to them. We must keep interest warm by the desire to help the inquiring faces before us.

If I see them becoming restless, I stop work for a minute and lead them in rapidly performing some light exercises, or let them sing some lively song, as "Three Blind Mice," or tell them a story to make them laugh. Sometimes I get one of them to tell a story. I cannot explain why, but it is a fact that our pupils get the idea that they confer a real favor on us if they learn their lessons well. It is our place to show them their mistake. I tell them it is not going to make me any better, or wiser, or richer if they learn a great deal.

At the beginning of the session I give very short easy lessons, and get the pupils into the habit of coming with them well prepared. They get good marks, and soon feel so well satisfied that an imperfect lesson mark hurts them more than our "educational ointment," the new strap. Then we have an honor roll made up every Friday afternoon from names having no discredit marks. *I work as hard as they do to get their names on that roll.* It saves a great deal of trouble.

I stimulate them to effort by the reward in the effort itself; Teach them to aim high and press steadily forward, assuring them that no matter what sphere in life they fill, they may have the respect and confidence of all who know them. Whatever they undertake to do they must be sure to do well. Never shirk responsibility or despise small things.

I encourage them to express their views as to what practical use they expect to make of all they learn. For instance—What is the use of learning to add? Why do you study geography? Will it do you any good to excel in reading and spelling, or to be able to write well? From their own answers I make the strongest reasons for punctuality and regularity, for diligence and attention as the only means of progress. I try to make them understand that they are the big wheels, and their youthful opportunities all the other wheels which are necessary to run the machinery for building grand places for themselves as the men and women who are to fill all the spheres in life now occupied by their parents and teachers.

Some one says, "The highest aim of the primary teacher, and of all teachers, is the *education* of the child, the harmonious development of its nature." "Not the sum of the things learned, but the mental facility manifested by the scholars in thought, speech

and writing, is the true criterion of the scholar's standing." "The scholar's final aim is not what he can *do*, but what he shall grow to be." "Morality has for its foundation firm habit, religious warmth of heart, and clear thought." Without the sympathy of the class, no teacher can successfully secure their best efforts.

I believe the strongest power we can have lies in the individual sympathy and interest we manifest in our pupils. Let them see that we, who are not related to them, who may not even meet them in after years, feel a deep interest in their progress, in the characters they are forming, the habits they are acquiring, and we have an untold influence over them, an influence which they will feel and be actuated by perhaps long after our voices are silent in death.

We are, often unconsciously, models for our pupils. If you do not believe it, just let them play school some noon hour when you are in charge, and if you do not see yourself in miniature, I am mistaken. I have tried it, and have been cured of serious mistakes which I was not conscious of making.

Would we stimulate them to a love for knowledge? We must love it ourselves

Would we have an enthusiastic class? Set the example by being enthusiastic.

Would we have a gentle, loving class; showing love for each other, love for the work, and love for us? Again we must be the pattern.

Would we recommend diligence in the work, perseverance under difficulties and disappointment, and patience and self-control in all circumstances?

Then we must show the advantages of possessing these qualities by practising them daily; and these very qualities developed in the children become strong aids in the management of our classes.

I would be sorry to give the impression that there is no difficulty in carrying out these principles of action. Often discouraged and humiliated on account of seeming failures, disappointments and vexations, I can but resolve to "try again," taking courage from the Divine command and promise: "Cast thy bread upon the waters, for thou shalt find it after many days."—*Read before Toronto Teachers' Association.*

TEACHING SPELLING.

BY A. A. MILLER.

1. Arouse the pupil's pride. Let him once feel that bad spelling is a disgrace, and half the battle is won. Children should be taught to avoid a wrongly spelled word as they would a contagious disease. At the same time they should look on correct spelling as a matter of course, and as not, in itself, meritorious. A great cause of poor spelling is the very prevalent notion that it does not matter how a word is spelled so that its identity be not lost. When pupils learn that intelligent readers measure the culture of the writer of a letter by his spelling, the first great obstacle to teaching spelling is removed.

2. Spelling should be taught in classes as a separate study. It will do to depend upon other recitations in this particular, when it will do to teach reading in connection with the grammar class solely, or when the study of geography can be properly confined to the use made of it in teaching history. Not only should spelling be taught as a separate study, but lessons should be assigned in advance of the recitation, that opportunity to study them may be had. Primary pupils cannot study in a better way than to write the word of the lesson on their slates, and the words of the reading lesson should constitute the spelling lesson. When the lesson has been repeatedly copied from the book, let it be written from dictation and afterwards spelled orally. Care is to be taken that as few words as possible be misspelled, for errors are very like to be repeated. Let words in common use be first taught; words to which pupils can attach some meaning, giving new words as their fund of information increases. Merely technical words may better be avoided until there is a need for them. Besides these

separate classes, all recitations should be, to a certain extent, recitations in spelling. When a new word occurs, have it spelled and defined. If this cannot be done, there is no use of the pupil who fails going further in that recitation until he consult the dictionary.

3. Pronunciation—that is, correct pronunciation on the part of the teacher—is a powerful aid to the study of spelling. In dictating words, many teachers are liable to pronounce so plainly as to be incorrect; each syllable being enunciated with labored distinctness, and an utter disregard of the laws of pronunciation. If the pupil is unable to spell a word, he has only to say that he does not understand it, in order to have it so pronounced as to leave no doubt as to its orthography. Of course, he will miss this same word the next time he has occasion to use it. Carelessness of pronunciation on the part of the pupils cannot be too carefully guarded against. We spell as we pronounce—to a great extent. If *part-i-ci-pale* be pronounced with three syllables, it will be spelled with three syllables; and if *perspiration* be pronounced as if the first syllable were *pes*, it will be spelled in like manner.

4. A fourth means to correct spelling is composition. A list of words is assigned for a lesson; the recitation to consist of the correct placing of these words in sentences. This is a very useful means of teaching the orthography and use of words pronounced alike, but spelled differently, and of different meaning. How often is the word *principle* used when *principal* is meant, and *vice versa*? So *current* is used for *cur-rant*, and the reverse. The argument for teaching the spelling of words only in connection with their meaning applies especially to this class of words. The spelling of each examination paper should be carefully scrutinized, and misspelled words noted. If it be understood that these efforts will affect the standing, carelessness in spelling will be effectually done away.

5. Good penmanship is a most efficient teacher of spelling. Many a person writes a word poorly because he is not certain of its orthography, and his penmanship prevents detection. A misspelled word looks worse when well written than if only scrawled. I have seen the word *to-gether* misspelled many times, but never did it look so utterly out of place as when it appeared in the rounded characters of a well-known writing teacher. A gentleman who stands high among the teachers of Wisconsin, in writing the diphthongs *ei* and *ie*, makes both letters exactly alike, and places the dot above and just halfway between them. There is nothing to be insisted on more strenuously than plainness of writing. It will prevent attempted deception as well as a great waste of time.

6. Rules for spelling have a place among the means of teaching this art. Just what their relative importance may be is a matter of opinion. Time spent in a mere memorizing of rules is time wasted. Yet this is just what many think to be their use. Their application to the spelling of certain classes of words may be very valuable, both as a means to correct spelling and a matter of discipline. The application of rules to the spelling of derivatives must be practised until it becomes habitual to the pupil, or the rules are of no account. But there is a large class of words that is above all rules, and that defies all law. Such words as *delible* and *indelible*; as *siege* and *seize*. The only way that I know to dispose of such words is to learn their spelling just as the multiplication table is learned. They must be taken by force and compelled to submit.

7. Pupils should keep a list of all misspelled words, and from time to time review them. Of course, the teachers will note all such words, and frequently bring them to the attention of pupils.

8. And last, but by no means least, let the habit of consulting the dictionary whenever any doubt arises, be formed as soon as possible—not an unwilling consultation, as is now usually the case, but a willing and cheerful search after truth. This habit cannot be over-estimated. If it be once acquired, there is little fear that misspelled words will find a place in any composition.—*New York School Journal*.

TEACHING LANGUAGE.

Many thousand years ago mothers and nurses discovered how to teach babies to talk. About other educational problems there may be doubt, but this one is settled; the one thing every human being, rich or poor, learned or ignorant, can do really well is to speak the tongue his mother taught him. Now, if pedagogues, instead of making children go their way, would only consent to follow the ex-

ample set by the mothers, and teach as they do, or, in other words, would let children learn in the way in which nature meant them to learn, they might be successful, too, but they consider themselves wiser than nature, and therefore they fail. A mother does not begin by teaching her baby to spell before it can talk. She says, "I am mother;" and the baby understands perfectly, and tries, and after a while says "mother," and is delighted; and so learning to talk goes on with perfect satisfaction to every one. In view of these well-known facts, common sense would suggest making an effort to see if it is impossible to teach reading and writing in the same way; in perfect faith that if it can be done it must be natural. That it can be done with entire success the result of many different experiments has proved. The method is very simple. For example, the teacher, on the first day of school, draws a man on the blackboard, and then taking a little class of about a dozen children about her she asks them what she has drawn. They say "a man," and are interested at once. She then writes the word "man," and tells them that means "man," too. They understand immediately, and after she has rubbed it and re-written it a few times they learn to recognize it wherever they see it. Then while the impression is still fresh they are sent to their seats to see how good a man they can make on their slates for themselves. This is their first writing lesson, and though naturally the first attempts are not very successful, it is surprising how quickly children learn to imitate any word they see written, and with what never-failing interest and enjoyment they will copy words and sentences upon their slates. Every word they read they also write, and of course spell; for children would no more spell the word "man" wrong than they write it, after having learned to draw it in this way, than they would draw the man without his head. Indeed, the method of teaching spelling is a great feature of the system. If anything has been demonstrated by repeated failure, it is that teaching to spell English by ear is impossible. Nine out of ten of the people who speak the English language to-day, if they are in doubt how to spell a word, write it down to see how it looks; that is, they spell by eye, although the eye has never been trained to retain the shape of words. The object system spends its whole power on this training of the eye. From his first lesson, before he knows a letter, the child is taught to imitate the written shapes; he is taught to rely entirely upon the eye, and after he has learned his letters, and can spell orally, instead of drawing what were to him at first arbitrary signs, the same system is continued. Spelling is taught by dictation, and by exercises in writing original composition, until at length the eye retains naturally and without effort the form of every word that has been seen.

Meanwhile, orthography is learned. Having always seen sentences written beginning with a capital, it seems to the children a law of nature that all sentences should so begin, and accordingly they never think of writing otherwise. They learn in the same way what a question mark is, and what it means, and where it should be put, and so on throughout. Strangely enough, also, although the child has never been taught his letters, and only knows written words as signs representing objects, he finds no difficulty in recognizing the printed words when he sees them printed in a book.

The children who have learned to read from script upon the blackboard, when they are put into primers, go on with so little difficulty that the delay in the school work may be neglected. Every one knows, however, that the converse does not hold true, and that children who have first learned to read print do not read handwriting naturally. As time goes on another strange phenomenon takes place. Children begin to read new words at sight, without knowing their letters. They appear to have come to associate certain written signs with certain sounds, and to generalize just as they do when they learn to talk. No child, for instance, ever heard the word "gooder," yet the chances are he will say "gooder," and not "better," because he has learned by observation the rule for forming the comparative, but not the exception to the rule. So in learning to read he seems to recognize the force of the letters long before he knows their names. When this stage is reached the battle is won. After that children soon learn the names of letters for themselves; at most the teacher has only to spell the words aloud for a few days as she writes them on the board. The difficulty then is to supply the books. There is no danger that children thus taught will not love to read. Learning has been one long pleasure to them, because it gave a vent for their energy in work they thoroughly understand, which occupied at once their brains and their hands. They read childish books with

the same case and the same delight that they talk childish talk, and the chief care of the instructor now should be to see to it that plenty of the right kind of reading is supplied: reading at the same time healthy and sound, and which shall lead to better things in the future.—*Atlantic Monthly.*

Examination Questions.

SECOND CLASS NORMAL SCHOOLS PROFESSIONAL EXAMINATION.

DRAWING.

March, 1880.—Time: One Hour.

Values.

- 10 1. Draw the "Greek Fret" moulding.
- 20 2. Draw a *Rosette* composed of simple curves on the diameters and diagonals of a square.
- 10 3. Draw a *Quatrefoil* on a square.
- 20 4. Show what you mean by *vertical repetition*, using conventional leaf and berry forms as elements.
- 40 5. Draw a design for *carpets* or *oilcloth* to illustrate symmetrical arrangement about a centre.

COUNTY OF WATERLOO—PROMOTION EXAMINATIONS.

MARCH, 1880—5TH TO 6TH AND 6TH CLASSES.

ARITHMETIC (Full work required).

1. Two houses, a barn and lot cost together \$2337.40. The barn cost $\frac{1}{2}$ as much as a house, and the cost of a house was 3 times as much as that of the lot. Find the value of each.
2. On this day, viz., 23rd March, I receive \$845 for a note of \$860. When is the note legally due, interest at 8% per annum?
3. A merchant buys \$2645.50 worth of goods on 3 mos. credit, but is offered 8% discount for cash. Which is the better bargain, and how much, when money is at 7% per annum?
4. A train having to perform a journey of 250 miles, is obliged after 108 miles to reduce its speed by one-fifth. The result is that the train arrives at its destination 1 hr. 10 min. behind time. What is its ordinary rate?
5. Three daughters, Mary, Jane, and Ellen, are to share an estate of \$80,000, in the proportion of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, respectively; but Ellen dies, and the whole amount is to be divided in a proper proportion between the other two. What share does each receive?
6. Reduce to simplest form—

$$\frac{44\frac{3}{8} \text{ of } .056 - 8.04 \text{ of } \frac{1}{4}}{(8-2.4) + \frac{1}{5} \text{ of } 3\frac{1}{2}} \times \left\{ 3\frac{1}{2} \text{ of } \frac{1\frac{1}{2}}{3} - 1 \right\} + 2 \times \frac{2\frac{2}{3}}{5}$$
7. What is the length of the shortest rope by which a horse may be tied to a post in the middle of a field 20 rods square, and yet be allowed to graze upon every part of it?
8. Mr. Smith paid $3\frac{1}{2}$ times as much for a horse as for a harness. If he had paid 10% less for the harness and $7\frac{1}{2}$ % more for the horse, they would together have cost \$245.40. How much did he give for each?

5TH TO 6TH AND 6TH CLASSES.

GRAMMAR AND COMPOSITION.

"Tis the mind that makes the body rich;
 And as the sun breaks through the darkest clouds,
 So honour *peereth* in the meanest habit.
What! is the jay more *precious* than the lark,
 Because his feathers are more beautiful?
 Or is the *adder* better than the eel,
 Because his painted skin contents the eye?

NOTES.—1. Leave construction lines in every instance.
 2. Use of instruments allowed.

1. Divide the foregoing passage into propositions: state their kind and relation, and analyze each.
2. Parse the words in italics in the same passage.
3. Explain what is meant by gender, complex sentence, etymology, preposition, mood, co-ordinate proposition.
4. Write sentences showing the several ways in which "who" and "that" are used.
5. Parse the words in italics in the following lines:—
*No blinder bigot, I maintain it still,
 Than he who must have pleasure come what will.*
6. Give the infinitive present, the present participle and the past participle of the *intransitive* verbs corresponding to "raise," "set," "lay," and "fell."
7. Explain the derivation of "hydrogen," "grandiloquent," "hesitate," "cosmopolite," "autograph," "villain," "parent," "analyze."
8. Distinguish between—
 You like him better than I,
 You like him better than me;
 and
 He made a better soldier than poet,
 He made a better soldier than a poet.
9. Transpose into prose.

THE BANIAN TREE.

Branching so broad and long that in the ground
 The bended twigs take root, and daughters grow
 About the mother tree, a pillared shade;
 High overarched with echoing walks between,
 Where oft the Indian herdsman, shunning heat,
 Shelters in cool, and tends his pasturing herds.

10. Write an essay on any one of the following topics:—
 American War of Independence. Duke of Wellington.
 Battle of Waterloo, 1815. Napoleon I.
 Abolition of Slavery, 1838. Indian Mutiny, 1857.

5TH TO 6TH AND 6TH CLASSES.

ENGLISH HISTORY (Brunswick Period).

1. Who, on the death of Queen Anne, was direct heir to the throne? Mention some of the provisions of the Act disqualifying him, and show the claims of George I.
2. Write notes upon each of the following:—Robert Clive, the younger William Pitt, George Stephenson, and Daniel O'Connell.
3. Give a short account of the struggle for supremacy between the English and French in North America during the reign of George II.
4. Mention some of the results of the first French Revolution in so far as England was concerned.
5. What is meant by the terms—National Debt, Sepoys, Free Trade, Holy Alliance, Corn Laws, Catholic Emancipation?
6. What were the evils which it was intended the Reform Bill of 1832 should remove? Who introduced the Bill in the Commons?

5TH TO 6TH AND 6TH CLASSES.

GEOGRAPHY.

1. Distinguish between the Diurnal and Annual Motion of the earth, and state the results of each.
2. Give a short description of the geographical position, extent and physical features of the North-West Territory, and the District of Keewaydin or Keewatin.
3. Describe the railroad system of Ontario.
4. Through what waters would a vessel pass in going from Halifax to Duluth via St. Lawrence route?
5. Draw the south coast line of Asia, from Isthmus of Suez to Hong Kong, marking off British India and Afghanistan, and naming the principal capes and mouths of the chief rivers.

6. What, and under what government are Jamaica, Minorca, Natal; Tyrol, Iceland, Hungary, Singapore, Teneriffe, Balize, Siberia.

7. Name the cities on the following rivers:—Clyde, St. Lawrence, Rhine, Hoogly, Tagus, Hudson, Seine, Potomac, Rhone, Mersey.

4TH TO 5TH CLASS.

ARITHMETIC (*Full work required*).

1. A town lot was sold for \$1,728, at \$8 per 8 sq. ft. The front of the lot is 48 ft. What is its depth?

2. If it requires 8,400 yds. of cloth $1\frac{1}{2}$ yd. wide, to clothe 8,500 soldiers, how many yards $\frac{3}{4}$ wide will clothe 6,720?

3. Multiply 892,756 by 714,095 in three lines of partial products.

4. What is the value of

$$\left\{ \frac{3}{4} \text{ of } 7 - 2\frac{3}{4} \right\} \div \left\{ \frac{0.48}{1} \text{ of } .58 \text{ of } 8\frac{1}{2} \right\}$$

5. A, B and C together can dig a ditch in 4 days. A can dig it alone in 10 days; B can dig it alone in 12 days. How long will it take C to do it alone?

6. At 7% the interest of \$480 is equal to five times the principal. How long has the money been on interest?

7. A certain garden is $12\frac{3}{4}$ rods long, and $9\frac{1}{2}$ rods wide. At $2\frac{1}{2}$ cents per cubic foot, what will it cost to dig a ditch around it that shall be $8\frac{1}{2}$ feet wide and 4 feet deep?

8. The ridge of the roof of a building is 44 ft. long, and the distance from each eave to the ridge is 19 ft. 8 in. How many shingles 4 inch wide, laid $5\frac{1}{2}$ in. to the weather, will be required to roof the building, the first row being double?

4TH TO 5TH CLASS.

GRAMMAR AND COMPOSITION.

Note.—When the pupils of this class (4th to 5th) have had this paper one hour and a half, the Examiner will read to them the "Anecdote of the Wolf," page 145, Third Reader, from "a few years ago" to end of lesson.

1.—Analyze the following—

That which neither threats nor imprisonment, the scourge nor the chain, could effect, was accomplished, and rapidly, by the influence of love, though its object was one of the most despised among animals.

2.—Parse the words of the following sentence—

The genius making me no answer, I turned about to address myself to him a second time, but I found he had left me.

3. What is meant by the terms—inflection sentence, proper noun, predicate, noun in apposition?

4. State clearly the distinction between simple, complex, and compound sentences.

5. Correct the improper use of adverbs and adjectives in the following—

It was a terrible nice party. The singing was gorgeous, the music magnificent, and the company generally awfully pleasant. I wonder what made John so fearfully quiet, when everybody else seemed to be in such splendid spirits.

6. Derive the following words and give the meaning of the roots, prefixes and affixes—conjecture, humanity, difficult, infirmity, remunerate, ashore, extract, sineure, assimilate, obdurate.

7. Change the voice of all the verbs in the following sentences:

The General led the attack in person.

This exercise was written by one of the pupils.

We may expect a calm after a storm.

Few know the value of health till they lose it.

He was immediately arrested by a detective.

8. Transpose into prose—

— Nature's care to all her children just,
With richest treasures, and an ample state,
Endows at large whatever happy man
Will deign to use them.

9. Re-write, in your own language, the portion of the "Anecdote of the Wolf" you have heard read.

4TH TO 5TH CLASS.

ENGLISH HISTORY (Brunswick Period).

1. Give the name and date of accession to the throne of each of the Sovereigns of the House of Brunswick.

2. What great political party ruled the country during the first reign of this period? Mention three or more of the leaders of this party during that time.

3. Tell what you know of "The Seven Years' War."

4. Explain the terms—Jacobites, House of Commons, Cabinet or Ministry, Universal Suffrage.

5. Who was King, and who Prime Minister, at the time of the American War of Independence? What led to this war?

6. When did the parliamentary union of Great Britain and Ireland take place? For how long had Ireland enjoyed an independent parliament?

7. Give a short sketch of "The Peninsular War."

8. Tell all you know of Lord Nelson.

4TH TO 5TH CLASS.

GEOGRAPHY.

1. Describe, as minutely as you can, the boundary line between Canada and the United States, beginning at Juan de Fuca Strait and ending at Passamaquoddy Bay.

2. Name the chief rivers of Europe, the countries through which they flow, and the waters into which they empty.

3. What and where are Honolulu, Cobequid, Kandahar, Ben Nevis, Warsaw, Restigouche, The Wash, Archangel, Cotopaxi, The Hebrides?

4. Draw a map of Africa south of the Equator. Make it as complete in every particular as you can.

5. Name and give a short description of each of the four great mountain systems of N. and S. America.

6. Name the States on the east and west banks of the Mississippi, also those bordering on the Atlantic Ocean, with their capitals.

N. B.—In answering these questions, the pupils should tabulate as much as possible.

READING—ALL CLASSES.

Any two or three sentences of the following:—

It is pleasing to contemplate a manufacture rising gradually from its first mean state, by the successive labors of innumerable minds: to consider the first hollow trunk of an oak, in which, perhaps, the shepherd could scarce venture to cross a brook swelled with a shower, enlarged at last into a ship of war, attacking fortresses, terrifying nations, setting storms and billows at defiance, and visiting the remotest parts of the globe. Who, when he saw the first sand or ashes, by a casual intenseness of heat, melted into a metalline form, rugged with excrescences and clouded with impurities, would have imagined, that, in this shapeless lump, lay concealed so many conveniences of life, as would, in time, constitute a great part of the happiness of the world? Yet, by some such fortuitous liquefaction, was mankind taught to procure a body, at once, in a high degree, solid and transparent,—which might admit the light of the sun, and exclude the violence of the

wind:—which might extend the sight of the philosopher to new ranges of existence; and charm him, at one time with the unbounded extent of the material creation; and at another with the endless subordination of animal life:—and, what is of yet more importance, might supply the decays of nature, and succour old age with subsidiary sight. Thus was the first artificer in glass employed, though without his own knowledge or expectation. He was facilitating and prolonging the enjoyment of light, enlarging the avenues of science, and conferring the highest and most lasting pleasures: he was enabling the student to contemplate nature, and the beauty to behold herself.

4TH TO 5TH CLASS.

DEFINITIONS AND QUESTIONS on Reading Lesson above.

Explain the meaning of (1) contemplate, (2) gradually, (3) successive, (4) fortresses, (5) billows, (6) remotest, (7) concealed, (8) transparent, (9) violence, (10) philosopher, (11) material, (12) subordination, (13) succour, (14) artificer, (15) facilitating, as used in the lesson.

Re-write the following, and for italicized words use their meanings:

- (16) Labors of *innumerable* minds.
- (17) By a *casual* intensesness of heat.
- (18) What is yet of more *importance*.
- (19) Might *supply* the *decays* of nature.

5TH TO 6TH CLASS.

Re-write Nos. 1 to 7, and for italicized words use their meanings. Answer the questions in the remainder.

- (1) Setting *storms* and *billows* at *defiance*.
- (2) Melted into a *metalline* form, *rugged* with *excrescences*.
- (3) Lay *concealed* so many *conveniences* of life.
- (4) By some such *fortuitous* *liquefaction*.
- (5) *Succour* *old age* with *subsidiary* sight.
- (6) *Enlarging* the *avenues* of *science*.
- (7) He was *enabling* the *student* to *contemplate* nature.
- (8) Parse "enlarged," line 4; "who," line 6, and "beauty" in last line.

To what instruments and to what uses to which glass is put does the author refer in each of the following cases:

- (9) Which might admit the light of the sun, and exclude the violence of the wind?
- (10) And charm him, at one time with the unbounded extent of the material creation?
- (11) And, at another, with the endless subordination of animal life?
- (12) Might supply the decays of nature, and succour old age with subsidiary sight?
- (13) And the beauty to behold herself?—last line.

ANSWERS TO QUERIES.

SUBSCRIBER, *Royal Road, Douglas*.—For work required for second-class certificates in Ontario, see CANADA SCHOOL JOURNAL. —For Manitoba, see article by Rev. C. Pinkham in present issue.

2. Teachers are paid in full by the Boards engaging them in Ontario. Salary for such as you describe, 400 to 500 dollars.

3. A candidate regularly licensed in New Brunswick could at once apply for the same grade in Ontario.

E. H. BLACK.—The school holidays in Ontario extend in summer

from the 8th of July to the 17th of August inclusive, and in winter from the 24th of December to the 2nd of January inclusive, (Trustees may reduce the summer holidays to four weeks, if they can get teachers to teach for them on those conditions.)

H. R. P., *Hillsdale*.—Roman history for second-class candidates extends to the close of the second Punic War.

S. K., *Castleton*.—The marks necessary for 2nd B, are 20 per cent. on each subject, 40 per cent. on each group, and 50 per cent. of the whole number obtainable; for 2nd A, "30 per cent. on each subject, 50 per cent. on each group, and 60 per cent. of the aggregate of total marks." Those given in last number were slightly incorrect.

G. M., *Lucknow*.—See Official Dept. of this number of the JOURNAL.

D., *Kingston*.—1. A teacher does not pay his superannuation fee if he is not teaching.

2. You should state, when making your application for examination, where you wish to write.

3. It will not be necessary to have a third-class certificate renewed in order to attend the Normal School.

4. Roman History (see above).

X. Y. Z.—You may shorten your University course one year by taking senior instead of junior matriculation examination.

2. Study Mason's Grammar carefully.

W. J., *Creighton*.—The Latin for 1880 for Second Class Certificates is the Accidence and the Principal Rules of Syntax and Prosody; Exercises; Cicero in Catilinam, II, III, IV., and Virgil, Re-translation into Latin of easy passages from Cicero.

Subscriber.—Candidates for First Class are not examined in Botany, Bookkeeping or Physiology.

M. E. C., *Ballymote*.—No percentages are fixed for 1st class certificates.

VERDANT GREEN.—Write for Curriculum to Dr. Geikie, or Dr. Frederick Wright, Toronto.

2. For time table consult your own Inspector.

Exchange Department.

In this department questions submitted by teachers will be inserted, that they may be discussed by those who are desirous of either giving or receiving light in regard to them.

The last paragraph of the replies sent by "H.C.C.," in the March JOURNAL, was rendered meaningless by the printer, who made "The While" appear as "The Whole," and omitted the sign of equality (=) after the words "The While" in each place where they occur.

In the Third Reader the lesson on The Vision of Mirza contains the following, "The sound of it was *exceeding* sweet." How should the word in italics be parsed?

What does Mason mean by "Notional Verbs"?

In the sentence "This is *my* book," are the words in italics pronouns or adjectives? SUBSCRIBER.

A board is 12 feet long, 1 inch thick, 18 inches wide at one end and 12 inches wide at the other. How will you proceed to divide it into two equal parts (that is, by cutting across the board); and how much lumber will each half contain?

How do you tell the "Gerund" from the Infinitive, and how do you parse the Gerund? TEACHER.

"BUT."

In this age of progress and rapid development in civilization, people are beginning to find out that our forefathers knew compar-

atively nothing, and in no branch is this illustrated better than in grammar. Lennie, among his conjunctions, has 'and' and 'but.' 'And' is a conjunctive conjunction, 'but' disjunctive. But now 'but' is parsed as a preposition in such sentences as: "When all but he (they correct it, him) had fled." They say: substitute 'leaving out' for 'but,' and as 'leaving out' is a preposition, 'but' is. They say it makes good sense. Outwardly it looks so. But it neither expresses what is meant, nor is there a particle of sense in it, as it is impossible. Let us take the sentence as it would be corrected: "When all, leaving out him, had fled." Now, if 'leaving out' is a preposition, him is in the objective, and the subject of 'had fled' is all. But 'all' is not the subject, for all had not fled. Then 'him' is a part of the subject, which I would for the moment call the negative subject. But the subject must be in the nominative, therefore 'him' must be 'he,' and the word connecting it with 'all' must be a conjunction and not a preposition, so if 'leaving out' is a preposition, it is wrong, and the word 'but' is not equal to 'leaving out,' but to a conjunction, wherefore 'but' is a conjunction.

I wish to show another reason, which ought to prove it beyond doubt. The meaning of the sentence: "When all, leaving out him, had fled," is this: Originally there was a number of persons represented by 'all,' and a person represented by 'him' on board the ship. But 'all' fled, and 'him' did not. So 'but' as a conjunction subtracts 'he' from 'all,' while as a preposition, 'him' originally a distinct person added to 'all,' is taken away, and 'all' is left, which is not the case. In the sentence: "The captain and crew fled," we mean that the captain and crew were the subjects who fled. But if we substitute for 'and,' 'with,' then the sentence becomes: "The captain, with the crew, fled." Or: "The captain, adding the crew, fled." Now a difference between this and its original sentence is that whereas, in the first, 'the captain and crew' is the subject, in the last 'the captain' is. That is, the captain fled while the crew accompanied him. We express that the captain fled, and 'with the crew' is but a parenthetical phrase. With 'and' we say that both the captain and crew fled, which is a different statement, and so in changing 'but' into 'except' we have a difference also.

Again, in the sentence $x + y$ fled, $x + y$ is the subject of 'fled,' and so they can be connected by the conjunction 'and,' which is x and y fled. And ' x ' equalling the captain and ' y ' the crew, the captain and crew fled. Or, with $x - y$, let $x =$ 'all' and $y =$ 'he.' Then 'all' minus 'he,' or 'all but he' is the same as $x - y$. But if we substitute 'leaving out' for 'but,' it implies that there is an original quantity $x + y$, and leaving out ' y ' we have x as the subject.

There are many examples in English classics where 'but' is followed by a nominative, as in Shakespeare, and which go for as much as the author is worth. So I conclude that 'but' is only what you might call the negative of 'and,' as 'minus' is to 'plus,' and that as in the example I have cited 'but' is a disjunctive conjunction.

H. P. B.

Notes and News.

ONTARIO.

The Peterborough School Board have not quite recovered from their economical (?) craze.

Listowel School Board is making matters lively. Nearly the whole staff has left during the past year, on account of reductions in salaries. They have a heated discussion regarding the appointment of Inspector; and have at last succeeded in awakening a decided interest in school matters generally in the ambitious town. One of their teachers having resigned at the close of the first session of 1879 to take a school in Toronto, the trustees refused to

pay her for the midsummer vacation, and were sustained in their action by the Education Department. She pluckily carried the matter into court, however, and of course won her case.

Peterborough Collegiate Institute has formed a Drill Association.

Creighton's Epoch Primer of English History has recently been adopted by the School Boards of London and Toronto.

Guolph has established a school for senior girls.

At the close of the Session of the Parliament street night school in Toronto, the Principal, Mr. Wm. Natrass, and the first assistant, Mr. R. T. Martin, were the recipients of handsome presents from their pupils.

The School Board in Sarnia has decided to plant shade trees in the grounds of their schools.

Rev. T. D. Phillips, M.A., mathematical master in the Collegiate Institute, Ottawa, has been forced by ill health, induced by overwork, to retire for a time from active work.

The Baptist denomination has purchased a lot in rear of University College, Toronto, and intend erecting a Divinity Hall thereon, the students of which will take their literary training in the Toronto University.

At the last monthly meeting of the St. Catharines teachers, an illustration was given by Miss Darche, mistress of St. James' Ward School, of the nature of physical training for children, accompanied by explanation of the uses of the various movements, and arguments in support of the system. A resolution was unanimously passed by the teachers that these exercises shall henceforth form a part of the daily work in each of the City Schools.

The following candidates obtained second class certificates at the late professional examinations at the Normal School, Toronto:—

MALES.—Thomas Ballantyne, Alfred Cole, John Cole, Wm. Colvin, Llewellyn Frank Cutten, Wm. Hay, Daniel C. Hetherington, Henry Horton, Wm. Irwin, Andrew Kerr, George McI. Kilty, Joseph Matthews, Wm. F. Mills, John McKay, George McKenzie, Wesley Newell, George A. Peters, Alexander Keith, James Robertson, Thomas G. Shillinglaw, Robt. Smith, James B. Standing, Thos. Stevenson, Simon H. Swartz, James F. Williamson, Cyrus Witmer.

FEMALES.—Sarah Cameron, Emma M. Cheney, Caroline Clifford, Charlotte Colmorgan, Victoria A. Creaser, Annie K. Green, Katherina Durrach, Catherine Dobie, Mary A. Dunn, Mary J. Elliott, Sophy Fox, Maria Hall, Christina Hardy, Margaret J. Harrison, Minnie R. Hay, Susanna Howden, Grace D. Kay, Mrs. Dora A. Kesner, Elizabeth Knowles, Ida K. Long, Julia Lewis, Sarah Loudon, Ina Meston, Jennie McGlashan, Jennie McLellan, Helena Patterson, Alexina Reid, Lydia Sheppard, Agnes Steedman, Lydia H. Thatcher, Mary R. Trout, Margaret L. West, Margaret H. Wilson, Helena Wilson.

At the distribution of prizes by the Ontario Art School in Toronto on April 24th, the gold medal was given to Miss B. Walker, of Belleville, and the silver medal to Mr. Geo. Reid, of Wingham. J. Lawson, Toronto, won the prize for ornamental design in outline drawing, and F. W. Jopling, Toronto, the prize for time outline from antique cast. Mr. John T. Willing, Toronto, received the prize for charcoal time sketching, and also Mr. Goldwin Smith's prize for Christmas cards, Canadian subjects.

We clip the following from the report of Mr. G. D. Platt, Inspector of Schools in Prince Edward Co.:

TEACHERS' CERTIFICATES AND SALARIES.

Of the 85 teachers employed, 21 had attended a Normal School, 23 held second class certificates (Provincial), 8 first class old country Board, 55 third class and four interim certificates. Several teachers obtained second class certificates during the year, and the number will doubtless increase in future.

The average salary of male teachers was \$368, and of female teachers \$256. In Ameliasburgh the average was \$407 and \$261 respectively, Athol \$336 and \$270, Hallowell \$373 and \$272, Hillier \$393 and \$259, N. Marysburgh \$327 and \$243, South Marysburgh \$332 and \$240, Sophiasburgh \$365 and \$250. Wellington paid its Principal a salary of \$575.

ATTENDANCE.

The number of pupils enrolled was 4697, and the average attendance for the first half of the year 2320, or nearly 50 per cent. The average for the whole year was not quite 46 per cent.—a slight decrease from 1873, probably owing to the severe weather and extensive snow drifts of the past year, which kept many of the junior pupils at home. The principal drawbacks are irregular attendance, and the too frequent changes of teachers. Parents are mostly to

diams for the former, and the temporary character of the certificates of many teachers has much to do with the latter. This is being gradually remedied, and, as the number of permanent certificates increases, will no doubt become less and less.

NOVA SCOTIA.

A Teachers' Association for Annapolis County was organized at Lawrencetown, on the 29th ult., under the superintendence of L. S. Morso, Esq., A. M., Inspector of Schools for District No. 4. The programme of exercises was varied and interesting, and the proceedings throughout in the highest degree acceptable. Next month's notes will contain a detailed report.

The Provincial *Journal of Education* for April contains the text of the Educational Act passed at the recent Session of the Legislature. In addition to minor amendments, it introduces important changes respecting the duties of Commissioners and the power of Inspectors. The grants to County Academies are to be henceforth to a certain extent conditioned on the amount raised by local effort.

It is announced that henceforth the tests of Examination for each Grade of License will be uniform for all classes of candidates. For a few years past, Graduates of Colleges, applying for the Academic License have been required to pass only the examination on professional subjects.

The Convocation of Dalhousie College was held in the Assembly Room of the Province building on the 21st ult., in the presence of a very large gathering of ladies and gentlemen. The proceedings were opened with prayer by the Very Rev. Principal Ross, who followed the prayer with a short address, in the course of which he referred in touching terms to the late Prof. DeMill, by whose death he said not only the college, but the city and the Dominion as well, had suffered. He then referred to the number of students during the term closed, nearly a hundred, and closed his remarks by saying that he had received a letter from Sir Wm. Young stating that, owing to illness, he was unable to attend. After the reading of the customary Pass List, and the presentation of Certificates of Merit by the Secretary of the Senate, Prof. Charles McDonald, to those who had merited this mark of distinction, the various University prizes were presented by the Professors of the classes in which they had been won, and the other prizes by the Principal. The graduating class, consisting of the following gentlemen,—Edwin Crowell, Albert E. Thompson, and Frederick S. Kinsman, in Arts, and W. M. Frayer in Science,—was then presented by Professor Lawson to the Principal, who conferred upon them their degrees, and addressed them afterwards. He first referred to the smallness of the class, and said they need not expect a lengthy address. He did not estimate the value of the work done by the smallness of the number of students. If five students were turned out thoroughly trained and equipped for the world, he thought the mission had been better filled than if they sent out fifty scilists or pedants. The valedictory was then delivered by Mr. Thompson.

Rev. G. W. Hill, D.C.L., Chancellor of the Halifax University, having been called on for an address, responded in eloquent terms. After a brief consideration of the proper location of Collegiate Institutes, and a reference to the benefits reaped by the City of Halifax from the presence in her midst of such a distinguished University as Dalhousie, the learned Chancellor, alluded in modest and fitting terms to the peculiar position occupied by the Halifax University. He vindicated in an able manner the utility of a general Examining Institution, such as the University is, in one of its chief functions, intended to be. The concluding portion of his remarks was of a highly practical character, dwelling on the importance of enlisting the energies of our educated classes in developing the resources of the country.

The following are the Examiners in Arts of the University of Halifax for the current year :

Classics.—Prof. Smith, A. M. (Mount Allison), and Prof. Wilson, A. M. (Kings.)

Mathematics and Physics.—Prof. A. G. McDonald, A. M. (St. Francis Xavier), and Prof. Eaton, A. M. (Provincial Normal School.)

English Language and Literature.—President Inch, LL.D. (Mount Allison), and Prof. Currie, A. B. (St. Mary's.)

French and German.—Prof. Liechti (Dalhousie), and F. C. Sumichrast, Esq.

Hebrew.—Rev. Prof. Stewart, D. D. (Mount Allison), and Rev. Prof. Currie (Presbyterian Theological Hall.)

Chemistry.—Prof. Lawson, Ph. D., LL.D., F. J. C. (Dalhousie), and Prof. Spencer, B. A. Sc., A. M., Ph. D., F. G. S. (Kings.)

Logic and Philosophy.—Very Rev. Dr. McKnight (Presbyterian Theological Hall), and Rev. R. McDonald, A. B.

Constitutional History and Political Economy.—Hon. L. G. Power, B. A., LL.D., and John V. Paygant, Esq., A. M.

NEW BRUNSWICK.

The right of women to the same Educational advantages as the sterner sex is gradually gaining practical recognition everywhere. Their claim, or the claim made for them, is very generally admitted in theory ; but we have only to compare the number of seminaries and colleges for ladies, or open to both sexes alike, with those open solely to men, to see how much remains to be done in the way of acknowledging the claim practically. Every year sees progress in the right direction, however, and New Brunswick is not to be behind other countries in the matter. The Senate of the Provincial University recently enacted the following Statute relative to examinations for women :

Examinations for women in certain of the subjects of the Faculty of Arts may be held at Fredericton or elsewhere in the Province, according to the regulations hereinafter prescribed.

1. Candidates will be admitted to a first examination, embracing the subjects of the Matriculation Examination, and will be examined in all the subjects required for such examination. French, however, may be substituted for Greek.

2. Candidates will be admitted to a further or second examination, embracing the subjects of the Course for the Freshman Year ; but Hygiene and the rudiments of Vegetable and Animal Physiology and Morphology may be substituted for Greek.

3. Candidates, on passing each of the above examinations, will be entitled to a certificate bearing the Seal of the University.

4. No candidate will be admitted to the First Examination unless she has completed the fifteenth year of her age ; nor to the second examination unless she has completed the sixteenth year of her age.

5. Every candidate who proposes to present herself at an examination must give notice of her intention to the Registrar of the University at least four weeks before the commencement of such examination ; and said notice must be accompanied by a fee of three dollars.

6. Both the First and Second Examinations will be held each year at the University, on the opening of the term in September. But should not fewer than four candidates have given timely notice of their wish to be examined at any other central locality in the Province, the Senate will endeavor to make such arrangements with the local Trustees of Schools, or others, as will enable them to hold a simultaneous examination in that locality.

This is the season for changes of teachers, which, especially in the country districts, where many male teachers give place to female teachers in the Spring, are far too numerous and frequent for the good of the schools and of the country. The existing regulations with regard to the classification of schools by Inspectors are so framed as to discourage these changes, and promote permanency in the location of teachers.

Among the resignations that have come to our knowledge, to take effect on the first of May, are those of L. A. Curray, M. A., Principal of the Queen's County Grammar School ; Alex. Johnston, B. A., of the Winter Street School—(the department in his charge being close) ; A. D. Smith, of Indiantown ; Miss Laura Hughes, of the Leinster Street School, St. John ; Miss Katharine R. Bartlett, of the Model School, Fredericton, who takes Miss Hughes' place ; Robt. M. Raymond, B. A., Principal of the Park Barrack Schools, Fredericton ; and A. E. Wortman, B. A., Principal of the York Street Schools, Fredericton. Mr. Wortman goes to Salisbury, Westmorland, and his place is taken by Jas. R. Mace, B.A., recently of Springfield ; Mr. Raymond will be succeeded by Berton C. Foster, B. A., recently of Andover ; and the third Department of the Model School, vacated by Miss Bartlett on account of her appointment in St. John, will be placed in charge of Miss Ellen M. Freeman, Silver Medallist of the Normal School.

Leave of absence has been given to Miss Minard, who has so long successfully taught the Primary Department of the Model Schools, and to Miss Frances J. Ross, and Miss Frances N. Seely, of Fredericton Schools. Their places will be filled by Miss J. R. Bateman, Miss Alice Meagher, and Miss Annie T. Moore.

The fine School-house at Gibson, York Co., was accidentally destroyed by fire on the 24th of March, at noon. This was the second school house burned on the same site, having been erected in 1876 to replace the first one, destroyed by incendiarism. The building was insured for \$1000, about one half its cost. The furniture was saved. Until the proposed new building is erected, the schools are separated,—Mr. R. H. Davis and Miss Staples teaching in the Hall at Gibson, and Miss Marsh at St. Mary's.

At the Provincial Examination held in March, there were five candidates for Grammar School License, two of whom obtained that Class, and three obtained 1st Class. Of thirteen who worked for 1st Class License, 10 obtained it, 1 obtained 2nd Class, and 2 failed to obtain any Class. For the 2nd Class there were 127 candidates, of whom 90 obtained the class sought, 31 obtained 3rd Class, and 6 failed entirely. 23 worked for 3rd Class License, and all of them passed the test. Thus 125 out of the whole number (168) examined, succeeded in gaining the class of License sought for. 133 of the candidates had been in attendance at the Normal School the past Session, and only 26 of these, or 19½ per cent., were unsuccessful, while 17, or nearly one half of the remaining 35, failed to get what they sought. Of those who worked at the First Class papers, the highest average was made by Miss Ellen M. Freeman and Mr. E. W. Stevens. The highest among the Second Class candidates were Miss Julia Cairns, of St. John, Miss Jane Price, of Woodstock, and Miss Maud Narraway, of St. John. The highest averages on the third Class papers were made by Miss Annie Young, of Stanley, and Mr. Joseph D. Le Blanc, of Memramcook. Forty five of the 168 candidates are reported as having made no mistakes in the spelling of common words, and a large number had only one word marked against them, six had misspelled ten words or more, the greatest number being fifteen words.

QUEBEC.

The educational interest of the month has mainly centred round our highest Protestant institution of learning in this Province, McGill University. The winding up of the Session's work in the different faculties, the conferring of degrees in the same on the successful candidates, the distribution of prizes to the most deserving students in the various classes bring all such institutions prominently before the public on such occasions; but this year an additional interest was imparted to all these proceedings, and a renewed enthusiasm and general interest were awakened in the University by the presence, in unusual numbers, of the alumni of previous years, who were attracted to their *Alma Mater* to commemorate the twenty-fifth year of the tenure of office of the present worthy and learned Principal—Dr. Dawson. At the banquet given on this occasion by the learned Principal to the graduates of McGill, it must have been extremely gratifying to him to see the large Molson Hall crowded to its utmost capacity with the graduates of the University, among whom not a few of those graduates present had risen to important positions of public and professional life, as, for example, His Honor the Lieutenant Governor, Dr. Robitaille, the Hon. Mr. Lynch, Solicitor-General, the Hon. Dr. Church, late Provincial Treasurer and President of the Graduates' Society, to witness the general and hearty expressions of goodwill to their University, and to hear from all the speakers the spontaneous tributes of praise for his able and successful administration of the affairs of the University during the past quarter of a century, and the almost unprecedented results produced, in regard of which it might well be said of him *et quisivim pars magna fui*.

Noteworthy features relating to the future were the announcement of the intention of Mr. Peter Redpath, one of the Governors, to erect a costly and capacious museum building on the College grounds, and of the Principal to place therein, as a gift to the University, his own large geological collections, and the further announcement that the graduates propose to commemorate the twenty-fifth year of the Principal's tenure of office by the creation of a University Fund or the erection of a University building to bear his name. "The museum building, it is estimated, will cost about \$40,000. "Session 1882-3 will be the fiftieth year of the existence of the McGill University, and it is proposed to celebrate this anniversary, and to prepare in connection with it a sketch of the history of the College, for circulation among its friends and graduates."

At the annual convocation of the Faculties of Medicine and of Law, of McGill University, an address of welcome was presented to His Honor Lieutenant Governor Robitaille, to which he made a very neat and appropriate reply, expressive of a warm interest in his old *alma mater*, complimenting very highly at the same time the founders of McGill, especially its learned and universally esteemed Principal, Dr. Dawson.

At the late examinations of the University of Bishop's College the following gentlemen passed their primary examinations in Materia Medica, Anatomy, Chemistry, Physiology, Practical Chemistry, and Practical Anatomy for the degree of C.M. M.D.: Heber Bishop, B.A., Marbléton, Que., prizeman; Ninian C. Smillie, Montreal, Que.; Walter de Moulpiéd, Nicolet, Que.; J. F. E.

Trotreault, St. Pie, Que.; H. R. Wilson, Montreal, Que.; E. Labue, Chicopee Falls, U.S.

The following passed their final examination for degree of C.M. M.D. in Surgery, Midwifery, Pathology, Medicine, Medical Jurisprudence and Hygiene: H. B. Chandler, Boston, U.S., gold Medallist; I. Leshe Foley, Montreal, Que., final prizeman; L. H. U. Gill, Pierreville, Que.; F. I. E. Trotreault, St. Pie, Que.; Edmund Labrie, Chicopee Falls, U.S.; Philip Dubé, Quebec, Que.

At the ninth annual convocation of Bishop's College, at which were present the Chancellor, R. W. Heneker, Esq., His Lordship Bishop Bond, the Rev Canon Norman, Vice Chancellor, Dr. David, Dean of the Faculty of Medicine, Dr. F. W. Campbell and others, the prizes were awarded to the successful competitors, and degrees conferred on those mentioned above that had passed the degree examinations.

Readings and Recitations.

EDINBURGH AFTER FLODDEN.

THE TOWN PROVOST, RANDOLPH MURRAY, Citizens, &c.

FIRST CITIZEN.

News of battle!—news of battle!
Hark! 'tis ringing down the street;
And the archways and the pavement
Bear the clang of hurrying feet.

SECOND CITIZEN.

News of battle! Who hath brought it?
News of triumph! Who should bring
Tidings from our noble army,
Greetings from our gallant king?
All last night we watch'd the beacons
Blazing on the hills afar,
Each one bearing, as it kindled,
Message of the open'd war.
All night long the northern streamers
Shot across the trembling sky:
Fearful lights, that never beacon
Save when kings or heroes die.

THIRD CITIZEN.

News of battle! Who hath brought it?
All are thronging to the gate:
'Warder, warder, open quickly!
Man, is this a time to wait?'
Who is this with bloody banner
Hanging from his drooping hand?
Can it be our Randolph Murray,
Captain of the city band?

SECOND CITIZEN.

Randolph Murray, what thy message?
Tell us all—O, tell us true!
Where are they who went to battle
For our monarch sworn to you?
Where are they, our brothers—children?
Have they met the English foe?
Why art thou alone, unfollowed?
Is it weal, or is it woe?

TOWN PROVOST.

Now, Randolph, tell thy tidings,
However sharp they be;

Woe is written on thy visage,
Death is looking from thy face:
Speak! though it be of overthrow,
It cannot be disgrace!

RANDOLPH.

Take the banner—none may touch it
Save thine old and honour'd hand.
It is all I have to bring ye
From the bravest of the land!
Ay, ye may well look upon it—
It was guarded well and long
By your brothers and your children,
By the valiant and the strong.
One by one they fell around it,
As the archers laid them low,
Grimly dying, still unconquer'd,
With their faces to the foe.

Ay, ye may well look upon it—
 There is more than honour there,
 Else, be sure, I had not brought it
 From the field of dark despair.
 Never yet was royal banner
 Steep'd in such a costly dye;
 It hath lain upon a bosom
 Where no other shroud shall lie.
 Sirs, I charge you, keep it holy,
 Keep it as a sacred thing,
 For the stain ye see upon it
 Was the life-blood of your king!

FIRST CITIZEN.

O, the blackest day for Scotland
 That she ever knew before!
 O our king! the good, the noble,
 Shall we see him never more?
 Woe to us, and woe to Scotland!
 O our sons, our sons and men!
 Surely some have 'scaped the Southron,
 Surely some will come again!

RANDOLPH.

Till the oak that fell last winter
 Shall uprear its shattered stem,
 Wives and mothers of Dunedin,
 Ye may look in vain for them!

PROVOST.

Thou hast spoken, Randolph Murray,
 Like a soldier stout and true;
 Thou hast done a deed of daring
 Had been perilled but by few.
 For thou hast not shamed to face us,
 Nor to speak thy ghastly tale,
 Standing—thou a knight and captain—
 Here, alive within thy mail!
 Now, as my God shall judge me,
 I hold it braver done
 Than hadst thou tarried in thy place,
 And died above my son!
 Thou needst not tell it: he is dead—
 God help us all this day!
 But speak—how fought the citizens
 Within the furious fray?
 For, by the might of Wallace!
 'Twere something still to tell
 That no Scottish foot went backward
 When the Royal Lion fell!

RANDOLPH.

No one fail'd him! He is keeping
 Royal state and semblance still;
 Knight and noble lie around him,
 Cold on Flodden's fatal hill.
 Of the brave and gallant-hearted,
 Whom ye sent with prayers away,
 Not a single man departed
 From his monarch yesterday.
 Had you seen them, O my masters,
 When the night began to fall,
 And the English spearmen gather'd
 Round a grim and ghastly wall!
 As the wolves in winter circle
 Round the leaguer on the heath,
 So the greedy foe glared upward,
 Panting still for blood and death.
 But a rampart rose before them,
 Which the boldest dared not scale;
 Every stone a Scottish body,
 Every step a corpse in mail.
 And behind it lay our monarch,
 Clenching still his shiver'd sword;
 By his side Montrose and Athole,
 At his feet a Southron lord.
 All so thick they lay together,
 When the stars lit up the sky,
 That I knew not who were stricken,
 Or who yet remain'd to die.
 'Then I stoop'd, and took the banner,
 As you see it, from his breast,
 And I closed our hero's eyelids,
 And I left him to his rest.

PROVOST.

Rouse ye, sirs; for now we may not

Longer mourn for what is done;
 If our king be taken from us,
 We are left to guard his son.
 We have sworn to keep the city
 From the foe, what'er they be;
 And the oath that we have taken
 Never shall be broke by me.
 Up, and rouse ye! Time is fleeting,
 And we yet have much to do;
 Up, and haste ye through the city,
 Stir the burghers stout and true!
 Gather all the scatter'd people,
 Fling the banner out once more,—
 Randolph Murray, do thou bear it,
 As it erst was borne before;
 Never Scottish heart will leave it,
 When they see their monarch's gore.
 No, if we are doomed to perish,
 Man and maiden, let us fall,
 And a common gulf of ruin
 Open wide to overwhelm us all!
 Never shall the ruthless spoiler
 Lay his hot, insulting hand
 On the sisters of our heroes,
 Whilst we bear a torch or brand.
 Up, and rouse ye, then, my brothers;
 But when next ye hear the bell
 Sounding forth the sullen summons
 That may be our funeral knell,
 Once more let us meet together,
 Once more see each other's face,
 Then, like men that need not tremble,
 Go to our appointed place.
 God, our Father, will not fail us
 In that last tremendous hour;
 If all other bulwarks crumble,
 He will be our strength and tower:
 Though the ramparts rock beneath us,
 And the walls go crashing down;
 Though the roar of conflagration
 Bellow o'er the sinking town,—
 There is yet one place of shelter
 Where the foemen cannot come,
 Where the summons never sounded
 Of the trumpet or the drum.
 There again we'll meet our children,
 Who, on Flodden's trampled sod,
 For their king and for their country
 Render'd up their souls to God.
 There shall we find rest and refuge,
 With our dear departed brave;
 And the ashes of the city
 Be our universal grave!

Teachers' Associations.

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

EAST VICTORIA.—Programme, Friday, May 21st, 10 a.m., President's Address; 11 a.m., Statics, Mr. W. E. Tilley; 2 p.m., Decimals, with class, Mr. S. Armour; 3 p.m., English Literature, Mr. C. J. Logan; 4 p.m., Fractions, with class, Mr. H. Hart; 7.30 p.m., Composition, Mr. J. Shaw; 8.30 p.m., Recent Changes in School Law, Mr. Knight. Saturday, 9 a.m., Question Drawer, Committee; 10 a.m., Election of Officers; 11 a.m., Prosody, Mr. J. Shaw. The meeting on Friday evening will be held in the Town Hall. G. H. Howson, Esq., Reeve of Bobcaygeon, has kindly consented to take the chair. G. I. IRWIN, President; J. H. McFAUL, Secretary.

FRONTENAC.—Thursday, May 13th, 11 a.m., Business Meeting; 1.30 p.m., How to Teach the First Book, Mr. McIntyre; 2.15 p.m., A Sketch of Mr. Alcott's School, Boston, Mr. Bamford; 3 p.m., School Hygiene, T. Dupuis, Esq., M.D.; 4 p.m., Common Inapproprieties of Speech, Mr. Summerby. Thursday Evening, Public Address, Friday, May 14th, 9 a.m., Cultivation of the Memory, J. H. Metcalfe, M.P.E.; 9.40, Practical Arithmetic, Mr. D. Robb; 10.20, A few of the Trials of a Teacher, Mr. Bole; 11.00, Question Drawer; 1.30 p.m., Grammatical Analysis, Mr. Hensbridge; 2.15 p.m., Election of Officers for the ensuing year. N. F. DUPUIS, M.A., President; J. W. HENSTRIDGE, Secretary.

GRENVILLE.—The next regular meeting will be held in the High School, Kemptville, on Friday and Saturday, May 21st and 22nd, 1890. Friday, 9 to 12 a.m., and 2 to 5 p.m., Opening Address, by the President; Reading of Minutes and Report of Committee on Library; Discussion on School Journal; Arithmetic, Messrs. A. McDonald, T. Meoch, and D. Halfpenny; Geography, Miss Amelia Gibson and Miss Jennie Thompson; Authorized Text-Books, Rev. Geo. Blair, M.A.; Algebra, Miss Kirkup and Mr. Conerty; Grammar, Mr. McPherson, M.A., and Mr. O. McCullough. Evening Lecture by John Burchell, Esq., F.L.S., Subject—Hints and Encouragements to Teachers. Saturday, 9 to 12 a.m., and 1 to 2.30 p.m., Methods of Teaching, the President; Reading, Mr. Conerty; Object of School Life, Mr. McCullough; Geometry, Jas. Carman, M.A.; Involution

and Evolution, Rev. Geo. Blair, M.A.; Spelling, Messrs. A. Wilson and R. W. Perkins; Principles of Land Surveying, Mr. Burchell. Friday will be allowed as a visiting day to those who attend the Association.

R. W. HICKS, President.

GEO. BLAIN, M.A., I.P.S., Secy.

KINGSTON.—Friday, 7th May, 9 a.m., Education in Canada, J. H. Metcalfe, M.P.P.; 10 a.m., Arithmetic, Mr. T. H. McGuire; 11 a.m., Grammar to Beginners, Mr. J. B. Wood; 2 p.m., Weekly Reports, Mr. W. H. Godwin; 3 p.m., Special Methods, Mr. W. G. Kidd; 4 p.m., English Composition, Mr. D. McFarlane; 7:30 p.m., Public Lecture, S. Woods, M.A. Saturday, 8th May, Business Meeting; 10 a.m., Object Lessons, Mr. W. J. Summerby; 11 a.m., A Paper, A. B. Nicholson, B.A.; 2 p.m., Drawing, Mr. A. W. Moore; 3 p.m., Question Drawer, Committee. M. LIVINGSTONE, Secretary. A. P. KNIGHT, M.A., President.

LANARK—Almonte, Friday, May 21st, 9 a.m., My Method of Teaching Writing, A. Devitt; 10 a.m., The Want of Connection in Studies an Evil in Schools, Geo. Berliquet; 11 a.m., The Prize System, Wm. A. Hanna; 1:30 p.m., Study of History in Public Schools, John McArthur; 2:30 p.m., Grammar, and How to Teach it, John Raine; 3:30 p.m., Assignment of Lessons, Ed. Anderson; 4:30 p.m., General Business. Saturday, 9 a.m., Reading, J. A. MacCabe, M.A.; 10 a.m., English Grammar for Senior Classes, P. C. McGregor, B.A.; 11 a.m., Examinations, J. P. Anderson; 1:30 p.m., English Literature, J. L. Michell, B.A.; 2:30 p.m., Geography, W. P. Robertson. Friday, 8 p.m., Public Lecture—The Cultivation of Taste, particularly among Children—J. A. MacCabe, M.A., Principal Normal School, Ottawa.

H. BEER, Secretary pro tem.

H. L. SLACK, M.A., President.

PRINCE EDWARD, Friday & Saturday, May 14 & 15.—1. Home Lessons Convention; 2. Examinations, G. D. Platt; 3. Islands of the Pacific, S. B. Nethery; 4. Euclid Deductions, W. Clark; 5. Moods in Grammar, J. A. Clark; 6. Grammatical Analysis, D. Young; 7. Reading and Elocution, R. Lewis, Esq., Author of "How to Read"; 8. Illustrative Readings. Roll of Teachers will be called, and all are expected to attend both days. Friends of Education are invited.

G. D. PLATT, President.

TEACHERS' ASSOCIATION.—The next meeting of the Durham Teachers' Association will be held in the High School Buildings, Port Hope, on Friday and Saturday next, May 7th and 8th. The programme is as follows: FRIDAY—10:30 a.m. Election of Officers; President's Address; general business; Geometry by Mr. R. Grandy. Composition by Inspector Tilly; Arithmetic by Mr. A. J. Reynolds. SATURDAY—Algebra by J. C. Hartstone, B.A.; Question Drawer by Messrs. Goggin and Barber; Superannuation by Mr. J. Crawford; Grammar by Mr. A. Puralow, M.A., I.L.B.; Written Examinations by Mr. W. W. Tamblyn, M.A. Every teacher in the country is expected to attend.

NORTH YORK.—The next half-yearly meeting of the North York Teachers' Association will be held in the Newmarket School Room, on Friday and Saturday, the 21st and 22nd of May next, commencing at 10 o'clock a.m. Programme:—1. Miss McMurchie, Newmarket Object Lesson. 2. Mr. J. Brackin, Richmond Hill, Elementary Drawing. 3. Mr. H. Irwin, Newmarket High School, "The Duties of the Teacher outside the Class." 4. Mr. McMurchie, Schomberg, "Method of Analysis, and Mode of Teaching it." 5. Mr. Rose, Newmarket, "Difficulties of Management, and how to overcome them." 6. Mr. W. F. Moore, Nobleton, Essay on "Order, Cleanliness, &c., in connection with the School." 7. Mr. W. Rennie, Newmarket, "Shall the Provincial Association be made Representative?" 8. Election of Delegates to Provincial Association. 9. Election of Officers. Mr. Scott, of Toronto Model School, may be expected to take up two or more of the following subjects:—"How to deal with Indolent Pupils," "First steps in Composition," "Drawing, To whom it should be taught; Who should teach it, What to teach, and How," "Memory, How to train it;"

D. FOTHERINGHAM, Pres.

W. RENNIE, Sec.

NORTH HASTINGS.—PROGRAMME—Thursday, May 13th. 10 a. m. to 11.—General business; 11 to 12.—"Written Examinations, the purposes for which they may be used, and how to conduct them," by Mr. Sutherland; 1:30 p. m. to 3.—"Hints to Young Teachers," by Inspector Burrows, Napanee; 3 to 3:30.—"Geography to Third Classes," by Miss McDermid; 3:30 to 4:30.—"Geography to Fourth and Fifth Classes," by Mr. Kirk; 4:30 to 5:30.—"Literature in Public Schools," by Mr. Mulloy; 5 to 9.—"History in Public Schools, what it should be, and how to teach it," by Professor Wright, Albert University; 9 to 10.—"Health in Public Schools," by Dr. Dufos. Friday, May 14th. 9 a.m. to 10.—Election of Officers, and reports of Committees; 10 to 10:30.—"School Management," by Miss Riddell; 10:30 to 11:30.—"Method of Teaching Arithmetic to Third and Fourth Classes," by Mr. Mackintosh; 1:30 p. m. to 3.—"Teachers' Associations," by Mr. D. Johnston, Cobourg; 2:30 to 3.—"Grammar to Juniors," by Miss Hornbrook; 3 to 4:30.—"Mistakes in teaching Grammar to Seniors," by Inspector Johnston. N.B.—On the evening of the 13th the Convention will meet in the Town Hall.

GEO. KIRK, Secretary.

W. MCINTOSH, President.

ELGIN.—The above Association will hold the next Regular Half Yearly Meeting in the Collegiate Institute Buildings, St. Thomas, on Thursday and Friday, 13th and 14th May, 1890. PROGRAMME—Thursday, 19 a. m. to 11.—Business Meeting, Nomination and Election of Officers; 11 to 11:30.—"Grammar to Junior Pupils," by B. O. Ingleby; 11:30 to 12.—"Essay," by Miss Metcalf; 1:30 to 2:15 p.m.—"Calisthenics," by Miss S. Watts; 2:15 to 3:15.—"Chemistry," by T. Kirkland, M.A.; 3:15 to 4.—"History," by A. J. Bell, B.A.; 7:30.—Lecture by Thomas Kirkland, M.A., Science Master, Toronto Normal School, in the Centre Street Baptist Church. Subject: "The story of the Earth" illustrated by Stereoscopic Views. Friday, 9 to 10.—"Energy, What is it?" by A. F. Butler, I.P.S.; 10 to 11.—"Natural Philosophy," by T. Kirkland, M.A.; 11 to 12.—"Arithmetic," by J. W. Cook; 1:30 to 2:15 p.m.—"Map Drawing," by D. McLean; 2:15 to 3.—"Geography," by S. C. Woodworth; 3 to 4.—Question Drawer.

N. M. CAMPBELL, President.

THOS. LEITCH, Cor. Secy. ry.

NO. 2 LEEDS.—The next meeting will be held at Farmersville, May 20th and 21st. Thursday, 9 a.m.—President's Address; Business Meeting; Roll Call of Members; Examinations, and how to prepare for them; 1:30 p.m.—Arithmetic, Grammar, Library, Language Lessons; 7:30 p.m.—Public Lecture. Friday, 9 a.m.—School Report, Alphabet, Algebraic Formulas, Essays; 1:30 p. m.—Recent changes in School Law, Drawing, Composition.

A. BOWERMAN, M.A., President.

J. S. BOWAT, Secretary.

REVIEWS.

FORTY THIRD ANNUAL REPORT of the Board of Education, Massachusetts, 1878-79. Mr. Dickinson, Secretary of the State Board, is to be

congratulated upon issuing what, to the thoughtful educationist, is the most suggestive work of the year. There is more practical instruction in it than in half a dozen ordinary works on methods of Teaching. We propose to quote largely from it from time to time for the benefit of our readers.

BOSTON MONDAY LECTURES, LABOR; by Joseph Cook. Published by Houghton, Osgood & Co. This volume contains ten lectures and ten precludes. The lectures relate to labor in its various relations to society, the precludes deal with the most momentous topics of the time. The man who wishes the advanced thoughts of the most profound thinkers of modern times on social and religious problems cannot afford to remain a stranger to the works of Mr. Cook. His prelude on the Future of Canada will be of special interest to Canadians.

PRESCOTT'S PLAIN DIALOGUES. New York: C. T. DeWitt, 33 Rose Street. This contains thirty-four dialogues of a better class than is sometimes to be found in American works of the kind. They are nearly all new, and teachers will find them free from many of the objectionable vulgarities and slang expressions which disgrace too many pages

ONE HUNDRED CHOICE SELECTIONS, No. 17. Philadelphia: P. Garrett & Co., 700 Chestnut Street. The teacher who wishes to obtain in a single collection an encyclopædia of good recitations should obtain the complete set (17) of the Hundred Selection Series. Number seventeen is a fair specimen, and contains absolutely nothing that is merely "filling in." The selections might be taken in order and every dozen of them would form a most excellent programme.

CHEERFUL WORDS.—By George McDonald. Boston, D. Lothrop & Co. Mr. McDonald has written some of the most delightful, as well as the most powerful novels of this century. No one of them is barren of characters who, by word and act, spread around them the sweet influences of truth, purity and religion. There is a charm in the plain way in which the great problems of religion are expounded by these characters in their daily lives, and in their simple and eloquent reasonings. This book consists of brief quotations from the conversations given in Mr. McDonald's books on a variety of interesting subjects. It is a most attractive volume.

AN ELEMENTARY GUIDE TO DETERMINATIVE MINERALOGY.—Chicago, S. J. Wheeler. This is written by Professor Wheeler, of Chicago University. It is based upon the method of "Weisbach's Tabellen Zur Bestimmung Dar Miner Alien." It is a capital arrangement of mineralogical tables for a prospector or amateur mineralogist to carry in his pocket.

A TRAMP ABROAD.—By Mark Twain. Everything this remarkable man writes is readable. His style is too well known to need description, but even his admirers will find new beauties to admire in this, his last and best book. It is a spirited account of the things that Mark Twain would be likely to see and appreciate in a lengthened tour, mainly on foot, through Germany and other parts of Europe. He is amusing, of course; a rare, racy, but delicate humor runs like a rippling stream throughout the whole of the book, but beside this brook the author has erected landmarks of information, which will remain in the memories of his readers. The book is literally filled with illustrations. They are all well executed, and some of them are from sketches by the author himself. They are a study. The artist has developed in him since he made his map of Paris. Any one who wishes genuine humor without any trace of vulgarity may safely purchase this book. It is sold only by subscription. Mr. W. S. Davis is the agent for Canada.

THE COMMON SCHOOL QUESTION BOOK.—By Asa H. Craig. This is a work of 340 pages, containing questions for review, with answers in a different part of the book on all the subjects of a common school programme. The questions strike at the root of the matter, and are very suggestive. For private study for examinations, the book would prove of great service, inasmuch as it gives questions on the important parts of each subject. The student who reads without a guide is liable to be confused, and finds great difficulty often in deciding upon which points to bestow his best efforts. A book like Mr. Craig's supplies to a certain extent the loss of a master to assign lessons and conduct reviews. The student by its aid can be his own coach. It contains 385 questions on the History of Canada alone, and

the answers are concise and accurate statements of the leading events in the settlement and growth of the Dominion. The answers are remarkable for their fairness in those parts relating to the history of troubles between Canada and the United States. As an instance of this it may be mentioned that it does not question the fact that the Americans were practically defeated at Lundy's Lane. We commend the book to teachers and students alike.

MAGAZINES.

BLACKWOOD'S MAGAZINE for April has been received from the Leonard Scott Publishing Co., 41 Barclay St. N. Y. It contains: Brummagom Morality; Part xiii. of the interesting story "Rent-a," the Peasant Proprietors of Norway; Part v. of "Bush life in Queensland," the Afghan War, Part II., "Eleanor," a tale of non-performers, the Prince Consort, the Crisis Abroad; the Appeal to the Country.

THE NORTH AMERICAN REVIEW for May, D. Appleton & Co., N. Y., contains: General Grant and Strong Government. The Religion of all Sensible Men. McClellan's Last Service to the Republic. Ralph Waldo Emerson. The Monroe Doctrine and the Isthmian Canal. Recent History and Biography. (1) History of the Norman Conquest. (2) The Life of Gladstone. (3) Lamartine and his Friends.

THE CONTEMPORARY REVIEW for April, 1884, Strachan & Co., 31 Paternoster Row, London, contains: The Armenian Question, Prof. Max Muller and Mr. Mill on Liberty, The genealogies between Adam and the Deluge; Personal Property, Debt and Interest, The Relations of Living Beings to One Another; The Society of the Future, A Spring Carol, Metternich, The History of Kent in England, The Outlook in Europe.

LITTELL'S LIVING AGE.—The numbers of *The Living Age* for the weeks ending April 3rd and 10th respectively, contain the following articles: The Proper Use of the City Churches, *Nineteenth Century*, The Pillar of Præso, *Contemporary*, The Beginnings of Greek Sculpture, *Fortnightly*, The Reign of Queen Anne, Bush-life in Queensland, and the North East Passage, a Narrative of the Voyage of the Vega, *Blackwood*, The Origin of a Written Greek Literature and Wordsworth, *Fraser*, An Indo-Anglian Poet, *Gentleman's Magazine*; and in the way of Fiction, the "Crocket Meg, a story of the year One; "Visions" from the Russian of Tourgenieff, and "Veronica Fontaine's Rebellion;" and the usual amount of poetry.

As a New Volume begins with the number for April 3rd, this is a good time to subscribe.

For fifty-two numbers of sixty-four large pages each (or more than 3,300 pages a year), the subscription price (\$8) is low; while for \$10.50 the publishers offer to send any one of the American \$4 monthlies or weeklies with *The Living Age* for a year, including the extra numbers of the latter, both postpaid. Littell & Co., Boston, are the Publishers.

THE GENTLEMAN'S MAGAZINE for April is a strong number. Besides a very interesting instalment of "Queen Cophteta," it contains: "Notes on Infinity," by Richard A. Proctor; an article on "Mrs Gr over," the actress, by Dutton Cook, one on "The Last English Parliament," by "the Member for the Chiltern Hundreds"; an account of "Joubert," by Margaret M. Maitland; a paper on "Dress in Relation to Health," by B. W. Richardson, M. D.; one on "The Dog and its Folk-Lore," by T. F. Thielton Dyer; a description of "Madeira," by an anonymous writer; and Table Talk by the Editor.

THE ATLANTIC MONTHLY for May contains two articles of special interest to Teachers: "The Examination System in Education," by Willard Brown, and "British Americanisms" by Richard Grant White. The former is an attack upon the examination system of the English and American Universities. In the latter Mr White shows, in his usual pleasing style, that many words which are set down as Americanisms, are more English than American. The number also contains additional chapters of "Still Water Tragedy, the Records of W H Hunt," and the "Undiscovered Country," poetical contributions by C. P. Cranch, George Parsons Lothrop, and an anonymous writer, and reviews of "Recent Novels," "Mark Twain's New Book," the "Life of Farragut," the "Memoirs of Prince Metternich," "Zola's Last Novel," "Hector Beruz," the "Souvenirs of Madame Virgee Le Brun," and "Symonds Greek Poets." The remaining contents are a good short story, entitled "McIntyre's False Face," by W. B. Bishop, "Ten Days in the Rebel Army," by S. H. M. Byrnes; a "Neglected Poet," by G. E. Woodberry, who writes under the heading of "Pleasant Article on Crabbe," a valuable article on "The Democratic Presidential Nomination," and "The Contributors' Club." In short, the number is very varied and interesting.

THE POPULAR SCIENCE MONTHLY, New York, D. Appleton & Co. The May number begins Vol. 17. It contains three articles of intense interest to Canadian teachers: "Climate and Complexion," by J. M. Buchan, M.A.; "Sham Admiration in Literature," and "The Impediment of Adipose." The first is valuable as showing the state of knowledge upon this subject, and presenting original views of the writer; the second exposes the hollowness of the too common admiration of literary works by those who never read them, but have merely read reviews of them, or worse, are merely enthusiastic in their love for Milton because it is fashionable to be so. The author recommends careful study of good English authors instead of Latin and Greek in schools. "The Impediment of Adipose" is a discussion of the cause of the mental and moral

peculiarities of Hamlet. They are attributed solely to the fact that he was over stout, 'fat and scant of breath.' The physical explanation seems to have considerable weight. The other articles are "The Carbon Baton," "God and Nature," "The Buffalo and his Fate," "The Martyrdom of Science," "The pleasure of visual form," "Hystoria and Demonism—A study in Morbid Psychology," "Bacteria as destroyers of insects," "Some facts and fictions of Zoology," "The Electrical Polyscope" (illustrated), "Capture among the Mollusks," (illustrated); "How insects direct their flight;" "Sketch of James Clerk Maxwell," (with portrait); "Correspondence;" "Editor's Table;" "Literary Notices;" "Popular Miscellany;" "Notes."

HARPER'S MAGAZINE for May presents an unusual variety of entertaining matter, and is full of beautiful illustrations. The novelty of the number is striking. The opening article, by Henry Van Dyke, Jr., takes us to the Red River Valley and across the border into Manitoba. The resources and the picturesque features of the country; and its peculiar people (including the Menonite immigrants) furnish entirely fresh pictures for pen and pencil; and, in the use of the latter, Mr. W. S. Macy, the artist, has been very efficient. Equally novel are the pictures of old Dutch life which Mr. Henry Bracc assisted by the pencils of Fyke and Stone—presents in his exceedingly interesting article entitled "Old Catskill." Mrs. Lillie's second paper on "Music and Musicians in England" is, in every page of it, a revelation of phases of English social life unfamiliar to the majority of American readers. The social side of English musical life has furnished Mr. Abbey with motives for a number of delightful drawings, engraved for this article. In addition to these, this artist has also contributed to this number a charming illustration of Robt. Herrick's poem "On Chloris Walking in Ye Snow." The remaining articles and departments are "Pho Shad and the Allowife," by James W. Milner, with thirteen illustrations; "Home Studies in Nature, II. by Mary Treat, with two illustrations; "Wnen," a Poem, by A. T. L., "The Metropolitan Museum of Art, With Fourteen Illustrations," "Salgama Conditia," A story, by Lizzie W. Champney; "White Wings," a Yachting Romance, by William Black. "Civil Service Reform in New York," by Edward Cary, "Our Beginnings," A Story, by Angeline Teal, "Lost," A Poem, by Alfred H. Louis, "Our National Guard," by Colonel H. M. Boies, "Mary Anorley," A Novel, by B. D. Blackmore, "To a Bluebird," A Poem, by George P. Guerrier. Editor's Easy Chair—M. Lessops in New York; Editorial Decisions, The Art of To-day, The Musical Explosion in Cincinnati, Wood-Engraving, State Pride in New York. Editor's Literary Record. Editor's Historical Record. Editor's Drawer.

Official Department.

PROFESSIONAL EXAMINATIONS.

CANDIDATES FOR FIRST CLASS CERTIFICATES

1. These examinations shall be partly oral and partly in writing; they shall be held at the Toronto Normal School on such days, and conducted by such Members of the Central Committee, as the Minister may appoint.

2. Candidates for First class certificates who are not Normal School students shall undergo their professional as well as their non-professional examination at the Toronto Normal School at the same time and on the same papers with those candidates for First-class certificates who are Normal School students.

3. The professional examination will be conducted so as to elicit the extent of the professional training of each candidate, as carried on concurrently with his instruction in the "non-professional subjects" prescribed by the Regulations. The Professional Examination for all grades of First-class certificates will be the same. The Subjects are:

EDUCATION, viz.—1. *Educational Methods*. (The candidate may consult the following works.—Teacher's Manual of Method and Organization, by Robert Robinson, Inspector of National Schools, Ireland;—Methods of Instruction, by J. P. Wickersham, A.M., Principal of the Pennsylvania State Normal School,—Carrie's Common School Education; Jewell on School Government) 2. *History of Education*. (The following works may be consulted.—Essays on Educational Reformers, by Robert Henry Quick, M.A.—Practical Educationists and their systems of teaching, by James Leitch, Principal of the Church of Scotland Normal School, Glasgow.) 3. *Psychological Foundations of Education*. (The candidate may consult "Education as a Science," by Alexander Bain, LL.D.)

SCHOOL LAW.

READING AND ELOCUTION.

MUSIC AND DRAWING.

DRILL AND CALISTHENICS.

The Entrance Examination to High Schools will take place on the 29th and 30th of June. Third Class Co. Board Examination, July 13th. Intermediate and Second Class, July 5th. Notice in each case must be given one month before the examination, on the part of intending Candidates.

ADAM CROOKS,

Minister of Education.