

THE
EDUCATIONAL RECORD
OF THE
PROVINCE OF QUEBEC.

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VOL. I.

IMPOSITIONS.

Having recently stated my views on "Corporal punishment" in the pages of the EDUCATIONAL RECORD, I am led by a natural process to think of another form of punishment known alike to schoolmasters and schoolboys by the name of Impositions or Impos. The title at first sight seems singular, and not very appropriate. Its origin is unknown to me. Perhaps some Master thought that by assigning such tasks he was in the strict sense imposing a burden on the boy. Perchance some boy may have conceived that on his side an opportunity was offered him of imposing on, or cheating, a Master by failing to perform correctly or entirely the work thus set.

Next to corporal punishment, the Imposition, as generally understood, is the easiest, the least troublesome form of discipline to a Master. This fact is no doubt an incentive to its use. A Master may be disposed to employ the birch, or cane, or taws, because they demand but little time. They cause next to no care or trouble, and yet their application may be serious enough to create fear, and thereby to preclude a repetition of the offence of which they were the penalty. Herein lies one of the dangers incidental to corporal punishment. Teachers are mortal. They should never look on the infliction of discipline as a gratification of outraged patience or exasperated feelings. They should regard it as a means of curing a fault and preserving a strict and high tone of industry and school morals. Hence they should be

prepared to give pains and attention to the investigation of the fault, and its subsequent correction. But it is also an easy matter to set a certain number of lines to be written out, and a master may often omit to read them from beginning to end, and may content himself with counting them. The boy on the other hand may execute them with the help of a pen that in my school-days was called a "coach." With this a boy could write two or three lines at once, by means of several pens fastened to one handle, which was held so that the writing was perpendicular. I well remember a schoolfellow who was frequently in this sense *imposed upon*, who was forever kept in by having to write lines, and who used to soothe his lacerated feelings by Latinizing the name of the Master who had set the punishment, and introducing the said name, thus disguised and coupled with opprobrious epithets, into the middle of some lines of Virgil or Ovid.

It is well perhaps to say that the whole of these remarks were written before the publication of an interesting paper from the pen of a lady teacher, which appeared in the number for June. With many of her observations I fully concur. An inferior and lazy instructor, male or female, who does not appreciate the great importance of the work of instruction, will be morally certain to have some careless, idle and uninterested pupils. But, given the best and most conscientious teacher on the face of this earth, who really educates in the true sense of the word, who exercises a sort of magnetic influence on his or her class, there will yet ever remain a few indolent children, whom noble ambition and a principle of duty will not rouse to exertion, and who require from time to time to learn the unpleasant consequences of idleness and inattention, and (taking the lowest ground) the wisdom and policy of prompt and active industry. Some parts of the lady teacher's paper will without doubt do good, especially to young and unexperienced teachers. But she appears to have in view what we hope is not a common entity, viz., a teacher grossly ignorant of the capacity of the youthful mind, who expects impossibilities, and who, believing brains to be machines, neglects the obvious forethought and consideration which every instructor should possess and exercise.

Let us note some of the objections to Impositions. First, to be effectual they must be rather lengthy. In that case they are likely to keep boys in an unreasonably long time, and thereby en-

feeble their energies, depress their spirits, and really affect their powers of work. Secondly, they are well-nigh absolute ruin to the handwriting. At the very time when boys should learn to write with care and neatness, they fall into a slovenly style of penmanship; they do not form their letters properly and they adopt a method which they probably never get rid of, and which is very unbecoming in educated people. This is mainly due to Impositions. These are generally lengthy, as I have said, and a boy is tempted to write them as fast as he can. Now I do not say that Impositions should be entirely swept away. They are, I suppose, a necessary evil. But I would suggest that the system should be modified, so that some of the evils attending them might be avoided. I would advise that, instead of setting so many lines to be written as punishment for unpunctuality, disorder, ignorance of work, some one of the following plans should be adopted. All can be in use in a school. 1st. The lesson might be said over again in play time to the Master, if the boy has failed in School hours. If the subject be mathematics, the Master himself should supervise, and see that the task is done. If it be construing, or grammar, or history etc, the Master had best question the boy as if in school hours, giving of course no marks, however well the lesson may be said. 2nd. An excellent plan is to require a certain amount of poetry to be committed to memory. Many boys, otherwise possessed of intelligence and ability, have great difficulty in learning any lesson *memoriter* and they would be benefited by such a task. Or 3rd, a boy may be ordered to write out a portion of the lesson, or a piece of dictation as neatly and correctly as possible, the Master being especially strict in refusing to accept the Imposition if carelessly written or incorrectly spelt. This again would benefit the handwriting. It is not a bad thing for the Master to suffer as well as the boy. This would check the tendency to inflict hasty, unjust, ill-considered punishment. I have heard of a school whose Master, having set an Imposition, employs one of his senior boys to look over it, and see that it is done. This is a most objectionable practice. It is done to gratify the Master's love of ease. It is pretty certain to incline him to unjust punishment, while at the same time it places the boy who is called upon to look over the Imposition in a totally false position.

If one or all of the above methods be adopted from time to time,

instead of the ordinary Imposition, a boy's handwriting would not be so liable to injury, and the character of his education would not be so injuriously affected by his idleness. I am of course merely speaking now of Impositions and punishments akin to them. There are of course other methods of correction beyond my present limits of consideration, and which a Master should use at his own discretion. But surely a boy disposed to shirk his work would soon feel that there is wise policy in being industrious. He would find that he could not evade the stern necessity of his lessons. He discovers ere long that it is more prudent and satisfactory to do those lessons in school time and obtain marks for them, than to be kept in when others are breathing the fresh air, enjoying themselves withal in cricket, lacrosse, boating, football, as the case may be; while he has yet to do his lesson and receive no marks for it. Many a lethargic boy will deliberately neglect his work and resign himself to the certainty of having to perform the purely mechanical task of writing so many lines; but when he discovers that he must, under any circumstances, take pains and exercise his mind, he will very soon see the wisdom of prompt and earnest industry, if only in order to secure his due modicum of play.

A Master should on every ground exercise careful consideration with regard to the Imposition he may set, for when set it must always be done. No excuses should be accepted, and intentional omission, in fact even frequent forgetfulness, should be severely punished.

It is possible that my remarks on corporal punishment may have sent an electric thrill of horror through the nerves of some Canadian Mothers, if any read this periodical, and that I may appear in the unexpected light of a truculent and hard-hearted person. But no one can really care for the young, and not desire that their faults should be eradicated and that they should be trained up in habits of honest and methodical diligence. I do not profess to make any novel suggestions, and only claim the authority which is the privilege of practical experience. I am confident that the plan of setting lines has evils connected with it which I should desire to be remedied, and I propose these other forms of punishment as substitutes, in cases where it may not be considered desirable to apply corporal penalty.

Two other points, and I have finished this already too lengthy

paper. Some Masters, if a pupil fail in a Bible lesson, order the offender to commit to memory or write out some passage of Scripture. Such a plan must be condemned most emphatically. If a Master desires to implant in a boy's mind a detestation of that Holy Book, and to lead him to the first stage on the road to unbelief, he could not adopt a much more efficacious method. The Sacred Scriptures and instruction in religion generally should always be connected with what is interesting and if possible pleasurable, and should never be associated with recollections of discipline and punishment.

It will no doubt be noticed that I have apparently spoken throughout in connection with boys' schools. But the suggestions which I have ventured to make are applicable when necessary to girls' schools likewise. In the latter case, as corporal punishment is inadmissible, the penalties for neglect of work or misbehaviour would probably be some such as I have named. Nevertheless, inasmuch as girls are more naturally industrious, more intellectually ambitious, and more amenable than boys, exhortation and moral suasion may be generally all that is needed, and no coercion may be called for except in extreme cases.

R. W. N.

THE BRITISH AND CANADIAN SCHOOL, MONTREAL.

A CHAPTER FROM THE EARLY HISTORY OF POPULAR EDUCATION
IN THE PROVINCE OF QUEBEC.

(Continued.)

There appears to have been established in the city of Quebec, perhaps shortly before the founding of the British and Canadian School, a school on the same general plan, as the Committee at its third meeting adopted a suggestion of the Hon. L. J. Papi-neau to correspond with the Committee of a Lancasterian school in Quebec. It does not appear to have survived long, for there is no subsequent reference to it in the minutes or reports of the British and Canadian School Society. But in the annual report read at a public meeting held October 5th, 1824, the Committee say:—

“In the fall of last year, by the indefatigable exertions of Lieut. West, a School Society was established at Quebec, under

the directions of a respectable Committee of Catholics and Protestants, to instruct the children of all religious denominations in the English and French languages. Two masters were immediately engaged. During the midsummer vacation the English master attended your school to learn the British system. By an account just received from Quebec, the number of scholars in attendance is 100, of which 36 are Catholics. To this Society your Committee has supplied lessons in French and English at cost prices. To a Roman Catholic school existing in the same city, containing about 200 children, in which also both languages are taught, your Committee have furnished a complete set of French lessons *gratis*. Your Committee having been solicited by the National School Committee to assist them with lessons, slates, &c., felt much pleasure in furnishing them with such articles as they could spare, and have applied to the British and Foreign School Society for the remainder, being two complete sets of lessons for the boys' and girls' schools, which have been lately fitted up on the British system. The British system has likewise been introduced into the Orphan Asylum in this city, containing about 30 orphans; a few lessons have also been sent to them at cost price. It is contemplated by the inhabitants of Laprairie immediately to open a school on the British system in that village. The respectable part of the community, both Catholics and Protestants, appear to be much interested in it. About 100 children may be collected."

So the system spread among the civil population of the Province. But military schools had been established on the same plan in various countries of the world, and were early introduced here. At the monthly meeting held February 3rd, 1824:—

"The Secretary has the pleasure of reporting that a Military School on the British system has been established this winter in the Barracks, by the indefatigable exertions of Captain and Adjutant Sampson, who states that since the British system has been introduced the increase of scholars has been so great that it was necessary to enlarge the room, which now contains 50 children and 50 soldiers. Previous to the introduction of this system the number seldom exceeded 30. A corporal of the 70th Regiment has been these two months past receiving instruction *gratis* on the system from Mr. Hutchings, for the purpose of taking charge of the Military School on the 1st May next. Mr. Hutchings speaks of him as giving every satisfaction. This school has been supplied by the Committee with slates, pencils, lessons, &c."

Later the corporal referred to above took charge of the school, and conducted it successfully. The number of soldiers' children, and of soldiers unable to read, in attendance speedily rose to 120.

The benefits received by the Military School were in part at least repaid by the military authorities :—

“Twenty-seven soldiers’ great coats have been received from Lt.-Col. Evans by Capt. and Adj. Sampson, 70th Regiment, and have been sent to the ladies of the Dorcas Society to clothe the poor children of the school.”

The benefits of the system were extended to the Indian population. It is worthy of remark that the movement in this direction appears to have been in answer to a request made by the Indians themselves. Early in January, 1824, a letter was received by the Committee from an Indian schoolmaster residing on the St. Francis River. The Secretary, Mr. Lunn, invited him to come to Montreal for the purpose of being trained in the British system, but when he arrived he found himself, through old age and debility, incapable of entering upon new courses. Accordingly he recommended that his assistant, a young Indian of 25 years, should be trained and instructed in his stead. Application was then made to Sir John Johnson, Superintendent of Indian Affairs, for rations for the young Indian during the time of his sojourn in the city, but the discouraging reply was received that, “as there is a schoolmaster already in the settlement, who receives £20 sterling per annum from Government, no allowance can be granted to any other Indian.” Nothing daunted, the Committee resolve, under date 5th April, 1824 :—

“That the Indian schoolmaster in the Indian settlement on the River St. Francis, in this Province, be instructed to send his assistant, and an Indian boy of good character, to the British and Canadian School Society, to receive further instruction in the English language, and to be trained to the British system, with a view of extending religious education among the Indian tribes in this country.”

It would appear that Earl Dalhousie, on learning of the difficulty raised by the Superintendent of Indian Affairs, immediately offered through Colonel Darling to bear the expense out of his own private resources, and that after the Indians had been in attendance at the school for more than half a year, the Department of Indian Affairs contributed £10 in aid of their maintenance. The Committee paid Mrs. Rian (*sic*) £3 per month for the board of the Indians. The Society’s report for the year says :—

“Your Committee would next with pleasure advert to an

Indian school in the Indian village of St. Francis, near Lake St. Peter, of the tribe of Abenakis. The master, who is likewise interpreter of the tribe, and receives £20 sterling per annum from the Government, appears to feel a deep interest in the welfare of this school. He writes under date of January last: 'The interest I feel for the instruction of our Indian children will always lead me to do all in my power to promote it, and I am convinced no reformation can be effected without the knowledge of the Holy Scriptures.' By a letter of a recent date he states the number of children in the school to be very small, in consequence of some of the children being employed in harvest; but he thinks that if the improved system of mutual instruction were introduced, about 80 might be collected. The Indians and Canadians in the village have entered into a subscription to build a school-house, and have applied to your Committee for a plan of the building, which they have gladly sent to them. The school-house, which they propose immediately to build, will accommodate 100 children. The two Indians from this tribe who have attended your school since May last for the purpose of being qualified, the elder, Simon Annance, aged 25 years, as school-master, the younger, aged 17, as general monitor, have made considerable progress in writing, arithmetic and the English language. The elder, who has studied about four years in a missionary college in the United States, is nearly competent to organize and conduct the Indian school, to which your Committee propose sending him this fall. They both promise to be useful. Towards the maintenance and instruction of these two Indians His Excellency the Earl of Dalhousie has very generously contributed £20."

An effort, to which the Society lent itself, was made to secure on a larger scale the well-being of the Indian population. A special meeting was called on the 21st February, 1825, attended by Messrs. John Frothingham, D. Fisher, J. Torrance and W. Lunn.

"The Secretary laid before the Committee a plan by Rev. Thaddeus Osgood to ameliorate the condition of the Indians in Canada, and to qualify young persons to be masters to supply the destitute settlements.

"The plan being read, it was resolved

"That as Mr. Osgood is about to proceed to Great Britain to raise a fund for the promotion of this object, and otherwise to assist this Society, the Secretary is hereby directed to prepare and deliver to Mr. Osgood a certificate of recommendation.

COPY OF THE CERTIFICATE.

“ MONTREAL, 23rd February, 1825.

“ The Committee of the British and Canadian School Society feel much pleasure in bearing testimony to the indefatigable, zealous and successful efforts of the Rev. T. Osgood in the moral and religious improvement of the rising generation of this extensive colony. The important and interesting objects, viz., the cause of the poor neglected Indians in the Canadas, as well as the present urgent necessity of training up and qualifying in a central school in this country young persons to be teachers, to supply the destitute settlements, they strongly recommend to the Christian public.

“ WM. LUNN, Secretary.”

At the third public anniversary meeting, Peter McGill, Esq., moved, George Davies, Esq., seconded, and it was unanimously resolved as the second resolution of the evening—

“ That this meeting rejoices to hear of the formation of a society in London for the promotion of education and industry among the Indians and destitute settlers in Canada.”

The report read at the meeting says :—

“ Your Committee have much pleasure in reporting that a society has been recently formed in England for the laudable purpose of supplying means to educate such of the native Indians of these colonies as have not been provided for by schools. A sum of £900 sterling, the remainder of a large sum collected in England some years ago by the Rev. Mr. Osgood, and which has been in the hands of trustees since that time, is now at the disposal of the society thus founded.”

(*To be continued.*)

Spelling Reform.—The English Spelling Reform Association have addressed through their president, Mr. A. H. Sayce, a memorial to the Educational Committee of the Privy Council, praying that certain changes may be made in the present Code, and also offering to lay their views personally before the Committee by means of a deputation. The special complaint of the spelling reformers is that the present Code does not allow children, when examined in Standards I. and II., to offer any other system of spelling than that commonly in use. It is suggested that, as school-books have now been printed according to more than one of the improved systems, such new systems might now be permitted as alternatives by the school inspectors in both writing and dictation. *The Academy.*

OUTLINES OF ENGLISH LITERATURE.

NO. III.

BY CHAS. E. MOYSE, B.A.

Recapitulation—Cymry and Gael.—We have seen that the dark-haired, black-eyed people of South Wales and of Ireland, west of the Shannon, are of Iberic stock. Their ancestors probably occupied the whole of England, Wales, and Ireland during the Neolithic period. We have also seen that on the Continent, during the same period, a more robust race, fair and blue-eyed, doubtless the ancestors of the historic Celts, pressed on the ancestors of the historic Iberians, as invaders. For, on turning to Spain and Gaul, at the dawn of history, we find the following distribution of blood: In Spain, the Iberians, from whom the peninsula derives its classical name, Iberia, lie in the north-west, and the invading Celts occupy the eastern part, in a band almost parallel to the Mediterranean shore, extending inland to about one-third of the breadth of the entire country (Celtiberia). In Gaul, the Celts, contiguous to their kinsfolk beyond the Pyrenees, are shaped like a wedge. The apex is Brittany; the sides are bounded by the compressed Iberians on the south, who possess the tract bounded by the Garonne, the Cevennes, and the Pyrenees (Aquitania), and by the Belgæ on the north, who inhabit the land between the Seine, the Marne, and the Scheldt. The Belgæ, representing perhaps the Cymry or Cimbri, are believed to be akin to the Celt. They were, no doubt, subsequent to him, and drove him before them, just as they, in their turn, were driven before the Teuton. Such are some of the historical traces of conquests which began in Neolithic time. *No Neolithic struggle seem to have taken place in Britain.* At the risk of being prolix, I will quote once more from Prof. Boyd Dawkins' "Early Man in Britain," where some of the conclusions stated in his previous work on Cave Hunting are worked out in greater detail:—

"Three, if not more, distinct peoples were in the British Isles at the time of the Roman conquest—(1) the small, dark Iberians in the west, the remnants of the Neolithic aborigines; (2) their Celtic conquerors, who introduced a new civilization from the continent *in the Bronze age*, occupying by far the larger portion of the island; and (3) the Caledonians in the north, large-limbed, and with red hair, considered by Tacitus to be of Germanic origin.

The last are identified by Dr. Beddoe with the tall, red-haired population in the east, in Athole and Mar. They probably arrived from Scandinavia by the same route as the Norwegians in later times found their way into Caithness, setting sail from Thule, and making for the Orkneys. The Belgic Gauls also had crossed over from the opposite coasts of France, and had taken possession of the southern counties. They are not to be distinguished by any physical character from the Celtic peoples."

The Celts themselves, when examined more closely, disclose two branches, the *Cymric* and the *Gaelic*. We have no space to speak of the time when these two branches can first be recognized, nor of the regions which they are said to have then occupied. Indeed, the whole of this debatable ground is now being subjected to the scrutiny of scientific ethnography, and conclusions once considered well-established may be seriously modified. The theory of Rawlinson (Herodotus), of which Prof. Henry Morley has given a summary in his *English Writers*, (bk. 1, ch. 1), may be referred to as one view of the matter. Time is dealing rather roughly with it in some particulars, however, and it is rather bold to assert now that Homer's Kimmerioi (*Odyssey*, XI.), dwelling on the verge of the ocean stream, enshrouded in mist and cloud, and never beheld by the rays of the bright sun, are to be connected with the Cymry who, on the credit of such references as Gomer in *Ezekiel* (xxxviii. 6) and "the Kimmerian isthmus" (Tauric Chersonese or Crimea) in the *Prometheus Vinculus* of Æschylus, are placed between the Danube and the Don. It is also denied that the Scyths, who lay on the east of the Don, and who thrust these "Cymry" to the south (Asia Minor) and the west (Europe), are even in name allied to the Scots (*Gaelic Celts*.) But such modern evidence as we have already adduced goes to show that Celts crossed to Britain from the south of Europe; that they occupied the whole of Ireland and larger part of Great Britain. It may now be added that they were of the *Gaelic* branch, and that the coasts of Spain were a busy seat of their emigration. In all probability they touched and colonized the west of Ireland, and worked their way eastward until met by the German Ocean. In fact, the name Scotland is derived from the Scoti who crossed, in the third century and at intervals until the beginning of the sixth, the narrow frith between Antrim and Argyle.

A brief appeal to language may not be out of place. Welsh philologists have detected many words which point to an occupa-

tion of Wales by the Gaels previous to its settlement by the Cymry. The Gaelic for water, and hence river, is *uisge*. When the Romans heard it they Latinized it into *isca*. Now, a glance at the map of Great Britain during the Roman sway reveals to us how thickly dotted these *iscas* were. *Uisge* is our Exe (Exeter—*Isca Damnoniorum*), Esk, Ox (as in Oxford), Axe, and lastly, our *whisky*.

At the end of the sixth century the English had succeeded in planting themselves firmly on the soil of Great Britain, and the Brito-Welsh (Welsh is derived from the Anglo-Saxon, *wealh*, a foreigner, a slave) had been thrust to the extreme west, where they lay in unbroken line from the Clyde to the Land's End. They occupied the kingdom of *West Wales*, that is, Somerset, Devon and Cornwall (subsequently reduced to Cornwall); *North Wales*, almost identical with modern Wales (*Cymry*); *Cumbria*, comprising Lancashire, Cumberland, Westmoreland and a small part of Western Yorkshire, and *Strathclyde*, a triangular territory with its northern angle on the Clyde and its southern base (Galloway and Reged) formed by the coast-line of Wigtown, Kirkcudbright and Dumfries (*Gael*). To the north lay the unconquered Scots (*Gael*) and Picts. The English in their career of conquest caused British emigration to Armorica, where the Britons joined their Celtic kinsfolk, whom the Franks had not subdued. The new stream of immigrants gave to the land the name Brittany or Lesser Britain. Ireland was inhabited by the Gaels; also the Isle of Man, where the Manx dialect, akin to old Irish speech, is still spoken.

Celtic Literature.—Its wandering nature.—We leave the history of the Celt and examine the spirit of his Literature. Whether we take the Cymric or the Gaelic variety it matters little; the intellectual aspect is very much the same in either case.

It seems to me that the first great fact worthy of note is the *nearness* of Gael to Gael, of Welsh to Welsh. I refer not only to position, but also to similarity of thought, habit and perhaps one might add language. Irish and Scots (not the Lowland Anglo-Scots) are practically one; North Welsh, West Welsh, and the Welsh of Brittany are practically one. A hero is common property and he is claimed by the several divisions of Celts in turn, until the truth about him is hidden in obscurity. Arthur is the hero of all the Welsh; Finn of all the Irish and Scotch Gaels. The heroic story as its sped often had new features ascribed to it.

BISHOP'S COLLEGE, LENNOXVILLE.

CONVOCATION FOR CONFERRING DEGREES IN ARTS.

June 24th.

Convocation, which was numerously attended, was held in the College Hall, and was opened by a speech from the Chancellor (R. W. Heneker) alluding to the recent trials the College had passed through, and paying a tribute to Dr. Dawson, who was present.

The reports of the Deans of the various Faculties were then received, showing each to be in a flourishing condition.

This was followed by the conferring of Degrees. The Degree of D.D. was granted to the Bishop of Montreal. The degree D.C.L. was conferred on Principal Dawson, of McGill. F. G. Scott and Richard Hewton took their B.A.

The Principal, Dr. Lobley, then gave the results of the examinations, reading the reports of the examiners, Rev. Canon Norman, Dr. Johnson, Rev. J. F. Allnat, Rev. J. Brock and Mr. Boodle. These reports showed that, notwithstanding drawbacks arising from non-residence of the students during the preceding terms, good work had been accomplished.

The prizes were then distributed. The Prince of Wales' medal was awarded to R. Fairlie Morris; the Chancellor's prize to R. F. Morris; Divinity prize to E. J. Harper; 2nd Divinity prize to A. H. Judge; Hansel prize to E. J. Harper; Hebrew prize to M. G. Thompson; Principal's prize (for logic) to F. G. Scott; S. P. G. Jubilee Scholarship to F. G. Scott; Divinity 2nd year prize to Wm. Morris; Classical prize to R. F. Morris; Mathematical prize to Wm. Morris; extra Mathematical prize to M. G. Thompson; Divinity 1st year prize to W. Worthington; Classical 1st year prize to H. J. Petry; extra Classical 1st year prize to J. W. Alexander; French prize to H. J. Petry.

Addresses were delivered by Dr. Dawson, the Bishop of Quebec and Rev. Canon Norman (the Vice-Chancellor), who paid a fitting tribute to the high intellectual attainments of the Rev. Principal Lobley, and spoke in the highest terms of his unwearied efforts on behalf of the college.

The Chancellor, with a few appropriate remarks, closed the proceedings.

THE A. A. EXAMINATIONS, 1881.

The results of the examination for the certificates of Associate in Arts were declared in the Molson Hall, McGill College, on June 23rd. Short addresses were made by the Rev. Canon Norman, Vice-Chancellor of Lennoxville, by Professor Moyses and Principal Dawson.

The following are some of the points that were most noticeable in the examination:—On the whole, it had been better done this year than last, the highest marks obtained this year being higher than the highest in the previous year, and the lowest marks than the lowest last year. The Greek papers were better done than the Latin, and the English literature than the English language. The success of the Montreal High School for Boys was noticed in obtaining the first nine places, and attention was drawn to its marked improvement in Dictation. The success of the McTavish Street School in classics was also remarked. The first place in the examination had been taken by a scholar who did not offer classics for examination. The hand-writing, it was observed, of those who came from the Montreal centre was better than that of other places. The high excellence of the examination passed by Miss Francis for the Senior Associate in Arts called for especial comment.

With regard to the different schools, the following statistics will be interesting:—

In Reading the highest marks were taken by the Waterloo Academy, a result possibly due to the different standards in different places. As regards the other preliminary subjects, the first four places in Dictation and the third place in Reading were taken by the Girls' High School. The Boys' High School took the first places in English Grammar, Arithmetic, Geography, British and Canadian History, and the Gospels. The Hamilton Collegiate Institute had taken an equal first in Arithmetic.

In the optional subjects the Girls' High School had distinguished itself in French, German, English Literature, and Botany. The Boys' High School had done best in Geometry, Natural Philosophy, English Language, History, and Chemistry, and had taken the first place also in Latin and French. The Hamilton Collegiate Institute distinguished itself specially in Algebra and Trigonometry, and had obtained the first place in Greek, though the scholar was

over age for the certificate. The McTavish School took the second and third places in Latin and the second and fourth in Greek. The St. Johns High School took the two first places in Geography.

The following is the list of those who have obtained certificates:—

SENIOR ASSOCIATE IN ARTS.

Marguerita Francis (McGill Normal School and Private Tuition), creditable answering in all the Imperative subjects and Mathematical Physics.

ASSOCIATES IN ARTS.

Frank P. Bernard (High School, Montreal),	1107	Marks.
Charles R. Daoust (High School, Montreal),	1050	"
Frederick L. Barlow (High School, Montreal),	1023	"
Percy E. Judge (High School, Montreal),	962	"
Peter C. Mitchell (High School, Montreal),	961	"
Alexander J. Tolmie (High School, Montreal),	927	"
William Mitchell (High School, Montreal),	919	"
Edward P. Mathewson (High School, Montreal),	918	"
Henry Munderloh (High School, Montreal),	895	"
Ellen E. Coe (Girls' High School, Montreal),	876	"
Wilfred R. Morris (McTavish School, Montreal),	850	"
John J. Arnton (High School, Montreal),	840	"
Hanbury A. Budden (High School, Montreal),	835	"
Manson D. Teetzel (Collegiate Institute, Hamilton),	822	"
William T. Gunn (High School, Montreal),	813	"
George H. Guy (High School, Montreal),	803	"
Charles Burkholder (Collegiate Institute, Hamilton),	802	"
William M. Reid (High School, Montreal),	781	"
Philip M. Robertson (High School, Montreal),	716	"
Percival Tibbs (High School, Montreal),	708	"
William Reid (High School, Montreal),	}equal	687
Ellen F. Kemp (Girls' High School, Montreal),		
Grace Foster (Girls' High School, Montreal),	}equal	669
Allice M. Cook (Collegiate Institute, Hamilton),		
James W. Morrice (McTavish School, Montreal),	660	"
Ridley L. Charlton (St. Johns High School),	659	"
James H. Bissett (High School, Montreal),	647	"
Andrew Stuart (High School, Montreal),	624	"
Mary E. Clunie (Lachute College),	622	"
Archibald Robertson (Collegiate Institute, Hamilton),	620	"
Arthur H. Irwin (St. John's High School),	535	"

JUNIOR CERTIFICATES.

Annie B. Barr (Girls' High School, Montreal),	835	Marks.
Agnes H. Fairbairn (Girls' High School, Montreal),	828	"
John S. Cassils (High School, Montreal),	824	"
Martha Martin (Girls' High School, Montreal),	669	"
Mary C. Greer (Collegiate Institute, Hamilton),	564	"
Jeanie Dickson (Collegiate Institute, Hamilton),	531	"
Ernest Allard (Waterloo Academy),	506	"
Nellie Hall (Waterloo Academy),	442	"
Henry Allen (Waterloo Academy),	401	"
J. W. H. Milne (Collegiate Institute, Hamilton),	392	"

 THE PROTESTANT PUBLIC SCHOOLS
OF MONTREAL.

The following account of Protestant public instruction in Montreal was originally drawn up in 1878. We are glad to be able to reprint it now, with a few omissions, as a preface to our summary of the close of the Public Schools. As the circulation of the RECORD is not confined to teachers, such a sketch will be of value to all who wish to have a short account of these institutions.

McGill University.—This University, directed by its Governors and Corporation, was originally founded and endowed by the Hon. James McGill in 1811, and received a Royal Charter as a University in 1821. It is a non-denominational Protestant institution, and proposes no religious tests to its students.

Liberal contributions from wealthy citizens have been bestowed from time to time in augmentation of the original endowment. By the revenue thus created it maintains a Faculty of Arts; a Department of Practical and Applied Science, subordinate to the Faculty of Arts; a Faculty of Medicine; and a Faculty of Law. The courses of study in Arts, Applied Science, and Medicine extend over four years; that in Law over three years.

Morrin College, Quebec, is affiliated with the University, and in the City of Montreal there are two affiliated Theological Colleges, whose students attend lectures in the Faculty of Arts, while receiving their theological training in their own Colleges. Two other Theological Colleges not affiliated to the University send students to attend its classes.

McGill Normal & Model School.—The Normal School, estab-

lished by the Canadian Government in 1857, and supported by an annual grant from the Province of Quebec, is the provincial training school for Protestant teachers. The Model School, attached to it, is an elementary school designed to afford the teachers-in-training an opportunity to acquire by practice experience in imparting instruction and in maintaining discipline. These institutions are administered by the Superintendents of Education of the Province of Quebec, in association with a committee of the Corporation of the McGill University.

Protestant Board of School Commissioners.—This body, under powers conferred by legislation, controls the expenditure of the proceeds of the School Tax levied upon real estate in Montreal belonging to Protestants. It was called into existence by Act of Parliament in 1846. The money placed at its disposal in 1847 was \$558.05. From that date to 1861 its annual receipts from the Government and the City Council scarcely averaged \$1,200. During the next six years it received about \$1,800 per annum. Consequent upon the guarantees given to Protestants in the accomplishment of Confederation by the British North American Act, a more liberal provision was made for the maintenance of schools. During the years 1868-'69-'70 respectively, the income of the Board, omitting school fees, was \$8,900 \$19,400 and \$18,300. In 1871 the School Tax of Montreal was fixed at one-tenth of one per cent on the assessed value of all rateable property. This raised the income of the Board from the City and the Government to about \$26,000 per annum. In the year 1873, in answer to an explanation from the City Council, supported by a petition of citizens, the School Tax was doubled, and the income of the Board became more nearly adequate to the work devolving on it.

This tax, at the rate of one-fifth of one per cent of the assessed value of property belonging to Protestant proprietors, yields an annual revenue of \$75,000. With this sum, augmented by an annual grant of something less than \$4,000 from the Protestant Treasury, and by the school fees of the several schools, which amount to about \$23,000 per annum, the Board pays the interest and sinking fund on a quarter of a million of dollars, borrowed by debentures and expended in erecting school buildings, and maintains a High School for boys, a High School for girls, a Senior School, and a system of Elementary Schools.

The High School of Montreal.—This school was established in 1843, by citizens of Montreal, as a proprietary school, succeeding by arrangement with the government of the day to the *status* and privileges of the Royal Grammar school, which had been established by royal warrant some years previously. In the year 1853 it passed into the hands of the McGill University, by which, in turn, it was surrendered to the charge of the Protestant Board of School Commissioners in 1870.

This school is especially a classical school for boys, and leads up to the course in arts of the University. With its preparatory classes it provides a *curriculum* extending throughout eight years of school work, during the last two of which a pupil, desiring to enter the department of Practical and Applied Science in the McGill University, may cease the study of Latin and Greek, replacing it by a severer course in Mathematics and the elements of Chemistry and Botany.

Into the High School all are admitted on payment of the prescribed fees; but in addition, all such boys from the elementary schools as show the possession of unusual talent and diligence during their course in them, are transferred to it as free scholars, and from it are promoted without expense to the University.

The High School is divided into the High School proper and the Preparatory High School.

The High School for Girls.—This school was opened by the Commissioners in 1875, in answer to a general demand for superior education for girls. In the third year of its existence, it had 227 pupils and a teaching staff of 15 persons. Promising girls from the elementary schools are admitted to it free of charge.

Senior School.—This school was opened in 1877, with the purpose of providing for pupils, who have passed through the elementary schools, a course of business training including a thorough review of English subjects, book-keeping, the rudiments of algebra, geometry and mensuration, British history, the elements of commercial law, and the French and German languages. The course of the Senior school covers two years.

Elementary Schools.—The first public elementary school, in Montreal, and one of the first in the Province of Canada, now the provinces of Ontario and Quebec, was established by a committee of gentlemen, in the year 1822, and was designated the British

and Canadian School. The necessary funds were furnished from year to year by public subscription and by an annual subvention voted by the Legislature. In the institution and maintenance of the school Lord Dalhousie, then Governor, and many prominent persons of both British and French Canadian origin took a lively interest. After a chequered history of forty-four years this school was handed over to the control of the Protestant School Commissioners.

The first Protestant Elementary Schools in Montreal, established under a general public system, were two schools opened in 1850 by the Protestant School Commissioners, which provided instruction for 244 pupils, taught by three teachers. Now the Commissioners maintain nine elementary schools.

These schools provide a five-years' course of instruction properly graded and organized in accordance with regulations and limitables issued by the Board. Many pupils complete the course in five years, but owing to natural inaptitude, irregularity of attendance and other causes, the average pupil, beginning to attend school at the age of six and a half years, finishes the work of the elementary school at thirteen years of age. At that age he is able to read English with ease and expression; he can write a letter or draw out an account legibly, in proper form and with but few errors in spelling or computation; he can use the elementary rules of arithmetic with speed and accuracy, and with some hesitation and an occasional mistake, he can solve questions in fractions, proportion and interest; he has an elementary knowledge of French, of English Grammar, of Geography and of Canadian History; he has learned by rote several songs, and he can copy a simple outline drawing with reasonable accuracy and neatness. If he has aspired to the High School, one year's instruction in Latin has been provided for him.

School Fees.—The Law of the Province of Quebec does not recognize free schools but it provides that the fees shall be moderate, and it makes such provision for cases of indigence that no child is excluded from the elementary schools by inability to pay the school fees demanded. The fees of children attending the elementary Protestant schools of Montreal range from 10c. to 20c. a month. For further details the reader is referred to the summary of the Revenue and expenditure of the Protestant

Board of School Commissioners published in the February number of the EDUCATIONAL RECORD (p. 66).

MCGILL NORMAL SCHOOL.

This institution closed on June 28th, the Hon. G. Ouimet, Superintendent of Education, occupying the chair. Principal Hicks read the following report for the year:—

It becomes my duty now to submit a report of the 24th Session of the McGill Normal School. In so doing, I shall merely give a brief statement of the proceedings of the past year, as I shall take it for granted that the time and labor I expended in the preparation of my last report, which was of considerable length, will be accepted as an excuse for a much shorter one on the present occasion. We have admitted into the school, during the present session, 126 pupils. Sixty-six of these pupils were residents of Montreal, and 60, or nearly half, came from country districts. Seven entered for the Academy class, 35 for the Model School class, and 84 for the Elementary School class. Out of this number, 99 have undergone an examination during the past four weeks, and I am now able to recommend to the Hon. Superintendent of Public Instruction 81 for diplomas—6 for Academy diplomas, 27 for Model School diplomas, and 48 for Elementary School diplomas. These diplomas, added to those of former sessions, will raise the whole number issued by this institution to 1,416. With reference to the pupils of the last session (1879-80) who obtained diplomas, 71 in number, I can furnish the following particulars: Of the four students who obtained Academy diplomas, three have been teaching during the whole of the present session. Of those who obtained Model School diplomas, 28 in number—5 entered the Academy class to study for a higher certificate, 15 were appointed to situations in schools and are now teaching, 2 married, 1 entered the McGill University as student, and the remaining 5 intend to teach during the coming session. Of those who secured Elementary diplomas, 38 in number—22 returned to the school for a higher certificate, 8 obtained situations, and of the remaining 8, circumstances have prevented me from obtaining full particulars. Nothing has occurred during the past session deserving of special notice. The affairs of the school have been carried on in a quiet and, I trust, profitable manner, and I can speak in the highest terms of the conduct of the young persons entrusted to our care. The Model Schools, as usual, have maintained their efficiency, and are under the supervision of the same teachers as last year. I must again thank the gentlemen who labor with me in carrying on the work of the school. The result of the instruction of these professors is seen in the large number of students about to go out as teachers in the Province. The ministers who kindly and gratuitously superintend the religious instruction classes deserve the best thanks of the friends of education for the aid they render us in this respect. And in conclusion, I am glad of an opportunity to thank the

Normal School committee, and the chairman, Dr. Dawson, for their kind attention to many things relating to the school brought before their notice during the past session.

The lists of prizes and diplomas of the Academy, Model School, and Elementary School classes were then read. The following is the list of the Academy class:—

1. Jemima Rodger, of Beechridge, P.Q.
2. Carrie Derick, of Clarenceville, P.Q.
3. George Parmelee, of Waterloo, P.Q.
4. Kate Wilson, of Montreal.
5. Elizabeth Radford, of Montreal.
6. Maria Blair, of Montreal.

Of 27 names that secured diplomas in the Model School class, the first two were John Ferguson, of St. Anicet, and Mary Abbott, of Boscobel. Of the rest of the names, two only were men. Out of the whole number, three were from Ontario, and the rest from Quebec; of these, 15 were from Montreal.

Of the 48 names of successful candidates for diplomas in the Elementary School class, the first two were Jane Palmer and Elizabeth Jackson, both of Montreal. Of the whole number, 21 were from Montreal, 25 from the rest of the Province, one from Ontario, one from the States. The class comprised only three names of men.

The valedictorian for the year, G. Parmelee, having read the address, Dr. Robins, who was called upon to speak to the students, congratulated them upon the completion of their year's work, and proceeded to say:—

The necessary limits by which I am restricted must be my sufficient apology for confining myself to but one topic—the great end to be attained by your labors—trusting that your own careful consideration will suggest the best means for attaining that end. It might appear to you more accordant with the day, the place, the circumstances of those whom I address, to discuss some subject less familiar and affording more scope for the enunciation of novel and striking truth, than does “the end of teaching.” But there is a strange inconsistency in human purpose. Men who have caught glimpses of great objects of pursuit are gradually led to follow the subsidiary means as final ends, forgetful of their primal objects. So, many teachers, observing that instruction is an indispensable means to the accomplishment of their great end, education, in their pursuit of the former gradually permit the latter to fade from view. Therefore, I desire to bring out from among the many subsidiary and inferior truths which have been brought before you in this school, and to press upon your attention, this great central truth, from which

all worthy schemes and methods of instruction are derived, and of which the practice of every truly successful teacher is a daily illustration, that it is the duty of all who influence childhood to aim at the development in them of every power and faculty of our complex nature. This truth needs no demonstration. It is readily accepted by every thoughtful person who considers, on the one hand, the relation of the present to the future, of the child to the man, of the passing to the abiding, and, on the other hand, the intimate connection subsisting between the several parts of our physical, mental and moral nature—so intimate that every influence affecting one faculty is propagated through our whole being. Now, first, this truth implies with reference to the physical nature of your pupils, that in all your arrangements you pay strict attention to the requirements of health, that you insist upon proper ventilation, that you encourage pursuits that lead into the pure and healthful air, that you oppose yourself to all injurious social habits, that you strenuously inculcate cleanliness of person, that by the tidiness of the school-room you set an example of, and cultivate a taste for, home cleanliness; lastly, that you repress that folly of vain and injudicious parents which stimulates precocity and fosters morbidly sedentary habits. Secondly, the truth implies with reference to intellectual culture, that you take a comprehensive view of the powers to be developed. Remember that neither memory alone nor the reasoning faculty alone, nor even both of these together, important though they be, are all the faculties you have to develop. Imagination must be awakened. Taste must be developed. The whole mind must be aroused from a sleep of infancy. And not merely must every faculty be aroused, but each must be stimulated to every kind of exertion of which it is capable. For example, taste is but imperfectly cultivated if it does not recognize harmony of coloring, beauty of form, grace in motion, elegance in expression, loftiness and delicacy in thought, in short every excellence in art, every beauty in nature. That memory is imperfectly developed which does not treasure up with equal ease all things, forms, hues, words, thoughts, trains of reasoning. That reason is defective which argues well deductively only, or inductively only, which is powerful in dealing with mathematical truth, but cannot rightly appreciate probable truth, or the reverse, which cannot rise to the speculative, or cannot descend to the practical. Every faculty, and this in every aspect, should be cultivated. Guided by this principle, you will neither undertake to teach too many things nor neglect any that may be needful for the development of any power of the mind. Aware that instruction is but the means, and education the end, you will not consider it your duty to teach everything, but rather to prepare your pupils to learn anything. It is sometimes charged against our best schools that while their pupils acquire more in a given time than formerly, yet there is, after all, notable deficiency in mental strength. There is both truth and error in the accusation. Fewer persons in the days gone by attained a moderate degree of information and of intellectual culture. Those who did so had at first a severe struggle with hindrances and difficulties, and so acquired a hardiness and robustness of mental constitution which enabled them more easily to

surmount future obstacles. As the acquisition of learning is made more easy, the attainment of a merely equal amount will correspond to a less and less development of intelligent vigor. The remedy is obvious. Teachers must so teach as not to save their pupils the trouble of thinking. He who rightly distinguishes between instruction and education will train minds not merely to drink from the fountain of other men's thoughts, but to evolve thoughts for themselves. Most men take their thoughts from others, and this, in many cases, without examining with care the opinions they adopt. This great evil will find its cure when a just education shall prevail. Lastly, this foundation truth implies, in respect to the moral nature of those whom we instruct, that we firmly oppose ourselves to everything lax in morals; not only to those things that public opinion condemns, but to many wrongs acquiesced in by public silence, if not sanctioned by prevalent public approval. I do not wish to speak vaguely. Have we no grave national faults? Have we not an overweening love for and confidence in wealth? Is it not, I ask seriously, the duty of every faithful teacher to show, while yet the minds of his pupils are impressible, that a cultivated mind, fairly earned renown in literature or science, distinction in political life, a genial heart, the love and esteem of good men, all these, and a thousand other things, are better than mere wealth, and should be more earnestly sought? Have we proper respect for constituted authority? for the counsels of the aged? Do we submit cheerfully to rule, and reverence the things that ought to be revered? Would not a universally faithful and efficient school discipline be a powerful, not to say effectual, remedy for defects in national character so grave? Permit me to venture the suggestion that there is a prevailing flippancy of tone in thought and feeling in our land, a great deficiency in seriousness of character and earnestness of purpose. It is our duty as teachers in those impressive moments, when the hearts of our pupils are open to such suggestions, to insist on the solemn meaning of life and the awful nature of its responsibilities. If it seems to you that in these last sentences I am giving you old-fashioned advice, I make no apology. It was by the practice of the virtues of severe frugality, of loyalty in service, of serious devotion to worthy aims, that our noble elder race won an honorable name—a name that can never perish. By virtues such as these must we vindicate our claim to be considered a worthy part of the great empire in whose glory we glory. More than all, only in practising virtues such as these can we hope in our humble place as individuals to win the smile of that Eternal one whose unshaken throne stands for ever exalted above earthly change.

After an address from Mr. J. R. Dougall, the proceedings closed.

Brain Weight.—The weight of a woman's brain in Slavonic races is greater than that of a man's. Among the Germanic peoples the brain weight of the sexes is equal, and in the Latin nations the brain of the man is heavier than that of the woman.
Pall Mall Budget.

HIGH SCHOOL FOR GIRLS.

The closing exercises were held on the morning of June 30th. the Rev. Canon Norman presiding. The proceedings having opened, Mrs. Fuller, the head mistress, read the following report:—

Mr. Chairman,—The session of 1880-81 being about to close, it remains for me to give a brief summary of the work of the past year. The attendance of pupils has been remarkably good, there having been an average attendance 174 out of 207 pupils enrolled during the year. This, coupled with the very great interest taken by all the classes in their work, and the large percentage of marks obtained for daily recitations, have in a great degree secured the very gratifying results of which to-day gives evidence. The average marks during the late examinations have in almost every case exceeded seventy-five per cent., while the competition for the medal has been so close that the difference of but a mark or a fraction of a mark, has divided the rank. Indeed, in the highest class, the 3rd senior, the competition was so very close that the Commissioners have granted three silver medals, and here let me say a word in favour of the written examinations. Many parents seem to feel that the days thus spent might be more profitably employed, and therefore withdraw their children when the time approaches; I feel this to be a mistake, as without such a review the interest and friendly rivalry thereby engendered would not be secured and the year's work would be left in a measure incomplete. During the session some necessary changes were made in the teaching staff. These however have in no way impaired the efficiency of the classes, as the vacancies were promptly filled by competent teachers. To these and the staff generally I would tender my thanks for the hearty co-operation they have given me throughout the year. Before closing I would thank the authorities of McGill and Lennoxville Colleges for the change of date of the school examinations the results of which as well as of those conducted by the school are about to be submitted.

This was followed by the reading of the class lists and the distribution of the prizes, the performance being gracefully varied by musical performances and by recitations in English and French. The young ladies whose names stood at the head of the classes were as follows:—

3rd Senior—E. Coe, N. Fairbain (equal) and A. Barr.

2nd Senior—M. Taylor and M. Lynch.

1st Senior—A. McGregor and E. Notman.

3rd Junior—R. McLea and O. Ritchie.

2nd Junior—M. Campbell and E. Ansley.

1st Junior—E. A. H. Shewan and G. Fisher.

2nd Class, Preparatory—F. S. Day and E. Millar.

1st Class, Preparatory—A. Copland and A. Jordan.

HIGH SCHOOL FOR BOYS.

The closing exercises were held directly after those of the Girls' High School, the Rev. Canon Norman presiding. The head master, Dr. Howe read the following report:—

The High School is 38 years old this day. I am myself 33—I mean that I have been working in the High School for that number of years. The first two or three of these were passed in the building now occupied by the McGill Normal School. The erection of this building involved the original proprietors of the High School in pecuniary difficulties that ended in bankruptcy. They could not find means even to repair effectually a leaky roof, and, as many men in Montreal who were boys in the school at that time will recollect, the rain used to stream through the ceiling of the class-rooms while we were studying hydrostatics below. It passed by Sheriff's sale into the hands of the late Mr. Harrison Stephens, and, through the late Hon. John Young, became the property of the Provincial Government. The Royal Free Grammar School of Montreal, sister of one of the same name in Quebec, had been incorporated, so to speak, with the High School; and the Royal Institution for the advancement of learning, Governors of McGill College, being the patrons of this Royal Free Grammar School, came to our rescue. We moved into a building erected by them, at the corner of University and Dorchester streets, now the Senior School of the Protestant Commissioners. After a few years we were burnt out, but the school-house was rebuilt and we continued to occupy it until our removal to the structure in which we are now assembled. So the High School, having passed through the ordeal of fire and water, having on one occasion narrowly escaped with its head, and having actually had its tail cut of, is what it is. I will venture to affirm that throughout all these trials and difficulties it was doing good work. For some years past a second generation of pupils has been going in and out of its walls, and I am in yearly expectation of seeing amongst the draft from the Preparatory High School some September, the grandsons of the first alumni of this High School. I beg forgiveness for the egotism, and at the same time for a little sacrilege of Virgil, in saying that I have an ambition to be where I am—*tertia dum regnantem viderit ætas*—until a third generation shall have seen the School maintaining its sovereignty. Not the least successful of its years has been that now closing. The first month of the Session, September, told us of the success of our out-going head boy (Blackader) in gaining an exhibition in McGill University. The April examinations of the College shewed the marked superiority of another head boy of some years back (Falconer). And the newspapers of the present month give us an account of what they call the marvellous career of another head boy (Huntley Mackay), our Dufferin Silver Medalist of 1875, who has come out head of the Military School at Kingston, winning 20 volumes of prizes and a commission in the Royal Artillery. I must not, though at the risk of being accused of boasting, omit to notice the recent School examinations in which the first nine places were taken by

High School boys—a success almost painful. And here it should be borne in mind that, by a regulation of the Protestant Board *all* the pupils of our Sixth Form are bound to undergo this examination; whereas other Schools send up only selected candidates, so that our boys have to compete with the pick of rival schools. The facts which I have brought forward should convince the public of the soundness of the educational training carried on within these walls, but many parents are hard to convince, especially when they have to pay school-tax.

How can it be other than a good school when there is so much watchfulness in regard to it? The City Council watches the School Commissioners; the Commissioners watch the teachers; the teachers watch the pupils; the pupils watch so that the school shall not lose its laurels, and the public are watching the whole. Turning from externals to an internal view of the school, I have to report that the Written Examinations of this month have been, on the whole, satisfactory. The Third Form boys have acquitted themselves in a manner that does credit to the Preparatory High School, from which they were drafted last September. So also the Fourth Form, except in mathematics, in which they have shown some weakness. The Fifth Form, however, have, but with one or two exceptions, done remarkably well, and promise a good out-going Form for the next session. Of the Sixth I need not report, as their record is to be found in the late School Examinations. You take so active a part yourself, Mr. Chairman, in the affairs of the Board generally, and more particularly in the High School course, that my report of these Written Examinations, although brief, will, I am sure, be considered sufficient. We have had no occasion to trouble the Board with any difficulties of discipline. The boys are a good set. I am sure that all the masters will join me in expressing their obligations to the Commissioners and to their clear-headed and active Superintendent for facilitating, in every way, our performance of our duties.

The reading of the lists &c. was as before varied by musical and other performances. The following boys stood at the head of their classes—

- 6th Form (Science) F. P. Bernard, F. L. Barlow and P. C. Mitchell.
do (Classical) C. R. Daoust, P. E. Judge and M. Watson.
5th Form (Science) C. P. Brown, N. N. Evans and W. S. Leslie.
do (Classical) P. E. Ritchie, T. W. Bussell and W. A. Cameron.
4th Form A. Henderson, Rose and Martin.
do B. R. Hill, H. M. Patton and W. A. Nichols.
3rd Form A. Gardner ma., Kerr and Barry.
do B. J. L. Day, Johnston and Ross ma.

PREPARATORY HIGH SCHOOL.

The closing exercises and distribution of prizes took place in Burnside Hall on the morning of June 28th, the Rev. Canon Norman in the chair. The head master, E. W. Arthy, opened with the annual report:—

As the session of 1880-81 is now drawing to a close, it becomes my pleasing duty to give you a brief account of the school that you have placed under my management during the past year, and to report the result of the examinations that have just come to an end.

There has been somewhat of a falling off in the numbers of the school this year, or, to speak more accurately, the number of pupils has returned to its normal standard. This is due principally to two causes. 1st. The unusually large number of 62 having been promoted last year to the High School, a vacancy was left for more than ordinary numbers. 2nd. The influx of new scholars was not equable, but there was an excess in some forms and a corresponding decrease in others, and as it was not deemed expedient to divide the 2nd Form, recourse was had to a process of weeding, which, though the best that could be done under the circumstances, resulted in some diminution of the numbers. In attendance and punctuality I believe I am right in saying that the school ranks fourth, being in this respect behind the High School for Boys, the High School for Girls and the Senior School, but ahead of all other schools under the Board. This is a fair report, as attendance is generally found to be worst among younger children. The health of our scholars has been good. We have had few, I think I may say only two, cases of malignant disease, and we deplore the loss of but one of our youngest ones.

Before passing on to the reading of the prize list, I wish to discuss briefly a very important question, because I find that I have been accused of an inconsistent line of action in this respect. The question is this: At what time should education commence? And to put it in a more practical form, at what time do we recommend parents to place their children in this Preparatory School? To answer the second question first, we reply that we begin from the beginning, and are willing, at the commencement of the year, to admit boys of five or six years of age, but, in the middle or end of the year, do not recommend parents to enter them so young unless they can read the alphabet and form their letters and figures, because we have really no class so low that they can enter it advantageously. In reference to the broader and more theoretical question, a few words will not be unreasonable. We commence education too early if we interfere with the powers needed for growth. On the other hand, we commence too late if we allow time to pass by when good and useful impressions can be made with perfect safety to the general health. This is just as possible a case as the other; nothing but observation will avail us here. We must set aside the instances that are extreme either in vigor or weakness. We know that many have begun to read at three or four years old, and have grown up perfectly healthy and

strong ; what we do not so well know is whether, by beginning at five or six, they would not have been as far advanced at fifteen as they are in the earlier commencement. If, however, any considerable number of children have begun schooling at three or four, without more than an occasional instance of observed mischief, then a year later ought to be a margin of safety for all but exceptional cases. The necessity and expediency of protracting the age till seven or eight cannot be made out. There ought to be proof positive that in such belated instances the child advances with a rapidity that counter-balances the previous loss of time.

The numbers of this school through the year have averaged 150 boys, the highest class containing 44 boys, of whom 36 have passed out of the school. The age of the boys varied from 7 to 11 years. The following is the list of those who stood at the head of their classes:—

- 2nd Form.—J. Day, J. Baylis and S. Lichtenheim.
 1st do. —A. A. Robertson and W. E. Cushing.
 2nd Preparatory Class.—G. Macdougall and R. Hutchinson.
 1st do. do. —C. C. Gurd and G. Boyd.

THE SENIOR SCHOOL.

This important institution, which is the culmination of the Elementary Schools, closed on June 28th in Burnside Hall. The chair was occupied by the Rev. Canon Norman. The regular staff of the school consists of F. S. Haight, M.A. (Head Master), R. S. Weir, B.C.L., and Miss E. Willan. Special branches are taught by special teachers from the High School. The number of pupils enrolled for the year has been 268, divided as follows:—

Upper Seniors—Boys, 17; girls, 20; total, 37.

Lower Seniors—Boys, 122; girls, 109; total, 231.

For the studies pursued by the graduating class we may quote the account given by the Valedictorian, Miss G. Jenner-Fust:—

“During our attendance here, the following are some of the principal subjects we have gone over:—Geometry, the first three books of Euclid; Arithmetic, including square and cube root; Algebra to the end of Quadratic Equations; the History of England, Rome, and Greece; in French, Fasquelle’s Introductory French Course and all the pieces by Molière in Professor Darey’s French Reader; German, to the end of the irregular verb; Botany, as far as the classification of plants. In the first year, in English Literature, we studied the Life of Oliver Goldsmith and his two poems, ‘The Deserted Village’ and ‘The Traveller’; in the second year Sir Walter Scott’s poem, ‘The Lady of the Lake.’”

At the close of the second year those pupils who have successfully passed the examinations receive a certificate or diploma. This year, out of a class of 24, 22 received diplomas. Of these 9 were boys and 13 girls. The medallists for the year were Sydney Lovelace, with 1,252 marks out of a possible 1,350, and Maud Clarke, with 1,181 marks.

McTAVISH STREET SCHOOL.

This school, which is our leading private school for boys, held its closing exercises on the morning of June 17th, in the house at 166 Mansfield street. Among the teachers for the past year were H. J. Lyall, Head Master; J. L. Hague, B.A., Oxford; A. Browning, B.A., Cambridge; F. W. Walker, B.A., Cambridge; J. W. Williamson, University of Edinburgh; F. V. Bernard, University of Metz; Rev. F. W. English; H. Bird, A.C.R.A.; Professor Andrew. The maximum number of the school for the year 1880-1 was 105, and it sent up two candidates for Associate in Arts, both of whom obtained a senior certificate. The chief prize-takers in the different forms were as follows:—

Form VI.—A. G. B. Claxton and W. J. Moris.

“ V.—H. Rose and R. H. Clerk.

“ IV.—G. Macintosh and H. MacCulloch.

Suspension.—J. Dunlop and K. Campbell.

Form III.—A. C. Hamilton and W. G. Simpson.

“ II.—E. S. Saunders and R. A. Force.

“ I.—A. R. Roy.

THE ELEMENTARY SCHOOLS.

The closing exercises of the Elementary or Common Schools of the City of Montreal took place simultaneously at the different school-houses upon the morning of July 29th. Want of space forbids our giving a detailed account of the proceedings at the different schools. The accompanying statistics, however, will be found useful, to which a few notes are appended for the sake of the uninitiated. The date for which the statistics are given is April, 1881, because the examinations are held in that month, and the promotions in the various schools take effect in the month of May.

Prizes for General Proficiency are awarded to all who take 75 per cent. of the marks for examination, and who have not been

in the class for two years, nor have undergone corporal punishment or suspension by the head master within the last six months. The comparison of the number of such prizes with the number of the class is no bad estimate of the success of the class as a whole.

The concluding totals of percentages of marks obtained by boys and girls respectively are the result of adding the percentage of marks obtained by each child and dividing by the total number of pupils. And upon comparing the percentage thus given with the average of the classes, it will be found that while the percentage of work by boys is on the whole 1.7 better than the work by girls, the average age of the boys is .6 lower than that of the girls. Except in the First Intermediate, boys pass faster through their classes than the girls, who are retarded in their progress by home duties and bad weather, both of which interfere with the regularity of their attendance. Thus, on the whole, *for the same age*, boys are still better workers than girls. This is an interesting fact, and should be borne in mind in estimating the comparative mental ability of the sexes.

Of the First Primary and Preparatory classes no such accurate statistics are printed, because their examinations are naturally, owing to their age, conducted *viva voce*.

SCHOOLS.	HEAD MASTER.	BRONZE MEDALLISTS.
Ann Street, 1850.....	S. P. Rowell.....	Maggie Galbraith and J. Chauvin.
British and Canadian } 1822. }	J. McKercher, B.C.L.	{ Annie Kyle and Alfred Rivard.
Dorchester Street, 1874	F. C. Haney.....	
Mill Street, 1875.....	Miss C. S. Winfield.	
Ontario Street, 1876..	Miss H. Carmichael	
Panet Street, 1850....	A. W. Kneeland....	Felicité Granger and M. Lucas.
Point St. Charles, 1876	S. H. Parsons, B.A..	Isabella Brown and Charles Blair.
Royal Arthur, 1870...	C. A. Humphrey....	Alex. Jeffrey and A. E. Brown
Sherbrooke Street } (St. Lawrence), 1871. }	A. Pearson.....	Lily Jubb and Edward Chartier.

	Ann Street.	British and Canadian.	Dorchester Street.	Mill Street.	Ontario Street.	Panet Street.	Pt. St. Charles.	Royal Arthur.	Sherbrooke Street.	Average Age.	Totals.
	408	409	154	39	128	291	292	497	519		2737
	11	11	5	1	3	8	7	12	13		71
Senior.	Number of Pupils.....	26	28			24	23	41	50		192
	General Proficiency Prizes.....	23	16			11	6	8	32		96
	Percentages obtained—Boys.....	88.6	82.3			78.2	73.8	75.4	71.3	12.8	79.6
	Do. do Girls.....	87.5	80.7			79.7	75.1	75.9	81.5	13.3	80.1
} 79.8											
2d Inter.	Number of Pupils.....	66	43	24		29	45	54	106		367
	General Proficiency Prizes.....	17	9	17		8	16	18	57		142
	Percentages obtained—Boys.....	80.2	72.3	78		75	79.6	85.5	78.4	11.9	77.4
	Do. do Girls.....	73.5	72.8	81.5		80.1	82.9	78.3	77.7	12.1	77
} 77.2											
1st Inter.	Number of Pupils.....	76	78	26		41	36	87	106		450
	General Proficiency Prizes.....	15	32	12		14	7	16	57		153
	Percentages obtained—Boys.....	76.2	80.7	79		78.1	70.5	68.1	84	11.4	81.8
	Do. do Girls.....	74	81.3	79		75.4	74.4	81.2	87.2	11.1	79.9
} 80.8											
2d Prim.	Number of Pupils.....	74	90	34	9	38	42	51	96		510
	General Proficiency Prizes.....	30	22	17	5	26	23	10	37		228
	Percentages obtained—Boys.....	83.4	75	86.5	86	82	82.3	77.9	83.5	9.7	82.4
	Do. do Girls.....	78.7	81.6	85.2	70.2	86	85.2	74.9	85	9.9	82.5
} 82.4											
1st Prim.	Number of Pupils.....	84	86	40	15	35	88	55	114		616
	General Proficiency Prizes.....	44	25	17	5	9	24	5	28		223
Prep.	Number of Pupils.....	82	84	30	15	55	67	82	105		602
	General Proficiency Prizes.....	18	22	8	4	14	14	1	28		164

QUEBEC HIGH SCHOOL.

The closing exercises of this institution took place June 24th, under the presidency of the Lieutenant-Governor. The ceremonies were as follows. A public examination was conducted by the Rector (Mr. Harper), by the Rev. Dr. Weir and others, and this was followed by the distribution of the prizes. Quebec is to be congratulated on her successful choice in filling the Rectorship which was vacant last fall. More than 100 boys have been enrolled during the past year, the highest class consisting of 20 boys. It is to be hoped that next year Quebec will send up some of her scholars to take part in the A. A. examinations of McGill and Lennoxville. The following is the list of the chief prizes:—

The Governor-General's Medal, (Languages)—Frank Laurie.

The Henry Fry Medal, (English Subjects)—William Home.

Mrs. Clark's Medal, (Mathematics)—Archd. Laurie.

First Prize for Greek—Arthur Veasey.

First Prize for English—James Laurie.

First Prize for Mathematics—Chas. Brodie.

Boys of First Division—Alex. Laurie, first boy; Geo Thomson, second boy; Geo. Johnston, third boy.

The Juniors—Alfred Miller, first boy; Herbert Williams, second boy; John Racey, third boy.

Preparatory Department—Fredk. Fry, first boy; Jas. Watson, second boy; Herbert Scott, third boy.

We hope that the Quebec High School has now taken a new lease of life.

ST. JOHNS HIGH SCHOOL.

The year that has just passed has been one of the most successful years, both as regards numbers and progress, that the school has had for some time. It will be unnecessary to mention more than the successes achieved in the A. A. Examinations, which will be found upon another page of the RECORD. The number of pupils in attendance during the year has been 70, ten of which constitute the highest class.

At the close of the summer term, Mr. Stevens, B.A., resigned his position as Principal. He and Mrs. Stevens were the recipients of a large number of beautiful and valuable presents, mainly from the students in the Senior Department.

MISSES SYMMERS AND SMITH.

This school, which takes the first place among our private schools for girls, held its closing exercises in the Montreal Gymnasium, Mansfield street, on the afternoon of June 15th. The numbers of the school for the year have varied from 110 to 120, and it has obtained the following certificates from the Ladies' Educational Association:—Chemistry, 10; Domestic Medicine, &c., 9; Ancient History, 8; English Literature, 7. The following are the names of the chief prize-takers in the various classes:

Elementary Class II.—E. Bulmer and E. White.

“ I.—W. Dawson.

Junior Class II.—E. Watt and L. Savage.

“ I.—E. Cowie and C. Edgar.

Intermediate Class II.—B. M. Leach.

A. E. Crathern and A. Redpath.

“ I.—B. M. Tait and E. Ibbotson.

A. I. Bulmer and M. Ross.

Senior Class II.—L. Lewis.

“ I.—C. Crispo and S. Mathewson.

The Wreaths were taken by C. Nield and E. deBeaumont, and the Silver Medal by S. A. Phillips.

REVIEWS.

“THE CORRESPONDENCE OF PRINCE TALLEYRAND AND KING LOUIS XVIII.” Harper & Bros., New York.

(For Sale at DAWSON BROS.)

The correspondence contained in this volume extends over part of the period of the Congress of Vienna (1814-15), and is printed from hitherto unpublished manuscripts preserved in the archives of the Ministry of Foreign Affairs at Paris. It is accompanied by a Preface and Notes by M. G. Pallain. The interest of the book will be very great to those who desire to learn the manner in which the Restoration took place in Europe, after the anarchical era of the French Revolution and early Bonapartism. Just as in England after the Revolution the idea of the King *de jure* superseded the King by Divine Right, so in France “Legitimacy” took the place of the older Bourbon Absolutism. In a Report, dated June, 1815, Talleyrand draws this out very clearly:—

“With this turn of mind now manifesting itself among all nations, and in these times, when everything, and especially politics, is discussed, examined, and analyzed, people are apt to ask what is legitimacy, whence it proceeds, and in what it consists. In the time when religious feelings were all-powerful and deeply engraved in the hearts and minds of men, it was possible to believe that the sovereign power was an emanation from the Divinity. It was possible to believe that those families who were raised to the throne by Heaven's favour, and long kept there by its will, reigned over men by Divine right. But in these days, in which there remains scarcely a trace of these feelings, and in which the bond of religion, if not broken, at any rate is much loosened, men will no longer allow the claim of legitimacy to this origin.”

In the same Report he goes on to define Legitimacy, and to show the conditions necessary to its stability and well-being:—

“Legitimate power is the form of Government best calculated to secure the prosperity and tranquillity of the people. From this it follows that authority, to be legitimate must have existed for a long succession of years; and accordingly, we see that legitimate power, from the fact that it is fortified by memories of the past, by the affection which men naturally feel for the family of their chief, and having on its side the possession, which in itself confers a title in the case of private ownership, is the form of Government least likely to expose the people to the perilous chances of revolution, and is, therefore, the form to which they are bound in their best interests to submit. On the other hand, if the conviction obtains that the abuses to which this power is liable constitute an evil outweighing the advantages which it offers, Legitimacy must be looked upon as a delusion and a snare.”

Guarantees are accordingly necessary to prevent the sovereign authority from becoming tyrannical, and so to secure the continuance of Legitimacy. These Talleyrand finds in personal liberty protected by law, the liberty of the press, the independence of justice secured by judges being irremovable, in ministers being responsible for their exercise of power, and in none but such being admitted to the councils of the sovereign, and finally in the law being the expression of the united will of the three separate states of the realm. Enough has been said to show the interest of this Correspondence to the student of French Political History. It need not be pointed out what a valuable assistance the work gives to the history of this great Congress. The Preface, by Mons. Pallain, is an interesting political essay.

"SHAKESPEARE'S CORIOLANUS," edited by W. J. ROLFE. Harper & Bros., New York.

(For Sale at DAWSON BROS.)

Mr. Rolfe's "Coriolanus" is, we need hardly say, a useful addition to his other plays of Shakespeare. The volume is in all 279 pages, over 100 of which are filled with notes and 40 by the Introduction. All that is necessary to an intelligent study of this somewhat difficult play is given, the passage from North's *Plutarch*, upon which the play is based, being re-printed from W. W. Skeat's useful "Shakespeare's Plutarch." Sometimes it is possible that the notes might be shorter. For instance, in commenting on the well-known passage, "So our virtues lie in the interpretation of the time," &c. (Act IV., Scene VII.), it was hardly necessary to give the different words which ambitious commentators have proposed to substitute for "chair." All good editors are agreed that emendation, such as delighted the ingenuity of Maginn, should be minimized as far as possible. But the notes are, as a rule, all that could be wished. The preface is somewhat longer than Mr. Rolfe's prefaces usually are, which is caused by the fact that the editor herein protests against the notion of "parsing" Shakespeare. In this most people will agree with him. Those who read Shakespeare should know already how to "parse." But we do not agree with him when he writes that "parsing may be useful exercise with the Greek or Latin authors, but never in the study of English authors." The study of literature is, of course, different from the study of language, but in their earliest steps they must be carried on together.

GEORGE H. HEPWORTH'S !!! Harper & Bros., New York.

(For sale at Dawson Bros.)

In an age like the present we must be prepared for very much that is startling and paradoxical in all branches of literature. Our ideas in all fields of thought—religious, scientific, social and political—have received such rude shocks during the last decade, that we feel inclined to say, with the Ajax of Sophocles,

"All strangest things the multitudinous years
Bring forth, and shadow from us all we know.
Falter alike great oath and steeled resolve;
And none shall say of aught, 'This may not be.'"

Over no field have greater changes passed, in none have greater displacements taken place, than in that of religious thought. All literature attests it, and the modern novel would be as incomplete without its religious padding as its predecessors without their love-making. Mr. G. H. Hepworth's new work is a striking example of this. It is a story written as a half-serious plea in favor of the doctrine of metempsychosis.

The belief in the immortality of the soul is one of the deepest-seated elements of religious belief, and even people, who, like the Positivists, practically deny it, are unable to do so without retaining the term to signify a posthumous immortality of renown, which they wish to substitute for the older belief in a continuity of conscious being. But however persistent the immortality of the soul may be as an idea, it is an idea that has taken upon it various shapes at different times and among different races. One of the commonest forms of belief among Oriental nations is the doctrine of the transmigration of souls, and it has found favor with poets, if not as an article of belief, at least as an idea suited to the requirements of the poetic imagination. That the doctrine of metempsychosis has not found serious advocates in modern times is hardly matter of wonder, considering the numerous difficulties that attend the belief. Wordsworth's ode is a proof of the poetical aptitude of the idea, but Mr. Hepworth is perhaps the first who has seen its capabilities as enhancing the old story of love. Gerard Roussel tells the tale of his marriage with Bertha Hohenstauffen. They were drawn together by a kind of Elective Affinity, having been married eighty years before as Leopold and Elise. The story is broken here and there by dialogues after the Platonic fashion with Will Rivers, the third interlocutor. The scene is appropriately laid in a lonely cottage on a wild, stormy night.

NOTES AND NEWS.

The High School Library.—We are glad to hear that the boys of the High School, Montreal, are taking active measures to get together a Library of reference. It seems to us a necessary appendage to a school, and it is wonderful that steps in this direction have not been taken before.

Translations and Appointments.—Miss Georgiana Hunter, S.A.A., of the Sherbrooke Street School, has been appointed to succeed Miss Henderson, late teacher of History and English Literature

in the Girls' High School, Montreal. By this appointment the Commissioners have paid a graceful compliment and something more to the lady who took the earliest certificate of the Senior Associate of Arts examination. The vacancy created by her translation has been filled by Miss J. McGarry, late of Ann Street School and Helmuth College, Ont., whose name will be familiar to our readers for her accomplishments as an Elocutionist. Besides the retirement of Miss Henderson, we hear that Mr. R. S. Weir, B.C.L., of the Senior School, has decided on abandoning the scholastic for the legal profession.

Ontario Association of Teachers.—This association meets at Toronto during the month of August. Dr. Robins is to deliver an address before it, on August 11th., upon "the Relation of the Will to the Intellect." The subject is one of great interest and was chosen for an address by the Rev. Dr. Stevenson at the Montreal meeting last fall.

The American Institute of Instruction.—The 52nd annual meeting assembled at St. Albans, Vermont, upon July 5th, 6th and 7th. The president for the year was Prof. W. A. Mowry of Providence, R. I. Among the subjects advertised for treatment were "Political Education," "How far do the Results of American education answer to the Needs of American Life?" "the Relations of Education to Citizenship in a Republic," "Jesus Christ the Model Teacher." In a future number we shall give a more detailed account of the subjects considered. The proceedings are to be published in a volume which can be secured by payment of \$1.10 to the Treasurer, G. A. Walton.

Selwyn College, Cambridge, Eng.—The foundation stone of this institution was officially laid early in June. The college is a memorial to Bishop Selwyn of Lichfield, and corresponds to some extent to Keble College, Oxford, in being professedly sectarian with the subordinate aim of cheapness. "Religion, simplicity of life and discipline" are intended to be the characteristic of the life at the new college.

The Educational Chronicle (Manchester Eng.)—The friends of Education will regret to hear of the discontinuance of this excellent journal. It was well printed and well edited. The tone of its articles was always high and it contained more readable matter than most Educational. Its decease is a decided loss to the cause of Education in Great Britain and elsewhere.

Mother Shipton.—In a bookling of sixty-four small quarto pages, called *Mother Shipton Investigated*, Mr. W. H. Harrison, of Museum Street, has brought together all that can be collected regarding that mythical personage who goes by the name of Mother Shipton. It seems that for two or three hundred years or so there has been floating about a mass of more or less foolish stuff which credulous

people call prophecy—attributed to Mother Shipton—and which has been steadily growing in bulk as a matter of course. This rubbish received a very notable accession when, on the 7th of December, 1872, there appeared in *Notes and Queries* what purported to be an “Ancient Prediction, published in 1448 and re-published in 1641,” by Mother Shipton. That such dull doggerel should ever have been taken as serious or accepted as the genuine language of the seventeenth century, not to mention the fifteenth, is sufficiently surprising, but the “Ancient Prediction” finished up with an awful climax:—

The world to an end shall come
In eighteen hundred and eighty-one.

This terrible denunciation “has been exercising the public mind,” Mr. Harrison assures us, and it is to calm the popular excitement and to allay the terror that presumably is on the increase, that this book has been printed. It is a curiosity and has been industriously put together. Our readers will be relieved when they learn, on Mr. Harrison’s authority, that the “Ancient Prediction” was a hoax, and that on the 26th of April, 1873, Mr. Charles Hindley, of Brighton, wrote to the editor of *Notes and Queries*, “and made a clean breast of having fabricated the prophecy.”
The Athenæum.

SCIENTIFIC DEPARTMENT.

The Convention of the Society of American Civil Engineers, which was held in this city in June last, was highly successful. It was attended by many men well known both on this continent and in Europe, of whom we may mention James B. Francis, of Lowell, Mass., chief engineer of locks and canals on the Merrimac River; Octave Chanute, of New York, chief engineer of the New York and Erie Railway; E. S. Chasbrough, city engineer of Chicago; T. C. Clarke, who received the gold medal of the English Institution of Civil Engineers in 1879, and also E. P. North, who took the gold medal of the Society last year.

The meetings of the Convention were held in Molson Hall, McGill College. Mr. T. C. Keefer was elected Chairman of the Convention.

Addresses of welcome were delivered by the Mayor of the city; F. W. Henshaw, Esq., President of the Board of Trade; Thos. White, M.P.; Alex. Mitchell, President of the Corn Exchange, and by Principal Dawson, C.M.G.

Mr. Welch, Vice-President, replied on behalf of the Convention, and concluded his address by saying:—“That engineer has a very inadequate idea of his mission who considers that physical good—commercial good—is the highest end of his profession. The real and highest aim of the engineer, by the works he constructs and by the union of the whole world into one by the construction of railroads, canals and telegraph lines, is to civilize and Christianize mankind.”

We should like to give a *resumé* of each paper read, but the space at our disposal forbids this. We therefore can notice but a few. Perhaps one of the most important to the general public was that of Mr. Sandford Fleming on "Uniform standard time for railways, telegraphs, and civil purposes generally." He remarked that as the continent extends across 105 degrees of longitude, an individual at the western limit finds himself seven hours of recorded time behind another individual at the extreme eastern side at the same moment of absolute time. According to the system of notation which we have inherited from past centuries, every spot of earth between the Atlantic and the Pacific is entitled to have its own local time. In the whole country there is, so far, an irregular acknowledgment of more than one hundred artificial and arbitrary standards of time. The consequences of this system are unsatisfactory. It is proposed that the community unite in an effort to simplify the system now in use, by reducing the number of time standards to a minimum, by substituting for an indefinite number of irregularly established and purely local standards a few main or, as they may be termed, continental standards, each one having a fixed and well-known relation to all the others. It is proposed to have these standards established and maintained by governmental authority; to have them regulated with precision through a common central observatory; and through these standards it is proposed to keep every town, city, railway and steamboat clock throughout the land as nearly as practicable in perfect agreement. The plan of arrangements favored by the Meteorological Society, New York, and the Canadian Institute, Toronto, is to have the standards so established that they will be exactly one hour apart; that is to say, while it would be nine o'clock at one standard, it would be eight o'clock at the next to the west, seven o'clock at the following, and so on, by steps of exactly one hour. There would be no difference in the minutes and smaller divisions of time. If the time be ten minutes or thirty minutes past some hour at any one point, it would at the same instant in absolute time be ten minutes or thirty minutes past some hour at every point. The hours themselves only would differ, and they would differ only in designation according as the localities were east or west. At the same instant of absolute time every clock in the country would strike either one hour or another; the minute and second hands would always and everywhere be in perfect agreement.

The President of the Society, James B. Francis, Esq., addressed the Convention on Water Power in the United States. He said the earliest application of water power to general manufacturing purposes appears to have been at Patterson, New Jersey, where "The Society for establishing useful manufactures" was formed in the year 1791. Having mentioned a number of water powers which had been systematically developed, such as that at Cohoes, on the Mohawk River, at Lowell, Mass., and Lewiston, Me., he went on to say:—

"In the usual process of developing a large water power, a company is formed who acquire the title to the property, embracing the land necessary for the site of the town to accommodate the population which is sure to gather round an improved water power. The dam and canals or races are constructed, and mill sites with accompanying rights to the use of the water

are granted, usually by perpetual leases subject to annual rates. This method of developing water power is distinctly an American idea, and the only instance where it has been attempted abroad that I know of is at Bellegarde, in France, where there is a fall in the Rhone of about thirty-three feet. Within the last few years, works have been constructed for its development, furnishing a large amount of power, but from the great outlay incurred in acquiring the titles to the property, and other difficulties, it has not been a financial success."

He then touched upon the subject of "Anchor Ice," which is frequently very troublesome to those using water power :—

"The essential conditions are that the temperature of the water is at its freezing point and that of the air below that point; the surface of the water must be exposed to the air, and there must be a current in the water. The ice is formed in small needles on the surface, which would remain there and form a sheet if the surface was not too much agitated. But in a water power there is a continued interchange of position of different parts of the stream. The result is that the water on the surface of a running stream does not remain there, and when it leaves the surface it carries with it the needles of ice, the specific gravity of which differs but little from that of water, which, combined with their small size, allows them to be carried by the currents of water in any direction. The adherence of these particles to the bottom, I think, is explained by the phenomenon of *regelation*, first observed by Faraday. He found that when the wetted surfaces of two pieces of ice were pressed together they froze together and that this took place under water even when above the freezing point. Prof. James D. Forbes found that the same thing occurred by mere contact without pressure, and that ice would become attached to other substances in a similar manner."

Mr. C. Latimer addressed the Convention for the purpose of showing that the British inch was used in the construction of the great Pyramid, and proved his contention by an entirely new mathematical demonstration. He believed that the British inch differed by a one-thousandth part from what it was at the time the Pyramid was built. He did not look upon that as a matter of particular value, because the measure had been preserved with great exactitude, and stood to-day a perfect measure.

Sir Josiah Mason, the founder of the Mason Science College, opened at Birmingham last fall, lately died. The deceased knight rose from a very obscure position, being the son of a poor weaver. Sir Josiah was the greatest manufacturer of steel pens in the world, although his name does not appear on these useful articles. He was the manufacturer of the well-known Perry, Gillott and Mitchell pens. He was interested in several companies engaged in scientific operations, such as Elkington & Co., of electro-plating fame. His various enterprises netted him an immense fortune, much of which he devoted to charity and benevolence. He built an orphanage costing £60,000, and endowed it to the extent of £200,000. In recognition of this generous deed he received the honor of knighthood. He founded and endowed the

Mason Science College, to furnish an education that would fit men especially for developing the industries of the Midland Counties of England. It was at first intended that all mere literary and theological education should be excluded from this institution, but it has been recently determined to have it fully equipped for imparting instruction in all branches usually taught in colleges.

The centenary of the birth of George Stephenson, inventor of the locomotive steam-engine, was celebrated in England lately with great *éclat*. In commemoration, arrangements were made for the establishment of scholarships to place the advantages of a university education and special training in mechanical engineering within the reach of capable students whose circumstances would otherwise render such training impossible. The total number of scholarships and exhibitions will be fifty-two.

The comet which has of late received so much attention from astronomers was first astronomically observed in the southern hemisphere on May 29th, and appears to have been at its least distance from the earth about June 21st. Its brightness is about that of a star of the fifth or sixth magnitude. The majority of English and American astronomers seem to lean to the opinion that this comet has not been seen before this year, in modern times, at least. We notice, however, that at a late meeting of the Paris Academy of Sciences the opinion was maintained that the comet now visible is the same as that observed in 1807.

Since our last issue, two men of repute in the scientific world have passed away—Prof. Rolleston and St. Claire Deville. The former was Professor of Anatomy and Physiology at Oxford, whilst the latter was Professor of Chemistry in the *Ecole Normale* at Paris. To Deville the world owes the only process at present employed in obtaining aluminium and magnesium, as well as improved methods for obtaining sodium, whereby this metal is now comparatively cheap.

J. T. D.

LITERARY DEPARTMENT.

The second centenary of Calderon has this year been celebrated in Spain, and has occupied the attention of the Spanish literary and scientific societies and journals. Menendez Pelayo writes as follows of the Spanish Theatre, of which Calderon is the Shakespeare :—"What our theatre gains in nationality it loses in universality. We cannot hope to be admired and worshipped by the whole world of culture, as are Sophocles and Shakespeare; we smack too much of the soil for that; we are too exclusively national to appear natural to, and to arouse the sympathies of, another people. This is an advantage and a demerit. Our drama is perhaps the second, or at least the third, in the world. It may be invoked as a war-flag in the time of romantic (literary) revolution; but it cannot be adopted as a type or model of the beautiful, as is the case with the idealistic art of Sophocles, and with the realistic art of Shakespeare, the two equally admirable poles of dramatic Art."

The earliest date, as well as the original discoverer, of the art of printing, is one of the moot points of history. An interesting communication on this point has been lately made to the *Academy* (June 4) by W. M. Conway. The conclusion at which he arrives is that "the earliest printing press to which both a date and a locality can at present be assigned was used near Groenendael, in the forest of Soignies, in the Province of Brabant, before the year 1440." The books that establish this conclusion are by Henricus ex Pomerio or Van den Bogaert, Prior of Groenendael, and are of a religious nature.

E. B. Taylor's "Anthropology, an Introduction to the Study of Man and Civilization," is an interesting summary of results arrived at by the school of archæologists, of which the author is a distinguished member, and which includes the names of Lubbock, Evans, Dawkins, Mitchell and others. The history of pre-historic man is a study of comparatively recent birth and the natural sequel of the popularization of the evolution hypothesis.

A monument to Lord Byron has been erected at Missolonghi. His name is dear to the Greeks, as a great poet; as one who made their country the theme of much of his poetry and identified himself with the cause of their liberation. The monument consists of a statue of the noble poet, executed by the sculptor, Vitalis of Syra. It is carved in Pentelic marble, and bears upon it an inscription, written in Greek by Prof. Demetrios Semitelos, to the following effect:—

Pause, stranger, look on Byron, Britain's peer
And poet, whom the muses loved full dear;
Him, so their friend they never should forget,
By public tribute Greeks in stone have set—
Comfort and joy he brought to Greece, when she
Fought weary the good fight of Liberty.

The funds for the purpose were raised solely by Greeks, none others being allowed to contribute. Byron's name has always stood higher abroad than in England, but after suffering from a temporary depression his claim to a high place among English worthies is at last being acknowledged. Matthew Arnold's volume of selections, prefaced by the article that lately appeared in *Macmillan*, is a sign of this.

Norse Mythology has lately attracted an unusual share of attention. The origin of mythology generally has been a point of much dispute, and when Prof. Bugge, about three years ago, propounded the theory that the Northern Mythology was in great part borrowed from classical and, above all, Christian traditions, brought home by the Vikings in the ninth and tenth centuries, his discovery set people thinking. It was, in fact, a return to the old explanation of the Pagan Gods, such as may be found in the first book of "Paradise Lost." Prof. Bugge's theory, however, did not pass unchallenged. Prof. Stephens has recently delivered, in the University of Copenhagen, a course of eight lectures in reply. Without denying that Norse Mythology may contain elements from classical or Christian sources, he believes the debt to be altogether very inconsiderable. After examining Prof. Bugge's argu-

ments in detail, showing, for instance, how unscientific his etymological basis is, he concludes that for at least one thousand years before the ninth century the Norse had been in possession of a developed religious system, presenting many points of coincidence with the Christian faith. This our readers may recollect was shown to be the case ten years ago by Karl Blind in a series of articles in the *Contemporary Review*.

Mr. Jefferson Davis's "Rise and Fall of the Confederate Government" has been published. The book is a defence of the action of the Southern States. The principal defence of Secession is the contention that it was warranted by the Constitution of the United States. Mr. Davis's argument is that the Constitution was accepted by the States as States, and not by the people of the United States; that the right of withdrawal from the Union was reserved by each State; that the State is the sovereign of each citizen, his allegiance being primarily to his State, and secondly to the Union; and that, should his State elect to secede from the Union, he is not only bound to cleave to his State, but it would be treasonable for him to act otherwise. Those who turn to the volumes for revelations, will find that Mr. Davis has little that is new to tell. Thus, no new light is thrown on the unsolved problem of the assassination of Lincoln.

R. W. B.

CORRESPONDENCE.

MATHEMATICAL EDUCATION.

To the Editor of the EDUCATIONAL RECORD:

DEAR SIR,—I noticed a letter in your last issue, on "Mathematical Education," containing some suggestions relative to the best method of teaching that branch of study, with which, as a teacher, I cannot concur, and, if you will kindly permit me, I will try to explain to your readers my reasons for differing from your previous correspondent. To follow out the figure somewhat facetiously used by Mr. Parkin, the course upon which he has exhibited his steed is a favorite one of mine, and though I may appear presuming, as a young and inexperienced rider, for attempting to compete with a jockey so much my superior in age and experience, yet I cannot forbear to enter the race with him. My hobby is not a thoroughbred of my own raising, but an ordinary roadster of well-tested endurance, and I frankly acknowledge that I hope to win an easy victory, since my opponent's steed must be ruled out as a *pacor*, *i.e.*, an animal that goes one side at a time. And here the metaphor is too weak, for one side of his steed does not go at all.

In selecting the best method of teaching a particular subject, we must take into consideration the object of that study. Your correspondent, in support of his theory, compares the study of mathematics with that of classics, and concludes that the method which is good in the one case is also good in the other. Now, while all do not agree with him in his method of teaching the

classics, yet even granting that the method mentioned by him is the best, does it necessarily follow that it is also the best method of teaching mathematics? Not at all. The object aimed at in one of these branches is totally different from that aimed at in the other. They serve to develop two distinct faculties of the intellect, both of which are essential to its complete cultivation. The great central purpose of classical study is to store the mental magazine with the treasures of the past, and to develop the powers of memory. Mathematics, on the other hand, train the reasoning faculties to make intelligent use of that which memory has in store. The one tends to the attentive accumulation of the facts of the past, the other to the practical use of those facts for the future. The multiplication table is learned by heart, as we say, merely because from its extremely useful nature it comes before the pupil while he is too young to reason extensively, but it is always better that the child, young as he may be, should know the meaning of what he says than that he should repeat it merely as an unmeaning succession of known sounds. To teach even the simplest of the mathematical branches successfully, it is necessary that the pupil should learn to make the mere wording of a rule secondary to the reasoning contained therein. In fact, I never encourage pupils in the learning of rules, but rather insist that they shall tell in their own words how and why they accomplish any desired process. I would rather that a scholar should be able only to demonstrate the first proposition of the first book of Euclid, with a thorough understanding of the same, than that he should be able to repeat six books as a parrot repeats the words taught him.

If the advanced rules are learned by children, it must be done in this parrot manner, without any understanding of the signification of the rules, and having them thus learned, there will be less desire to study out the reasons for them in later years, and the scholar will be too easily satisfied with superficially knowing *how*, without digging to the foundation and knowing *why*. If, however, he first enters the study with the idea of seeking for *reasons* and not for *rules*, he will by that very means acquire rules which depend not upon treacherous verbal memory, but rules which, even forgotten, can be reproduced with a slight effort of reason.

As to the means of carrying out good ideas, I quite agree with your previous correspondent; but may they never be applied to his proposed method of teaching the higher mathematics. No, no. Let the mathematics accomplish their designed purpose, for while it is important that the memory receive its fair share of training, it must be balanced by equally well developed reasoning powers.

I enter my steed, then, Sir, trusting not to the skilful handling of an experienced jockey, but to his own tried powers, feeling confident that he will prove himself a veritable "Iroquois."

Yours respectfully,

GEO. H. HUBBARD.

Sherbrooke, P.Q., July 9, 1881.