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### A Few Thoughts on our District School System.

*A paper read before the Provincial Association of Protestant Teachers at Bedford, on Thursday, Oct. 24th, 1878, by Rev. Edson Irving Rexford, B. A.*

I do not propose to enter into any elaborate discussion of this subject but I wish to bring before this Convention thoughts which must occur to every one who takes the trouble to examine into the common school system as it exists in many part of our Eastern Townships. By this means I desire to bring clearly before those of influence amongst us some of the great and unnecessary evils that exist in our common school system, and to show the easy manner in which some of them may be removed. I feel a pride in being able to claim the Eastern Townships as my home; I take a deep interest in all that concerns their moral, intellectual and material progress. As I look back over a period of

fifteen years to the time when I was a school boy in one of those typical red school houses with which these Townships are fairly supplied, I see that great changes have taken place. The country has made great progress in almost every direction; I have but to notice the great change in farming implements and house furniture to see what rapid progress the country has made. We see machines employed on every hand where none were to be found fifteen years ago; and machines then in use have been superseded by others more serviceable and less expensive. And if we take a look into our farm houses we find the same improvement Sewing machines, harmoniums and the latest style of churn are now numbered among the necessities of life. In fact if Rip Van Winkle, having slept his twenty years sleep on one of the beautiful hills of our Townships, should make his appearance among us to-day I am sure he would be more astonished at the changes that have taken place than he was when he descended from the Katskill Mountains. One familiar object, however, would now strike his attention, he would at once recognize an old friend in the red school house. The exterior is the same, and if he entered he would find the interior a little more dingy but the furniture is much the same stove with the legs spread out as though determined never to budge an inch, the water pail, the tin cup, the black board, the lump of chalk would all be familiar objects to the Rip Van Winkle of twenty years ago; and this is the apparatus with which the teachers of the Townships are expected to work to-day. Our farmers have been very active in the improvement of our agricultural implements. They have spent their time and money liberal in promoting the railway interest of the country, but they have yet to learn that the material prosperity of the country can best be promoted by a thorough and efficient common school system where their children can be thoroughly grounded in the elements of an English Education. Much might be said in this connection about the careless manner in which teachers are engaged,—about the little trouble that is taken to ascertain the qualifications of a teacher. A contrast might be drawn between the care that is taken to secure a well-qualified man to mould the farmer's

cheese in the factory and the indifference that is shown in engaging a teacher to mould the brains of an immortal soul in the school. But I pass on at once to consider some of the *unnecessary evils* in our present system. The first one that I will mention is *the great variety of text books in use in our common schools*; this is a difficulty which meets a teacher on the first day of her school work and which annoys her all through the term. The number of arithmetics, geographies, grammars and reading books that are placed in her hands on the first day of school would form a very respectable reference library on these different subjects, and in this library the teacher would have the benefit not only of the combined wisdom of Canadian authors, but that of our American cousins would be fairly represented. This great variety of text books is but the natural result of the present system in which the choice of books lies wholly with the parents. The parent decides that his child shall study arithmetic, reading and geography, he furnishes the text books from the nearest store, or they are castoff books of an older pupil, and when the first day of school arrives the child is sent to the teacher thus equipped. The books may happen to be like those of some other child, oftener they are quite different, and the child is thus constituted a class by himself. If the teacher protests the parent declares that the books are good enough for his child, and that he is not going to throw away money for new books.

Think now of the herculean task that lies before the teacher placed in such a position, a task that must baffle the powers of the most experienced organizer. I think that it will be admitted by all that the greatest difficulty that the district school teacher meets with in conducting her work is the variety of attainments that exist among her pupils, that in her small school of twenty-five pupils, she has primary classes, intermediate classes, senior classes and advanced classes; that in almost every subject she is obliged to divide her twenty-five pupils into four or five classes. This is what I would call one of the *necessary evils* of your district schools. It is no doubt a great inconvenience and will always mar the efficiency of those schools as compared with the graded schools of thickly populated districts. But when we remember that the four or five classes into which it is necessary to divide a school in a particular subject on account of a variety of attainment are generally broken up into seven or eight on account of variety of text books, we can see how great this evil is and how seriously it interferes with the efficiency and success of the schools. It paralyzes the teacher's efforts, it ties her hands, it magnifies the greatest difficulty she has to contend with by increasing her already too numerous classes. Class teaching is in in many instances turned into individual teaching, and the teacher not only finds it very difficult to overtake her work even during the long six hours, but she is unable to use the spirit of emulation and the sympathy of numbers which are very valuable in the instruction of the young. If parents saw that by placing a strange reading book in the hands of their child they were not only increasing the work of the teacher, but were also depriving their child of much of the teacher's attention that he would otherwise receive, I think there would be less trouble about variety in our text books. For it does seem to me that by the present arrangement children receive in many cases one half of the teacher's attention which they would receive if a uniform series was used in our schools. But again, this system brings into our schools inferior books, books that are quite behind the age, and as a rule these are more expensive than the improved text books which

can be furnished at a low rate on account of their large circulation. And this is a very important point in our ungraded schools, when the pupil has to spend more time with the book and less with the teacher. Again, it very often happens that the child comes to school bearing in his hand a text book which is entirely unsuited to his years and attainment, and yet the teacher is expected to keep up the interest of her children and to bring them on under all these difficulties—a task which I for one should be very sorry to undertake. It must be evident to all that his is not a necessary evil, that it would be easy to secure a uniform series if the proper machinery were set in order to direct the parent's choice. To whom then are we to look to remedy this evil? Can we expect that the parents themselves will bring this about? How are they going to agree? Each parent will naturally want to keep to the particular set that his children are using, and who among them is to decide upon the merits of the different books in actual use. And I do not think that the present attitude of parents towards educational matters gives us reason to hope that they are likely to meet together and decide in this matter. We cannot then look to parents for the reform needed; can we look to teachers? If they taught for any length of time in one place they might exert a powerful influence over the parents, and bring about a uniform use in their own schools. But when they change nearly every term, as at present, it is evident that they can do very little to settle the question. If they attempt to make any change they are at once accused of taking too much upon themselves and of putting the parents to needless expense, and the parents are confirmed in their opinion when the next teacher condemns the books recommended by her predecessor. It is to the Inspectors, I think, that we should look to take the lead in this reform. I am confident that if the Inspector of this District, for example, would enter heartily into this question, he could within two years secure a uniform series of text books for our schools and thus greatly enhance the efficiency of the school work.

The Inspector is looked upon by the people as a man of great experience, of good judgment, and of influence in educational matters, and any suggestion therefore that comes strongly recommended by him would have great influence. Let the Inspector choose from the authorized series a list of books which he considers best for the schools in his district. Let this be placed in the hands of school boards, teachers and pupils endorsed by the strong recommendation of the Inspector. Let the parents be called together at two or three points in each Township and there let the Inspector point out to the people the great advantages to be gained by having a uniform system, advantages to parent to pupil and teacher, and I am sure that when the matter is clearly laid before them by one in authority they will at once co-operate in bringing about a state of things that so materially benefits themselves. In passing I may state that I think these gatherings might prove useful in many ways. For I think we should consider it part of the Inspector's duty to cultivate a healthy public interest in school matters and thus lead the parents to do their duty. For it seems to me there are many duties which parents owe to their school and teacher which they do not recognize intuitively. They require plain and definite instruction upon many points in order that they may co-operate with the teacher in securing the efficiency of the school. This instruction they would gladly receive from the lips of our school Inspector. I appeal therefore to our Inspectors because they can carry out this reform better than any one else; I appeal to the

teachers to interest themselves in removing one of the most unpleasant features of their work. I appeal to the parents who are indifferent because they are thus depriving their children of a large part of the teacher's attention which they might otherwise enjoy.

The next point that I wish to refer to in our district school system is *the frequent change of teachers that prevails*. This is also an unnecessary evil that most sadly interferes with the success of any school system. In view of the small inducements that are held out to teachers we must expect few young people to adopt this as their life work; young men will use this profession as a stepping stone to something more lucrative, but by spending their fresh energies in this direction they confer as well as receive a benefit. Young women spend a few years in training the children of others, then leave this for the highest type of life, that of training one's own children. A certain amount of change, under the present custom of changing the teacher every term, is simply outrageous. I think you will agree with me that there is no more effective means of retarding the progress of the scholars than that of placing them in strange hands every three or four months. This custom arose I presume in the days of the "Hosier schoolmaster" when it required the muscular power of a man to control the brute force that manifested itself in the winter schools. A woman might teach the little ones in the summer school, but a man must be had for the boys in the winter; this state of things has now practically passed away; we have become more civilized. Throwing boys through the window is not now a necessary part of school work, and therefore young women are engaged for the winter term, or shall I say that young women have proved themselves better teachers than men and therefore they are engaged for both terms of the school year. But I think I am giving a true impression of the present state of things when I say that it is the general rule that the schools have a different teacher every term. For a teacher to continue two or three or four terms in a school is the exception and at once becomes the subject of remark; this is sufficient to ruin the efficiency of any school. But there are certain peculiarities in our district schools that make these frequent changes doubly injurious. The evil from these frequent changes arises from the fact that the new teacher cannot grasp at once the exact mental state of the different pupils. She cannot discover for some time just what the child knows, what work he has really mastered and what he can undertake next with the most profit. The new teacher has to take the child on trial at first and as she teaches him in the different subjects points come up continually which show his ignorance or knowledge until the child's real attainments are clearly before the teacher. While the teacher is getting fully acquainted with the child and the child is becoming fully accustomed to the peculiarities of the teacher, two, three or four weeks pass away during which both pupil and teacher have been working to great disadvantage. This difficulty would not be so great nor the delay so serious if the teacher had but one class in a single subject to examine. But when there are three or four different classes in each of the several subjects the difficulty becomes much greater and the delay that is caused by these frequent changes of teachers becomes a very serious matter in view of the short school year of eight months.

Another reason why it is difficult for a teacher to discover the exact standing of the pupils is *that each of the two terms into which the school year is divided is preceded by at least two months holidays*. The new teacher therefore does not receive the pupils with their minds

fresh from the instruction of their former teacher, but after they have rusticated for two months. If it be difficult to discover what a child knows at any time, it is ten times more difficult to discover the attainments of a child that has grown rusty during two months absence from school. This of course increases the evil of these frequent changes. *Again there are no records in connection with these schools* which the incoming teacher may consult to assist her in ascertaining the standing of the pupils in organizing her school. In most well ordered schools, written examinations are held once or twice a year in all the subjects, and the pupils are classified according to their standing; in this examinations form not only a test of the success of the teacher's efforts and of the pupils progress, but the registered results form a valuable book of reference particularly to a new teacher taking charge of a school. Now written examinations are entirely unknown in our district schools. The idea of closing up a term by a written examination in each subject to test the work of progress of each pupil during the term has yet to be introduced in Township elementary schools. The new teacher finds no record from which she can learn anything concerning the state of the school of which she is to be the mistress. From these various reasons it is evident that this frequent change of teachers tends in an especial manner to interfere with the success of the schools; but the remedy for this evil is not a difficult one. Let the Boards of Commissioners resolve that they will not engage a teacher for less than a year. Let them first recognize the importance of the question and then use their influence to keep the same teachers for as long a time as possible in the same schools. Let them indicate that they look with suspicion upon those teachers that move about from school to school. In their appointments let them show a preference for those teachers that have taught several terms in the same school. Let them make a slight difference in salary in favor of those who continue in the same school from term to term. If the regular salary be ten dollars per month, let the Board offer nine dollars for the first term, ten for the second and third and eleven for subsequent terms provided the teacher continues in the same school. If these simple means were faithfully adopted I feel confident that these changes would in a very short time be reduced to their minimum number. But parents and Boards of Commissioners must first be brought to a due appreciation of the loss which they and their children sustain in these frequent changes. Another remedy for the evil is regular written examinations, if these examinations were held at the close of each term and a permanent record made of the questions and the percentage of marks in each subject it would prove of very great value to the teacher in organizing the school. By comparing the percentage of marks taken by a pupil in any subject the teacher would have at once a correct index in that particular branch. The weak point and the strong points of each pupil would then be clearly brought before her mind at the outset of her work. *The present division of the school year into two terms separated by long intervals of vacation tends to perpetuate these frequent changes*. Those who divided the terms in this way seem to have thought that extremes of temperature were most favorable to mental activity. For the coldest days of winter and the warmest days of summer form the greater part of the school year, while the temperate weather of spring and autumn is set apart for vacation. If the two terms were brought nearer to one another and made to continue from October until June with slight interruptions it would tend to check these frequent changes of teachers and improve the efficiency

of the schools in every way. I believe that if these simple suggestions that I have made were faithfully acted upon they would reduce these changes to the minimum number and counteract in a great measure their evil results. I have referred to written examinations as one of these counteracting remedies, I desire now to point out the great value of written examinations as part of the regular school work. *I regard the absence of these examinations as one of the most serious defects of our district schools.* It seems to me there can be no two opinions about the value of written examinations as a means of education and training. "They not only afford a necessary text of the amount and thoroughness of the work done in a given time," says Dr. McLellan in his late address "they possess a high educative value. Oral examinations are not enough; there must be frequent written examinations if the best results are to be secured. Examinations represent the active use of the faculties as contrasted with that passive use which too often resolves itself into letting things come into one ear and go out at the other. Examinations excite emulation in the active and able; they touch the pride even of those who do not love knowledge much but still do not like to write themselves down absolute blockheads, and the examinations are themselves an exercise in English composition, in the control of thoughts and in the useful employment of knowledge. Examination is education. It is not merely that which goes into the eyes and ears of a student that educates him, it is that which comes out of him. No one knows himself master of a subject until he has reproduced it. In short, written examinations give a thorough mastery of the subject, prevent the student from sinking into an attitude of mere passive receptivity, educate to logical habits of thought and clearness and conciseness of expression." And yet our district schools know nothing of this means of training which the best educationists prize so highly and they would prove very valuable in the small classes of our country schools where the spirit of emulation is not very strong as fresh incentives to study. Apart from their educative value these examinations form a test of the amount and thoroughness of the work done in a given time. The importance of such a test in connection with these schools cannot be over-estimated. We often hear it said that teachers hold a most responsible position, yet it seems to me that teachers of these schools are the most irresponsible class of workers that can be found in the country. Their engagement in a great majority of cases consists merely of a verbal agreement, they are not usually engaged for any period recognized by law. They take charge of a school. No one knows anything of the state of the school or the attainment of the pupils; they carry on their work for four months without any regulations or standard of attainment to guide them; at the close of the term they quietly leave their work. There is no test of work done no test of progress, no taking of stock, no one knows whether the pupils have made fair progress or whether they are in the same position or a worse position than at the beginning of the term, and no one inquires. The teacher, may be, leaves the school never to return, another teacher takes the work at the beginning of the term, and no one inquires. The teacher, may be, leaves the school never to return, another teacher takes the work at the beginning of another term and works on in the same irresponsible manner. Is it not true then that the teachers in district schools hold most responsible positions and yet are practically responsible to no one for the manner in which they discharge their duties. Now a regular series of written examinations introduced at the

close of each term would form a general test of the amount and thoroughness of the work done and the most successful teachers would at once be manifested by the superior results of their work which these written examinations would bring out. In this way credit could be given according to results of teachers' work. And these periodical tests would prove beneficial to the most faithful and conscientious teachers. They require these little stimulating influences the year in and the year out. Such examinations would also furnish the means for comparing the efficiency of schools in different townships and different parts of the same township. The desire to have one's pupils pass a creditable examination as compared with other schools would prove a strong incentive to energetic work on the part of the teacher. And a wider field for competition would be brought before pupils. It may be thought that I have overstated this, case, as there are inspectors who look after the teachers' work. I submit, however, that the present mode of inspection has practically no effect upon the schools. The inspector visits a school for one or two hours during a term. He records his visit in the register kept for that purpose. But if you read between the lines you will find this statement:—"I left the school just I as found it without making any effort to improve it." I maintain that such a plan of inspection has no beneficial influence upon pupil or teacher. I have great faith in the office of School Inspector. I believe that it is by means of these officers that the present unsatisfactory state of our district schools can best be improved. But they must take a broader view of their responsibilities before they can do this. For I feel bound to say that after looking over the past ten years of the history of our district schools I can see no practical results of the present system of inspection. There are many other points in regard to these schools to which I would like to direct the attention of the Convention, but I feel that I have occupied too much of your valuable time already, not more time I am convinced than the subject demands, but more perhaps than I should have given it.

### Pedagogics Abroad.

AN EDUCATIONAL CHAPTER FROM TAINE'S NOTES ON ENGLAND. (I)

Harrow, Eton, Rugby, are among the principal establishments of secondary instruction in England, and correspond nearly to our large lyceums. There are at Eton about eight hundred boys, and five hundred in each of the others, from thirteen to eighteen years of age. But between these schools and our lyceums the difference is enormous, and no other comparison gives greater prominence to the contrast between the two nations. They tell me that I may take Harrow as an example.

This is an independent, private establishment, receiving no aid from the State, originally founded by a legacy, and, consequently provided with a landed estate and an hereditary revenue. Sometimes the revenue of such a property is very large. At Harrow it is small (£1,100). Large or small, it is administered by a body of trustees, who are renewed by election. Here there are six, great lords and proprietors of the neighborhood, who are empowered to make considerable changes, and to appoint the head-master. But the principal part of

(1) Translated from the French by James Harold Wickersham.

the machine is the staff of under-masters, each of whom undertakes a course—Greek, Latin, French, Mathematics, etc.—and, besides, lodges and feeds in his house from ten to thirty boarders. When there are only a dozen of them, he has them eat at his own table, with his family. Sometimes, when they are more numerous, they eat at two tables, presided over by the ladies of the house. Usually, there are two in a room. The largest have a room to themselves. Thus, the child, transplanted into the school, finds there a likeness to the paternal mansion—the more so, because families are so large in England. He has his room; he dines three paces from a lady; he lives in a natural social position, and is not, as among us, subjected to the communism of a barracks.

Another difference: Among us a lyceum is a large box of stone, into which one enters through a single opening, provided with an iron gate and a porter. In the interior are some courts resembling yards, sometimes a wretched row of trees to compensate for plenty of walls. As this stone structure is always in a great city, the young man who passes without the grating does not find beyond any more than within it anything but stone and brick. Here the school is in a little town, with a hundred free openings into the country.

At Eton, around the old central court, I saw roses, ivy, honey-suckle climbing everywhere along the buildings; beyond are rich meadows, wherein huge elms spread their venerable branches; close to them is a green and shining river; on the water are swans; upon the islands cattle ruminates; the current winds and disappears towards the horizon amidst the foliage.

At Harrow the landscape is less pleasing, but verdure and the open air are not wanting. A meadow of ten or twelve acres belongs to the school, and is used for the play-ground. I met little boys in black jackets, the big ones in black coats—all crowned with a small straw hat, not only in the town, but out of the town, along the hedge-rows, on the banks of the pond, their muddy boots showing that they are always on the roads or in the wet meadows. Thus, while among us the season of youth is spent under a bell-glass, through which penetrates the moral and physical atmosphere of a capital, among them it is spent in the open air, without imprisonment of any sort, in the constant companionship of fields, of waters, and of woods. Now, it is a great point for the body, the imagination, the mind, and the character to be developed in a position healthy, calm, and conformed to the mute exigencies of their instincts.

On the whole, human nature is here allowed freer play and is less affected by this education than with us; the children resemble the trees of an English garden; while ours might be compared to the clipped and leveled yews of Versailles. For instance, here, the children are almost as free as students; they are compelled to attend classes, lessons, dinner, and to be at the appointed hour in the evening, nothing more; the remainder of the day belongs to them, to employ it for themselves as they may desire. The only charge weighing upon them during these hours of freedom is the obligation to perform the prescribed task; but they may do it where they please and when they please; they work in their rooms or elsewhere. I have seen some studying with the librarian, others reading seated on the balustrade. They follow their taste, wander where they wish. They are to be seen on the streets, at the pastrycook's, in the cookshop; they scour the country, fish, skate, swim, go birds'nesting. They are masters of their time and of their money also, give themselves treats and purchase ornaments for their

rooms. It appears that if they get into debt their little private furniture is sold to the highest bidder. They have the privilege and the responsibility; it is curious to see youths of twelve elevated to the dignity of men.

Eight hours work daily is the maximum, most frequently six or seven; with us eleven, which is unreasonable. The young have need of physical movement; it is against nature to oblige them to be pure brain, sedentary cripples. Here athletic games—tennis, football, races, boating, and above all, cricket, occupy a portion of every day; in addition, two or three times a week, the classes are suspended in the afternoon in order to give place to them. Self-love is mixed up with this, each school endeavors to surpass its rival, and sends to the trial of strength, oarsmen and players carefully trained and chosen. Harrow beat Eton last year, and hopes to win this year also. To-day, eleven of the oldest and best players uphold the reputation of the school against eleven players from London; two flag-bearers, flag in hand, mark the bounds, hundreds of youths line the sides, at a distance, and applaud fortunate strokes. The affair is serious; their opponents belong to a celebrated cricketing club, all being admirably skilled, strong, and cool; the youths have a right to be passionately fond of an exercise which grown up men make the principal object of their life.

Indeed, there are gentlemen in this country whose ambition and course of living are those of a Grecian athlete; they subject themselves to a particular diet, abstaining from all excess at table and in drinking; they develop their muscle, and submit themselves to a wise system of training. When prepared, they enter the lists, and compete for the prizes in boating or cricket at all the great competitions in England, even far off in America. I was informed of a cricketing eleven who went to Australia with this design, just as in other days the athletes of Pontus and Marseilles went to Olympus. It is not at all surprising if the youth become enthusiastic for games so much in repute. The head of the eleven cricketers, the captain of the oarsmen, is a more important personage in the school than the best scholar.

These already constitute the germs of association, an apprenticeship in commanding and obeying, since each crowd which plays cricket submits to discipline and selects a head. But the principle is still more widely applicable. Youths and young men form together an organised body, a kind of a minor state apart, having its chiefs and its laws. These chiefs are the boys of the sixth form, more particularly the fifteen monitors, and in each boarding-house the first pupil. They keep order, enforce the rules, and, in general, hold the place of our ushers. They hinder the strong from bullying the weak, are arbitrators in disputes, intervene when a boy has got into a scrape with a villager or a shop-keeper, punishing the delinquents. In short, here the pupils are governed by pupils, each, one, after having submitted to authority, exercises it in turn. During the last year he is enlisted on the side of the regulations; he makes them to prevail; he feels their utility; he adopts them with all his heart, instead of kicking against them, as a French school-boy does not hesitate to do. Hence, when he leaves school, and enters life, he is less disposed to consider rules as absurd and authority ridiculous; he understands freedom and subordination; he has more nearly comprehended the conditions of a society, the rights and the duties of a citizen.

Besides this general preparation, there is a special one. The bigger boys form debating societies amongst themselves, where they discuss moral and political

topics. The head-master is only honorary president. After the young speakers have addressed the meeting, the vote is taken, the arguments and the debate are summarized in a report; it is a small parliament. In addition, three of the oldest edit a review, *The Triumvirate*. Their aim "is to arouse in their comrades extended ideas of patriotism, and to interest them in the affairs of the country." They belong to the conservative opposition, argue about the French alliance, about the elections, about the right of voting. There are some common-place things in it, and some gush; but good sense is not absent. For example, with regard to the right of representation, which they wish to extend up to a certain limit only, they appeal to their reader's experience. During the holidays in the country he has seen that the villagers, the shop-keepers of the proposed class, are sufficiently educated to vote rightly. Thus, the argument is practical, drawn from facts, and not from a pompous theory. I have just read a number of this review. Certainly, our students of rhetoric produce by no means anything approaching the same degree of culture and political information.

Add still another trait: All, or nearly all, are religious; they would be shocked at an irreverent word; they sing earnestly in the chapel. Since Arnold's time, the aim of education has been to produce Christian gentlemen; most of them are professedly religious, take the sacrament, and pray nightly of their own accord. Thus, when they enter the world, they are the upholders, and not the adversaries, of the great ecclesiastical establishment of the national religion.

On all hands, I arrive at the same conclusion: There is not in England any great separation between the life of the child and that of the full-grown man; the school and society are on an equal footing, with no intermediate moat or wall; the one leads to and prepares for the other. The adult does not, as among us, leave the compartments of a hot-house, an exceptional regime, a special atmosphere. He is not troubled, taken out of his element by the change of air. Evidently, to my eyes at least, they are greater children and more manly; greater children, that is to say, more addicted to play and less inclined to pass the limits of their years; more manly, that is to say, more independent, more capable of governing themselves and of acting independently. The French school boy, above all the inmates of our colleges, is wearied, embittered, rendered acute, precocious; he is caged up, and his imagination ferments. In all these respects, and in what relates to the formation of character, English education is superior; it better prepares for the world, and forms healthier minds.

The author of "Tom Brown's School Days" says, When I formed the project of writing this book, I endeavored to represent to myself the most common type of a little English boy of the upper middle class, such as I had witnessed in my experience, and I faithfully maintained this type from the beginning to the end of my story, while merely striving to give a good specimen of the species." The book thus conceived had an enormous success. Youths and adults all recognize themselves in the picture, and we can make use of it in admitting with the author that the portrait, if not flattered, is at least kindly.

Neither Tom nor his father cared much for education, properly so called. His father asks himself, "Shall I tell him to mind his work, and say he's sent to school to make himself a good scholar? Well, but he isn't sent to school for that—at any rate, not for that mainly. I don't care a straw for Greek particles, or the digamma, no more does his mother. What is he sent to school

for? Well, partly because he wanted to go. If he'll only turn out a brave, helpful, truth-telling Englishman, and a gentleman, and a Christian, that's all I want." And when Tom, several years afterwards, asks himself what he came to school for, he replies: "I want to be an A. 1. at cricket and football, and all other games, and to make my hands keep my head against any fellow, lout, or gentleman..... I want to carry away just as much Latin and Greek, as will take me through Oxford respectably..... I want to leave behind me the name of a fellow who never bullied a little boy or turned his back on a big one." Remarkable works, and which well sum up the ordinary sentiments of an English father and child; science and mental culture occupy the last place; character, heart, courage, strength, and bodily skill are in the first rank. Such an education makes moral and physical wrestlers, with all the advantages, but also with all the drawbacks, attached to this direction of mind and body.

Along with other unpleasant effects the rude instincts are developed. An Eton master says that "play comes first and books afterwards." The child places his glory, like Tom Brown, in being a good athlete; he spends three, four, five hours daily in rough and violent exercises. At hare and hounds, a boy flounders for hours in plowed fields and in muddy meadows, he falls in the mud, he loses his shoes, he picks himself up as well as possible. At foot-ball the sides precipitate themselves upon each other; the boy underneath bears the weight of an entire mass, arms and legs are dislocated, collar-bones broken. Nearly all the games habitually yield bruises; pride is taken in not minding them; and by a natural consequence, there is no more hesitation in inflicting than in submitting to them. The child becomes a fighter, a boxer. The author of "Tom Brown" says, "To fight with fists is the natural and English way for English boys to settle their quarrels." All the men I have met did so at school, and this is still common.

Unfortunately the school arrangements operate in the same direction; in addition to imposition, the being kept from play and confinement, the birch is used. In certain schools, it is enough for a boy to appear three times on the "black list," for him to have to prepare for a flogging. This morning four were flogged at Harrow. In all the schools it is the head-master to whom this amiable office appertains. There is hardly a head-master in France who would accept, at such a price, a salary of £6,000. In principle, the flogging is for all, even the larger boys; yet scarcely any but the younger and smaller boys are subjected to it; a strange thing is that it is not unpopular. Fifty years ago at the Charter House the boys, hearing that it was proposed to substitute a fine for it, rebelled, crying, "Down with fines! hurrah for the birch!" and on the morrow they renewed acquaintance with the beloved birch. The teachers with whom I have conversed consider that this chastisement is not humiliating, and that it develops special courage in the child. According to them the strokes are a natural form of repression. It is enough that opinion does not regard them as humiliating, and that the sufferer does not feel himself insulted. Under the head-masters, the big boys entrusted with maintaining discipline have the right to inflict the same punishment. For this purpose they carry a cane in certain schools, and use it.

Here it is necessary to refer to a shocking institution—"fagging," or the obligation of the little boys to be the servants of the bigger ones. The practice has been modified, softened, at Harrow, at Rugby, and in some other establishments; but in itself it always continues

bad; for it is a school of brutality, and pushes the English child towards the side to which he inclines, towards all the excesses which the energetic, violent tyrannical, and hard temperament admits of. A lady whom we know, and who is in truth of foreign extraction, could not bring herself to subject her son to flogging, and has put him in a Paris lyceum.

According to official inquiries, the small boys are valets and slaves. Each big boy has several, who are bound to run errands for him, to sweep for him, to clean his candlesticks, to toast his bread and cheese, to call him at the appointed time, to help him at his games, frequently during two or three hours daily, to run after his balls and return them to him, to be at his orders during all the time he is awake, to endure his caprices.

In order to maintain such an exact and minute obedience, the big boys use terror. "Boxes on the ears, kicks, are mere common pranks of theirs, these not counting among the numerous punishments.....In the first degree the real punishments are systematic boxes on the ears; the offender must keep his hands at his sides and hold his head forward to receive a dozen slaps, applied right and left." On other occasions he places the palm of his hand on the table, the back of his hand is then beaten with the blade of a paper-knife till sometimes a gash is made. Caning comes next, then two kinds of tanning, etc. Tom Brown was tossed in a blanket, and thrown upward with such force that he struck the ceiling. One day having refused to sell his lottery-tickets to the big boys, he was seized hold of, held up before the blazing fire, and literally roasted till he was ready to faint. This actually occurred, the romance being but the reproduction of an authentic fact. Besides, in the lives of Cowper, Lord Byron, Sir Robert Peel, other cases equally revolting are to be found.

Doubtless, the instances just cited are the darkest, and, as the English are persevering in matters of reform, the picture is becoming brighter. Yet, even supposing the reform completed, the impression continues unpleasant; for, on the whole, a school conducted in this style is a sort of primitive society, where force reigns almost uncontrolled, all the more so because it is considered a point of honor among the oppressed not to denounce their oppressors. The master interferes as little as possible. He is not, as among us, the perpetual representative of humanity and justice; very seldom and in very few schools is an appeal made to him or to the governing body. The weak are left to themselves; they have but to suffer and be patient. Now, what a temptation is it for a vigorous youth to possess the power and the right to flog! It is not a good thing to give free rein to the instinct of domination and of brutality. The use always leads to the abuse; an incentive to what is unreasonable is given by the irrationality which is practised, to blows by blows which are given; a man ought never to be allowed the opportunity for becoming a despot and an executioner. On the whole, education thus understood is not destitute of resemblance to that of the Lacedemonians; they hardened the body and tempered the character, but, as well as I can conjecture, they often ended by producing hunters and louts.

Naturally, the cultivation of the mind must suffer from such a training. Mr. Farrar writes: "When seeing young men ready to sacrifice everything to cricket, when seeing them devote to it a number of hours and an enthusiasm out of all proportion to that which they give to their work, when seeing that their mind is so continually taken up with it that they speak,

think, and dream of nothing but cricket, it is not surprising to find many persons attributing to this affectation of muscularity the miserable poverty of the intellectual results which we obtain."

The teaching is not what is necessary for counterbalancing these gross tastes; there is nothing attractive about it; it can hardly be considered by the young as other than a task; it is very slightly literary and altogether technical. The chief aim is to know Greek and Latin well, to write correctly in verse and prose in these two languages; in fact, by means of memory and exercises, the smartest succeed in doing so. But on other points I consider them inferior. Their Latin, prose and verse, is less elegant and less pure than that of our good compositions written by the classes in rhetoric. They do not seem to know true history; they recount the legends of Curtius and of Regulus as being true. They speak of Chivalry and the Middle Ages in vague generalities, as was done in our old University. They do not appear to feel the differences of manners, of sentiments, of ideas, of characters, which is the result of centuries. They do not seem to have read, like our scholars, the works of a true historian, of a Thierry, of a Michelet, or of a Guizot. In general, they have few ideas; if one excepts questions relating to existing and practical contemporary politics, a student of rhetoric in a Parisian lyceum is more proficient.

They have read many classical texts; but the explanation which is given to them is wholly grammatical and positive. Nothing is done to set forth the beauty of the passage, the delicacies of the style, the pathos of the situation; nor is the process of the writer indicated, the character of his talents, the turn of his mind; all that is left vague. The master does not speak to the pupils as a critic to persons of taste; he does not comment upon the great writers of their country; he does not try to refine their literary taste. It is the same in mathematics; he teaches forms rather than the spirit; the manual of geometry is always the text of Euclid, learned and recited by heart; reason and reasoning have only a secondary place. "Too frequently this teaching tends to form Greek scholars and calculators."

On the contrary, the French youth who is nineteen, possesses, if he is intelligent, and has been industrious, general instruction, a quantity of ideas blocked out, some half-shaped ideas of his own, a decided preference for certain authors and a certain form of style, the embryos of theories, vague views about the beautiful, about history, about philosophy; at least the sentiment that there are vast questions of first importance on which he requires to form an opinion, a requirement all the more pressing because around him skepticism floats in the air, because, most frequently, he has lost his religious beliefs, because no prevailing doctrine, imposed or accepted, is at hand to arrest his fluctuating mind, and because, if he desires to cast anchor in a port, he is obliged to seek for the port and forge the anchor.

Here many distinguished Englishmen, whom I have known, consider their school, and even their university education, as a simple preparation in mental gymnastics, a training of the intention and of the memory—nothing more. They said to me, "Setting out from that, we have been obliged to undo, or rather to form, our education; to acquire by personal reading, all what we have succeeded in learning about philosophy, about history, about political economy, about the natural sciences, about art, about literature." A remedy is being found for this defect; the circle is now being enlarged; but

it is still narrow, always having Euclid and Sapphic verse as its centre. In consequence, the mind maturing at a later period is left to form for itself its more comprehensive views.

In matters of detail and expense, there is also a marked difference between the two countries. The average outlay for keeping a boy at Harrow is £200 yearly. How many fathers among us would be able to expend £200 yearly on their son's education? In France, a functionary, a man attached to one of the professions called liberal, makes most frequently £120 at thirty years of age, and £200 at fifty, and, commonly, he has, in addition, the interest on a very small capital. But then, as compensation, to keep his son at college costs him only £40, £20 at a minor seminary, and the bursaries given by the State are numerous. It may be calculated, I think, that a classical education costs five times as much in England as in France. The English admit that one of their national vices is the habit of lavish expenditure. As regards primary instruction, the aid given by Parliament reaches only 8,500 schools; the same grant would maintain 25,000 in France. It would entirely educate 1,500,000 French children, in place of 950,000 English. Mr. Arnold estimates that the expense of maintaining and administering the French schools, in proportion, is one-fourth of that of the English schools. At Oxford, and in the universities in general, B—tells me that on the average an undergraduate spends £300 a year. However, £200 yearly is sufficient. Some, by means of economy, live on £100. The author of "Tom Brown at Oxford" mentions that a very poor student pulls through on £75, but only because he is lodged gratis, and on condition of being despised. Among us a student of medicine or law, who should have £75, and his lodgings found [him, would consider himself well off. Many of them have no more than £60, and the richest never thinks of despising his poor comrade.

**A paper read before the Protestant Provincial Association, October 25th 1878 by Henry A. C. Fuchs.**

Having been requested to lay before this meeting the question anent the usefulness of Greek, Latin or German in our schools I beg to submit the following points:

The Teutonic languages, i. e. High and Low German, Scandinavian, Danish, &c., are in every principle identical with Greek and Latin, being *one* of the train languages come to us from the East. It is absolutely true that no study will develop the mind and increase its reasoning powers as much as these tongues do. But there has this difference to be drawn: that while Greek, classic Greek, is an absolutely dead language, the German is a living tongue, having its syntax, its very beauty identical with the Greek, while at the same time it is spoken by millions of people, by a nation, I am proud to say, that stands inferior to none in science or knowledge. It is an acknowledged fact that Greek is only used in our schools and Universities for the purpose of training the mind to logical reasoning: why then reject a language that has the same advantages in every respect and whose only fault is that it is a "living" tongue, while at the same time it will be of immense benefit to the student in practical life? Men like Goethe, Schiller, Buerger, Uhland and a host of others have not written in vain, else why would a practical nation like the English have their writings translated into their own tongue? You will find as

correct distichs in Goethe's and Schiller's writings as ever Homer composed. The German language is very rich in words, having—if I mistake not—some thousands of words more than Greek or Latin. It has therefore the great advantage of giving a superior shading to any sentence uttered. Not for one moment do I wish to be understood to speak disparagingly of a language whose great excellence is known all over the world, which in fact *has* civilized the ancient world; but pray, after studying Greek for 6 or 8 years as many of us had the pleasure of doing—pray what ultimate benefit derives the scholar from it? In this century of ours most, or rather all things are measured by their value in dollars and cents, and of what earthly use is Greek to a student in after-life, except he wishes to become a minister of the Gospel or a pedagogue? The entire Iliad and Odyssey have been translated into German from the original and in such a thorough style that every little detail is most faithfully reproduced. I said, the German tongue has the same syntax as the Greek, and any student of philology will acknowledge the similarity, for instance, of the articles  $\delta$ ,  $\eta$ ,  $\tau\acute{o}$  and *dar* (*der*) *dir*, pronounced (*dee*) *dirs*, pronounced (*daas*); as in Greek the Gen. and Dat. Singl. of the masculine and neuter are alike, so are in German the same two cases in the same two genders identical. Both languages decline and conjugate in the same manner; their syntax as a whole is astonishingly similar, their intricacies and subtleties fairly vying with each other, as I am quite sure any student of both tongues will be ready to admit. All these points being even, the usefulness of both as cultivators of the mind being acknowledged, it remains for me now to refer to the *practical* utility of Greek and German to the majority of students in after-life. Every one knows that it is utterly impossible to remain stationary in art, in science, in life: in short in anything mundane; one must either progress or retrograde; science is progressing with giant strides: philosophy, astronomy, chemistry and all the rest of those darling "ies" are actually running a race, neck to neck, which of them shall gain the greatest influence over human affairs, which of them shall make the most startling discoveries and which of them shall come nearest to that impossible goal: perfection. To judge then of the usefulness of German let us look at the book-market of the world, Leipzig, and from the reports published we learn that by far the greatest amount of scientific works are published in German, while the English publications refer—mostly to commercial life. Science, art and higher literature, especially history are now-a-days expected especially from the German press, and the world acknowledges that it is not disappointed. Why then leave those treasures of power—for knowledge *is* power—locked up from our youths, why train their minds and devote the best years of their lives to the acquirement of a language whose beauty no one can deny, but whose usefulness, compared to German, is, I say, below the standard the world requires, when by studying German instead of Greek the pupil receives the same mental training while at the same time the portals of practical knowledge and living science are thrown open to him and he thus is furnished with the first link of the chain that leads to success in life: practical usefulness?

I have so far only referred to the Greek tongue, but now beg to say a few words about the usefulness of Latin as compared to German. It is my opinion that Latin although a dead language—pardon the paradox—is still living and will forever live, as long as the world

is blessed with Lawyers, Doctors and Chemists, for it has grown to be an international language by which gentlemen rule the world and, astonishingly often, our pockets. Its absolute usefulness in practical life can therefore hardly be disputed, and it remains for me only to compare it to German. Here again we find a wonderful similarity in declension, conjugation and syntax; for instance, both tongues require the most important word at the close of a sentence. It would detain you too long to enumerate more instances, but allow me to assure you that any one having studied either of these languages first, will acquire the other in less than half the time that would be required by a person who has learned neither of them. The usefulness of Latin while going hand in hand with German is still more apparent if we but look at the map of Europe: Spanish, French, Italian, Portuguese, the grand children of Latin, while Danish, Hollandish, Low-german or Dutch, Scandinavian are the offspring of German. By teaching then to rising generations those two fundamental tongues we at the same time give them the keys to all the leading languages of Europe. Now that English is fast becoming the cosmopolitan commercial tongue of the world why should English children be deprived of acquiring one of the elementary languages—German—and thus be kept from intellectual as well as (to some extent) commercial intercourse with the nearest neighbors, France excepted, that England has been? And again—leaving the lost ten tribes out of the question—are not the English and German nations interwoven by the closest ties of blood and friendship?

Having shown the equality of "training power" in Greek and German, the superiority of German over Greek as regards usefulness, I venture to express the hope that at no distant day German will supersede Greek in our schools, and thus, in union with Latin lead on the future generation to wisdom, knowledge, practical usefulness and success.

HENRY A. C. FLCHS.

24th of October 1878.

### Michel de Montaigne on the Schools of the Sixteenth Century.

It may be interesting to many of our readers to read again, what Montaigne wrote 300 years ago about the education of his time: it will afford them a measure to determine the wonderful progress we have made. He writes:

"Considering our modes of instruction, it is no wonder, that neither teachers nor pupils are fitted for life, although they gain much learning. For, indeed, all the care and all the out-lay of our parents are only to fill our heads with knowledge; nothing is thought of furnishing us with judgment and wisdom. Call out on the street,—'see the learned man'; and about some other one,—'see the excellent man'.—and the people will not turn their eyes a moment away from the first. We ought to ask who is best learned and not who is most learned. We work only to fill the memory, and we leave the judgment and the heart empty. We can say: 'These are Cicero's words', 'Plato has done this,' 'Aristotle has said that'; but what do we say? What is our opinion? What do we do? The parrot can do the former, as well as we.—What does it avail us to fill the stomach with meat, if we do not digest it, if it does not become assimilated, so as to nourish and strengthen us? We rely too much on the arms of others, and leave the strength of our own undeveloped. If I

would arm myself against fear of death, I apply to Seneca; if I need consolation for myself, or another, I get it from Cicero. I could have found it in myself, if I had practised looking for it there. I have no patience with this beggarly semi-existence; for even if we could become prudent through the prudence of others, we can be wise only through our own wisdom."

"I have always wondered that a soul, enriched with a knowledge of many things, does not, thereby, become more active. He who would absorb so many great, strong brains of others, said a young lady to me, must necessarily compress his own brain, in order to make room for the others." ..... But this is not wholly the case. Our soul expands in the proportion in which it is filled; and antiquity proves to us, on the contrary, that men fit to administer public affairs, that great generals and great counselors in matters of state, were, at the same time, very learned.

"The fault of our education lies then, not in absorbing too much,—it lies in overestimating the intellectual and neglecting the ethical, in the stress laid on memorizing and in the slighting of the useful. Look at our learned men. They know the theory of everything, but fail to apply it. But what is science without understanding? If our soul is not improved through study, if our judgment does not gain by it, the pupil would do better to spend his time playing ball; for then, at least his body would gain strength. See him return after so many years from the university: Who is less fit for the business of life, than he? What he shows most prominently, is, that Latin and Greek have made him more foolish than he was when he left home. He should return with a full, well-nourished soul, but he has only blown it up."

In another place he says: "In teaching they din incessantly into the ears of the pupils, as if they were pouring into a funnel; and nothing is left for the pupils to do, but to say again what has been said to them."—"The teacher must demand of his pupil an account, not only of the lesson, but also of its meaning. He must look for the benefit which the pupil has derived from the lesson, not in the memory, but in the life of the pupil. Whatever he has learned, he must view under a thousand different aspects, and apply it in a variety of ways, in order to show whether he has understood it properly, and made it his own. It is a sign of indigestion, if the stomach returns the food in the condition in which it was taken in. The stomach has not done its work, if it has not changed in matter and form, whatever has been given it to digest."—"Who ever asks his pupil what he thinks of rhetoric, of grammar, of this or that saying of Cicero? These things are crammed into our memories as oracles whose essence is only letters and syllables. But knowing by heart is not knowledge; it is only retaining what has been given the memory to keep. What we know fully, we control fully, without reference to authorities, without first looking into a book."—Concerning discipline he says, "Away with violence and compulsion! Nothing debases and stultifies more effectually. If you would have a pupil fear disgrace and punishment, do not harden him against them."—"The schools of our times are in fact dungeons for the imprisonment of the young. The pupils are made lazy and negligent, because they are punished for laziness and negligence before they are guilty of them."—(*Kindergarten Messenger and The New Education.*)

### The Faculty of Applied Science in McGill University.

The donations announced to-day to the funds of the above Faculty, in answer to an appeal on behalf of the University, though not large in amount in comparison with those given to some other objects, are connected with one of the most important educational efforts carried on in this country. The establishment of a School of Engineering and allied professional subjects in connection with the University, was advocated by Principal Dawson in his inaugural address in 1855; and in 1857 a beginning was made by the appointment of a Professor of Engineering. After a few years the effort had to be suspended for a time; but was resumed in 1872 as a Department of Applied Science in the Faculty of Arts, and was extended so as to embrace, not merely civil engineering, but mining, assaying and practical chemistry. In the present year it has farther advanced to the rank of a separate Faculty, with four professors and lecturers of its own, and with aid from the professors in science and modern languages in the Faculty of Arts. In the present session this new Faculty has 24 regular students, besides several taking partial courses; and at the rate of its increase in recent years, may be expected next session to have between thirty of forty students. Embracing as it does the preliminary education necessary for surveyors, civil engineers, mechanical engineers, mining engineers, and practical chemists, as well as a most valuable training for general business pursuits, it is to be supposed that ere long it will vie with the older professional faculties of law and medicine in the number of its students. It is not, however, without rivals, for since McGill took the initiative in this matter, schools of practical science have sprung up both in Ontario and the Maritime Provinces. Still, the central position of Montreal, the circumstance that it was first in the field, and the facilities which it affords for practical experience and for obtaining employment for graduates, must secure to it a large proportion of the young men desirous of this kind of training.

The subscriptions and donations of the present year are intended to promote the efficiency of the school for a time, until permanent endowments can be secured for it; and in the University lists will be found the names of donors to this permanent fund, to the amount of \$8,000. A lady of Montreal has also contributed a magnificent collection of mining models—the best, it is believed, in the Dominion.

The University has in this, as in other parts of its work, begun with the essentials of education, trusting that with professors and students would come the necessary external appliances. Its Faculty of Applied Science has thus, as yet, no building of its own, but occupies such space as can be allowed to it in the already somewhat crowded building of the Faculty of Arts. Plans have been prepared for a separate building which would form an imposing object on the College grounds, and would afford the means of better and more efficiently carrying on the work of the Faculty, but these must wait for their execution till additional means can be obtained. The object is, however, one that invites the attention of those who may be able to give aid to educational enterprises. Montreal should endeavour to retain its pre-eminence as a great centre of professional education, as well as to take a large share in the scientific training of men fitted to advance the industries of the country and to take the lead in the development of the resources of Great West.—*Montreal Gazette.*

### McGill University.

The Board of Governors of the University begs to acknowledge, with thanks, the following contributions to the maintenance of the "Faculty of Applied Science":

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—*Montreal Gazette.*

### McGill University.

THE CONVOCATION—CONFERRING DEGREES—PRIZEMEN—VALEDICTORIES—SWEET GIRL GRADUATES.

31 March.

Convocation is a long-looked-for day by many *alumni*, who are about to sever time-honored ties and bid good-bye to their *Alma Mater*, who, having with maternal vigilance presided at their studies, and taught them as much as she knows (and mothers know a good deal now-a-day, although it is only this, or rather the next, generation of *matres* which will reap the benefit of "higher education for women" so loudly called for in this progressive age), sends them forth to cure or kill, or to get fat upon the oyster, whilst the shell remains to those who have not been tutored by her. As a rev. lecturer said the other day in a lecture on "Thomas D'Arcy McGee," men owe a great deal to the education they receive from their mother, and when their mother is such a one as Domina McGill, who has ever been successful in getting the assistance of Montreal's eminent lawyers and doctors, they may proudly go forth and boast of having been educated at her hands.

Long before the time fixed for the ceremony, the Wm. Molson Hall is crowded to suffocation with students, "their sisters, their cousins and their aunts;" the irrepressible "medicos," whom every one has heard or heard of, are forming a small crowd in one corner, and are acting as orchestra previous to the rising of the curtain, if the expression may be used on so solemn an occasion; "Alouette" is chorussed, and due homage is rendered to beauties entering the hall, for the "medico" is a judge, *par excellence*, of female perfection; the "theologs" are grave in demeanor, as becomes them, whilst our future judges look profound and solemn. The prizemen are loudly applauded, and the deliverers of the valedictory meet with joyous approval and much laughter. Mr. Fleet, who delivers the valedictory on behalf of the disciples of Themis, asks the pertinent question, "Where are the lecture room and library of the Law Faculty?" This hit tells. His discourse is an excellent one, and to parody his closing

sentence, we can say, "*Il a gagné sa cause car il a bien parlé.*" The following paragraph deserves the *imprimatur* :—

"If rumour tells true, those who are after us, are to enjoy privileges that have not fallen to our lot, since it is whispered that ere many convocations pass, the sweet girl graduate may claim her degree. In short, that more than ever, the ladies are determined to take the law into their own hands. If this be so, I bear this message to you from the undergraduates; they will receive you with open arms."

The proceedings are opened with prayer by Archdeacon Leach.

On the platform are Hon. Chas. Day, Chancellor of the University; Professor Dawson, Vice-Chancellor; Messrs. W. H. Kerr, Q. C., E. Carter, Q. C., J. S. C. Wurtele, Q. C., J. Archibald, Doctors Scott, Craik, Roddick, Girdwood, Fenwick, Osler, Reddy, Nichol, B. C. L., Rev. Jas. Roy, M. A. and Professors P. J. Darey, Markgraf and many others.

Dr. Scott reads the Prize and Honour list for the Faculty of Medicine, and the degrees are conferred by the Vice-Chancellor, assisted by Dr. Osler.

#### FACULTY OF MEDICINE.

The total number of students enregistered in this faculty during the past year was 160, of whom there were from: Ontario, 87; Quebec, 53; Nova Scotia, 3; New Brunswick, 7; P. E. Island, 3; Newfoundland, 1; United States, 14.

The following gentlemen, 40 in number, have passed their primary examinations on the following subjects:—Anatomy, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine and Botany and Zoology. Their names and residence are as follows:—N. Ayer, Woodstock, N. B.; T. I. Browne, Ottawa, O.; Charles N. Beer, Charlottetown, P. E. I.; P. Cameron, Williamstown, O.; F. W. Church, Aylmer, Q.; J. Cahalan, Wyandotte, Mich.; D. K. Cowley, Ottawa, O.; G. O. Dibbles, St. Stephens, N. B.; J. S. Edwards, London, O.; E. C. Fields, Prescott, O.; H. D. Fraser, Pembroke, O.; L. W. Gray, Pembroke, O.; H. E. Heyd, Brantford, O.; H. A. Higginson, L'Original, O.; A. Henderson, Montreal, Q.; G. E. Joseph, Pembroke, O.; E. J. Laurin, Montreal, Q. W. A. Lang, St. Marys, O.; R. L. Maas, Negaunee, Mich.; L. D. Mignault, B. A. M. C. McDonald, Montreal, Q.; J. A. McDonald, Panmure, P. E. I.; R. T. McDonald, Montreal, Q.; K. Mackenzie, Melbourne, Q.; B. E. Mackenzie, B. A. Aurora, O.; D. C. McDaren, B. A. Montréal, Q.; E. A. McGannon, Prescott, O.; T. A. O'Calagan, B. A. Worcester, Mass.; A. F. Pringle, Cornwall, O.; F. W. Fulford, Detroit, Mich.; G. T. Ross, Montréal, Q.; J. W. Ross, Winthrop, O.; A. M. Rutten, Napanee, O.; B. L. Ricordan, Port Hope, O.; E. J. Rogers, Peterboro, O.; J. Stewart, Ste Anicet, Q.; F. W. Serviss, Iroquois, O.; E. H. Smith, Montréal, Q.; W. H. Snow, Dundas, O.; R. B. Structhers, Phillipsburg, O.

W. C. Perks, of Port Hope, has passed the written, but owing to illness was unable to present himself for the oral examination.

The following gentlemen, 37 in number, have fulfilled all the requirements to entitle them to the degree of M. D., C. M., from this University. These exercises consist in examinations, both written and oral, on the following subjects:—Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence and Hygiene,—and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the hospital:—

I. L. Brown, Chesterfield, O.; Henry J. Burwash, St. Andrews, Q.; Billa F. Butler, Stirling, O.; Philip E. E. Carman, Iroquois, O.; John B. Carman, Iroquois, O.; Murdoch Chisolm, Loch Lomond, N. S.; William Case, Hamilton, O.; Thomas Gray, Brucefield, O.; George Il Greves, Carp, O.; David F. Gurd, Montréal, Q.; George C. Hart, Osnabrook Centre, O.; Franklin Hanna, Harlem, O.; Alfred J. Henwood, Brantford, O.; Andrew W. Imrie, Spencerville, O.; J. L. Irwin, Montreal, Q.; Joseph A. Jockson, Lawrence, NY; Charles J. Jamieson, Ottawa, O.; John B. Lawford, Montreal, Q.; John M. Lefebvre, Toronto, O.; Hoyes W. Lloyd, Strathroy, O.; Chas C. Lyfond, Roscoe, Ill; John A. McArthur, Underwood; O.; Oscar J. M. A. McCully, Sussex, N. B.; George McCullough, St. Marys, O.; William J. McGuigan, Stratford, O.; Stuart McNee, Perth, O.; John B. Menzies, Almonte, O.; Oscar H. Riley, Franklin, Vt.; M. C. Rutherford, Waddington, N. Y.; John G. Scott, Ottawa, O.; Maurice, M. Seymour, Chesterville, O.; William F. Shaw, Ottawa, O.; John Smith, Torbolton, O.; Richmond Spencer, Montreal, Q.; William R. Stherland, Montreal, Q.; Clarence A. Weageant, Dundas Co. O.; Hedley V. M. A. Williston, Newcastle, N. B.

Frank Butler, MD. M. R. C. S. Eng, Lecturer on Diseases of the Eye and Ear, receives the degree in course, with *pro-forma* examination.

Of the above named gentlemen, Mr. J. B. Lawford is under age. He has, however, passed all the examinations and fulfilled all the requirements necessary for graduation, and only awaits his majority to receive his degree.

The following gentlemen have passed in Anatomy:—W. Cormack, G. H. Oliver, W. J. Musgrove, M. McNulty, J. H. Carson, F. H. Mewburn, C. M. Gordon, A. P. Poaps, F. Tupper, W. A. Derby, G. C. Wagner, J. C. Shanks.

The following gentlemen have passed in Materia Medica:—W. Cormack, M. McNulty, A. Dunlop, J. J. Hunt, H. Lunam, B. A. W. Moore, A. McDonald, T. W. Reynolds, W. Shufelt, J. C. Shanks, J. Williams, J. B. Harvie, T. A. Page.

The following gentlemen have passed in Chemistry:—A. P. Poaps, W. Cormack, A. McDonald, A. H. Dunlop, W. T. Derby, T. W. Reynolds, J. B. Harvie, W. A. Shufelt, J. C. Shanks, A. D. Struthers, J. McKay, C. M. Gordon, Jas. Ross, B. A.; B. Fritz, J. Williams, J. J. Hunt, H. Lunam, B. A.; R. H. Klock, J. H. Carson, G. C. Wagner, F. H. Mewburn, W. Moore, T. A. Page.

The following gentlemen have passed in Physiology:—W. Cormack, H. E. Poole, W. J. Musgrove, A. McDonald, F. H. Mewburn, W. Moore, A. D. Struthers, W. A. Shufelt, C. M. Gordon, G. C. Wagner, T. W. Reynolds, J. J. Hunt, J. H. Carson, E. Fritz, R. H. Klock, A. H. Dunlop, W. C. McGillis.

The following gentlemen have passed in Practical Anatomy:—W. A. Shufelt, F. Tupper, C. M. Gordon, F. H. Mewburn, J. C. Shanks, J. H. Carson, W. A. Derby, E. Fritz.

Students who have passed in Botany:—Class I.—H. V. Ogden, B. A. (prize); G. W. Cameron and F. A. Holmes, equal, 2nd prize; Alex Shaw, James E. Trueman, Philias Vanier, T. N. McLean, E. J. C. Carter, H. Gale. Class II.—B. W. Burland, Henry O'Keefe, W. T. Duncan, B. F. W. Hurdman, J. H. Edick, Edmund Christie, T. J. Pierce O'Brien, E. C. Bangs, W. A. Dewolf Smith, J. H. Shaver, John Graham, W. H. Shaver, John M. Scott, T. L. Martin, Class III.—W. E. Thompson, J. B. Green, B. D. Pierce, A. McK Catenach, N. J. Hinkley, C. B. H. Hanvey, C. H. Ormand, W. W. Denyer, R. F. Campbell, George Shradly, Albert Cuthbert.

## MEDAL AND PRIZES.

The Medical Faculty prizes are four in number :—

1st. The Holmes Gold Medal, awarded to the student of the graduating class who receives the highest aggregate number of Marks for the best examinations, written and oral, in both Primary and Final branches.

2nd. A prize in books awarded for the best examination, written and oral, in the final branches. The gold medallist is not permitted to compete for this prize.

3rd. A prize in books awarded for the best examination, written and oral, in the primary branches.

4. The Sutherland Gold Medal awarded for the best examination in Theoretical and Practical Chemistry, with creditable passing in the Primary branches.

The Holmes Gold Medal was awarded to John B. Lawford, of Montreal.

The prize for the Final Examination was awarded to A. W. Imrie, Spencerville, Ont.

The prize for the Primary Examination was awarded to John Andrew McDonald, Panmure, P. E. I.

The Sutherland Medal was awarded to W. I. Gray, Pemroke, Ont.

The following gentlemen arranged in the order of merit, deserve honourable mention : In the Final Examination, Messrs, Shaw, Gray, Sutherland and Williston.

In the Primary Examination, Messrs. Josephs, W. I. Gray, J. W. Ross, Beer, Rogers, Henderson, R. B. Struthers and Heyd.

## PROFESSORS' PRIZES.

Botany.—H. V. Ogden, B. A., St. Catherines, O.

Practical Anatomy.—Demonstrator's Prize, in the Senior Class, awarded to Chas. N. Beer, of Charlottetown, P. E. I.

Junior Class prize awarded to James Ross, B. A., Dewitville, Q.

Practical Chemistry.—Prize awarded to Wm. Moore, Derby, Ont.

Dr. Oscar J. McCully, M. A., of Sussex, N. B., delivers the valedictory, and is followed by Dr. Fenwick, who reads the follow address :—

Gentlemen Graduates,—The time has arrived when the relations between us as teacher and student must cease. Steady and persevering industry, which has marked your earlier throughout your pupilage, has now been crowned with success, and you have been admitted into the ancient and honourable fraternity of medical and surgical practitioners. In offering the congratulations of this Faculty on this auspicious occasion, it becomes a pleasing duty to add a few words of counsel and advice touching the duties you have assumed as well as concerning the career which we all hope you will follow with success in the business of your lives. Ponder well on the important nature of those duties, for they are nothing less than the care and guidance of your fellowmen under the most trying circumstances. Duties of the greatest interest to the public as to yourselves, and for the faithful performance of which you will be held to strict account. Your career will be narrowly scrutinized, as to your keeping is entrusted the credit and reputation of our Alma Mater. We are members of one family, and disgrace or discredit falling on any one member must be deeply felt by all. There are a few suggestions that may not be considered out of place and which will, if followed, conduce to your personal comfort and to success in your career. Attend strictly to your own health. Bacon remarks that a " sound state of health begets a natural

vigour of the faculties." No class of men require a larger share of bodily vigour than physicians. Who more exposed to the baneful influence of malaria, or the germs of contagious or infectious disease than the physician. In epidemic visitations, whilst other classes of the community can seek protection, by isolation or abandonment of localities infected, physicians are called upon to remain and risk their lives in the service of others. With the heroism and pluck of the soldier they forego all considerations, join the forlorn hope and advance to the breach with unswerving faithfulness.

Theirs not to make reply,  
Theirs not to reason why,  
Theirs but to do and die.

Need I refer in proof of this to the recent scourge of yellow fever in the Southern States when over 80 medical men perished in giving succor to their fellow man. All honour to their memory. Such is the position that each one of us may at any moment be called upon to assume, and as sanitarians we know that strict obedience to the laws of health will enable us to resist the baneful influence of disease. But again, your vocation is to advise and direct others how to preserve their health, and in so doing you will be expected to know how to take care of your own. I must caution you against the baneful influence of the cup of bitterness. As physicians you are all fully aware of the evils of intemperance, how it beclouds the mind, renders helpless the body, and leads to disease and early death. The physician, of all other men, should be at all times in full possession of his faculties, as at any hour of day or night he may be called upon to render assistance, when the life of a fellow man is at stake. Under such circumstances the public will fully endorse the sentiment of Hamlet :—

" Give me that man  
That is not passion's slave, and  
I will wear him  
In my heart's core."

In this particular I should advise you to adopt the motto of Othello :—

" I have very poor and unhappy brains for drinking. I could well wish courtesy would invent some other custom of entertainment."

Another duty to yourselves is to keep pace with the rapid advance that is being made in medical and surgical science. The practitioner who is content with what he has learnt during his pupilage, will soon fall behind, and rightly earn the contempt of his fellowman. Idleness should be no feature of the honest and true physician ; through you cease to be pupils, you must still be students, as your life should be devoted to observation and reflection. Take stock each year of what you have acquired, and see to it that you have added to your store. To your patients, let integrity be your pass-word, truthfulness your breastplate, gentleness and suavity, with forbearance yet firmness, your guiding-star. Harshness and want of sympathy in the ills of others, will not tend to elevate you in the esteem of your fellowmen. Seek not success through any other channel than close attention to the business of your calling. It is your privilege to relieve suffering, and, under heaven, to save life ; close attention, with a full measure of judgment, and putting in force the practical knowledge acquired at the bed-side in the hospital ward, will be certain of success. If in any severe case, where you are in doubt or perplexity, if you have any fear of the correctness of your own judgment, seek the assistance and advice of a brother practitioner of larger experience than your own. Never refuse your aid because of the

uncertainty of receiving remuneration, be generous to the poor, remember the words of our beloved Saviour, "Forasmuch as ye did it unto the least of one of these my brethren, ye did it unto me," and your reward will be sure. The physician is the custodian of many family secrets. He is the friend in adversity, the counsellor in time of need. If mishap or disgrace invade the family circle the trusted physician is the first to be consulted. How necessary then for the full exercise of discretion and reticence. How dangerous is the babbler. Remember then the oath you have this day taken; cautiously, with prudence and charity, pursue your honorable calling. I may here remark that a proposal has come semi-officially to the profession of this Dominion to join the ranks of the British Medical Association by becoming members of that Society. The objects of that Society are in every way beneficial to the best interests of the profession, the advancement of scientific knowledge and the elevation of the standard of medical education. I have no doubt that the proposal will be seriously entertained by the profession of the Dominion at the next annual meeting of the Canada Medical Association, to be held in the city of London, Ontario, in September next. It is very desirable that the profession in this country should receive that recognition from the institutions of the Mother country which is its due. It would appear as though the dawn were breaking in our clouded horizon, and although we may not expect to be placed on the same footing as the older institutions of Great Britain, we may hope that we will not continue to occupy the anomalous position which we do at present. My chief object in referring to this matter is to call your attention more especially to the existence of this our national association, to which all members of the profession ought to belong. But more than this, it is much to be desired that branch societies should be established in all the sections of this country. We must be up and doing; medicine is a progressive science; there is a large field open to each one of you for observation, and, in observing remember that you must not hide your light under a bushel, but seek to emulate the work of those who have enlarged the boundaries of medicine by reclaiming an unexplored wilderness, and laying bare truths which have long been hid. It requires but a beginning, for you will find that the work will become so engrossing and satisfactory that you will be forced, from the very love of well-doing, to persevere with all your energy to the end. For what does not the science of medicine in some way or other bear upon? It analyzes the wonderful processes observed in all organized beings—generation, development, growth, nutrition, decay, disease and death. It solves two important questions for the legislator, and lays bare mysteries to the jurist. To ourselves, it elevates and brings forth the better feelings of our nature, enlarges our sympathy, strengthens our hopes, induces self denial, and leads on to the practice of the greatest of Christian virtues—true charity. Follow on, then, gentlemen, in the honorable career opening before you; may you be worthy sons of this University, full of usefulness and proficiency. You all have the path open to you of sheding lustre on Alma Mater, and in your career may you be full of joy and peace and happiness. Gentlemen, farewell!

## FACULTY OF LAW.

Mr. W. H. Kerr, Q. C., D. C. L., reads the list of Prizes and Honours awarded to Students in Law, and with his assistance the Vice-Chancellor confers the decrees.

Report of the examinations in the Faculty of Law, for the session of 1878-9:—

By a regulation passed in 1873, candidates for the degree of D. C. L. in course, are obliged, in addition to the formalities previously prescribed, to pass, within four years from their graduation as B. C. L., such examination as shall be determined by the Faculty of Law. During the present session the only candidate who has presented himself is Thomas Nichol, M. D., B. C. L., who has satisfactorily passed the required examination.

## GRADUATING CLASS.

The following students' names, arranged in order of merit, have successfully passed the examinations required for the degree of B. C. L.:—

Armine D. Nicolle, B. A.  
 Robert D. McGibbon, B. A.  
 George E. Bampton.  
 William F. Ritchie, B. A.  
 E. B. Busted.  
 George F. Carter.  
 Charles J. Fleet, B. A.  
 Paul G. Martineau.  
 B. C. McLean.  
 Albert Leblanc.  
 Z. E. Cornell.  
 Boutillier J. Trudel.  
 Walter Lord Ross.  
 Leandre Ethier.  
 Alexander E. Duncan.  
 Peter J. McNaughton.  
 Edmond R. St. Jean.  
 J. Henri Pillet.  
 Leon Ledieu.  
 Alderic Decary.

Besides these, Seth P. Leet has also passed examinations satisfactory to the Faculty, but is not ranked, in consequence of his being prevented from attending two of the examinations through severe sickness in his family, and of his having obtained private examinations in these classes.

The Elizabeth Torrance Gold Medal, in the Faculty of Law, is awarded to the student who, being of the Graduating Class, having passed the Final Examination, and having prepared a Thesis of sufficient merit in the estimation of the Faculty to entitle him to compete, shall take the highest marks in a special examination for the medal, which Examination shall include the subject of Roman Law.

During the present session the student who has fulfilled these conditions is Armine D. Nicolls, who is therefore entitled to this prize.

In the special examination for this prize, Mr. Nicolls was however closely pressed by Mr. R. D. McGibbon, B. A., the former having attained 663 and the latter 659 marks, out of a possible 700. The faculty therefore resolved to recommend Mr. McGibbon to the Governors of the University for a duplicate medal. It was, however, considered by the corporation that the better course under such circumstances would be to give a special prize instead of a duplicate medal. A prize to the value of \$25.00 in books, to be called the Elizabeth Torrance prize, will accordingly for the present session be given to Mr. McGibbon.

The prize for the best thesis was awarded to L. J. Ethier, of Montreal.

Passed with 1st Class honours in this year:—

Armine D. Nicolls B. A.  
 Robert D. McGibbon, B. A.  
 George E. Bampton.  
 W. F. Ritchie.  
 E. B. Busted.

They having obtained over 80 per centum of the total marks allowed upon all the subjects.

Standing in the various classes :—

INTERNATIONAL LAW—PROF. KERR.

McGibbon 1st. Professor's Prize.  
Nicolls 2nd.

CIVIL LAW—PROF. RAINVILLE.

Nicolls 1st.  
McGibbon and Ritchie, 2nd equal.

ROMAN LAW—PROF. TRENHOLME.

Nicolls 1st.  
McGibbon and Bampton, 2nd equal.

COMMERCIAL LAW—PROF. WURTELE.

Bampton, 1st Professor's prize.  
Nicolls, 2nd.

CRIMINAL LAW—LECTURER ARCHIBALD.

McGibbon, Nicolls and Bampton, 1st equal.  
Ritchie, 2nd.

LEGAL HISTORY—LECTURER LAREAU.

Nicolls and McGibbon, 1st, equal.  
Bampton, 2nd.

CIVIL PROCEDURE—LECTURER HUTCHINSON.

Fleet and McGibbon, 1st, equal.  
Nicolls, 2nd.

In the second year twenty-six students presented themselves for examination, of whom the following twenty-one in all, names arranged in order of merit, were successful :

Albert W. Atwater, B. A.  
K. N. McFee, B. A.  
Robert Weir.  
Eugene Lafleur, B. A.  
William P. Sharp.  
John McKercher.  
Joseph P. Cook.  
Francois O. Dugas.  
Camille Madore.  
Joseph F. Painchaud.  
Samuel M. Jackson.  
John C. Alguire.  
Alfred L. De Beaumont.  
Joseph E. Austin.  
Jean B. Laplante.  
Henry R. Hammond.  
William McLennan.  
William B. S. Reddy.  
Herbert S. Hunter.  
Gonzalve D. Goyette.  
Alfred J. Chartrand.

The following having obtained more than eighty per centum of the total marks allowed are entitled to first rank honours :—

Atwater, 1st prize.  
McFee, 2nd do.  
Weir.  
Lafleur.  
Sharp.

Ranking in the various classes :—

INTERNATIONAL LAW—PROFESSOR KERR.

Atwater, 1st.  
McFee, 2nd.

CIVIL LAW—PROFESSOR RAINVILLE.

Atwater and Weir, equal.  
McFee and Dugas, 2nd, equal.

COMMERCIAL LAW—PROFESSOR WURTELE.

Atwater, 1st.  
Madore, 2nd.

ROMAN LAW—PROFESSOR TRENHOLME.

Atwater, Lafleur, Weir, 1st, equal.  
McFee, 2nd.

CRIMINAL LAW—LECTURER ARCHIBALD

Atwater and McFee, 1st, equal.  
Sharp, 2nd.

LEGAL HISTORY—LECTURER LAREAU.

Atwater, McFee, 1st, equal.  
Lafleur, 2nd.

CIVIL PROCEDURE—LECTURER HUTCHINSON.

McFee, 1st.  
Atwater, 2nd.

In the first year twenty-three students presented themselves for examination, of whom twenty-two were successful.

The names are as follows, arranged in order of merit :

William A. Weir.  
Allen R. Oughtred.  
Joseph S. Bothwell.  
Alexander C. Rutherford.  
Allen G. Ingalls.  
Charles Raynes.  
Robert C. Smith.  
Alexander Cross.  
Albert C. Lyman.  
Edmond M. McMahan.  
Hon. Henry Aylmer.  
Rev. Joseph L. Forster.  
Donald Downie.  
Campbell Lane.  
R. D. Matheson.  
William W. Redpath.  
George G. Foster.  
A. L. DeMartigny.  
Antoine A. Gauthier.  
Louis G. A. Cresse.  
Louis P. Trudel.  
James Shortiss.

The following having obtained more than 80 per centum of the total marks allowed are entitled to first rank honours :—

Weir, 1st prize.  
Oughtred, 2nd prize.  
Bothwell.  
Rutherford.

The following is the ranking in the several classes :—

CIVIL LAW—PROFESSOR RAINVILLE.

Weir, 1st.  
Rutherford, 2nd.

## COMMERCIAL LAW—PROFESSOR WURTELE.

Rutherford, 1st.  
Weir and Oughtred, 2nd, equal.

## ROMAN LAW—PROFESSOR TRENHOLME.

Weir, 1st.  
Oughtred, 2nd.

## CRIMINAL LAW—LECTURER ARCHIBALD.

Lyman, 1st.  
Oughtred, 2nd.

## LEGAL HISTORY—LECTURER LAREAU.

Ingalls and Weir, 1st, equal.  
Oughtred, 2nd.

## CIVIL PROCEDURE—LECTURER HUTCHINSON.

Weir, 1st.  
Oughtred and Raynes, 2nd, equal.

Mr. Chas. J. Fleet, B. A., B. C. L., delivers the valedictory, and is followed by the *bâtonnier* of the Montreal Bar, who thus addresses the newly-fledged advocates:—

Professor, W. H. Kerr, Q. C., D. C. L., said that 32 years experience at the Bar taught him that the profession of the law was one of the noblest if not the noblest in the world. Justice is the watchword of the law. Before the law all men are equal—the rich and the poor—and all have that which they are entitled to and nothing more. It has been by the endeavors and struggles of the brave lawyers of England against the persecutor, that the constitutional rights of the subjects have been secured to them. The law enters into every detail of life. The liberties and lives of every man and woman in every civilised country are dependent upon the law. It therefore governs our every action and is the most important factor of society. He urged the graduates to be respectful to their seniors; affable to their equals, and courteous to their inferiors. To the Bench they should accord the respect due to their position, (Applause).

The Benediction is then pronounced by the Rev. Dr. Wilkes, and the assembly disperses.

## POETRY.

## The Safeguard.

A baby crept to his father's knee,  
And was lifted up and lulled to rest,  
Till the blue eyes closed, so tired was he,  
And his little head fell peacefully  
At ease on the ready shoulder there,  
While the baby hand so soft and fair,  
Lay like a shield on his father's breast.

Of old 'twas said that when men drew near  
To fierce temptation or deadly strife,  
And lost their way in a maze of fear,  
Or periled their souls for worldly gear;  
By a way unknown an angel hand  
Would lead them out of the dangerous land  
Into the light of a noble life.

The story is true for the world to-day:  
We see no white-robe angels mild;  
But out of the dark and perilous way  
Where men and women forget to pray,  
Into the place of a purer land  
They are led by a gentle, shielding hand—  
The hand of a little, helpless child.

ELIZABETH W. DENISON.

## OFFICIAL NOTICES.



## Department of Public Instruction.

## APPOINTMENTS.

Notice of application to erect, &c., school municipalities, under the 5th section, 41st Vict., chap. 6.

To erect into a school municipality the villages of Saint Joseph, Saint Bonaventure and Saint Bernard, in the parish of Charlesbourg, in the county of Quebec, to wit: all the territory heretofore forming district No. 3, and now forming districts Nos. 3, 3 $\frac{1}{2}$  and 3 $\frac{1}{2}$ , and to detach this territory from the remainder of the school municipality of the parish of Charlesbourg.

## BOUNDING, ERECTING, &amp;c., &amp;c., OF SCHOOL MUNICIPALITIES.

His Excellency the Lieutenant-Governor has been pleased, by order in Council, dated the 25th day of December 1878, and in virtue of the powers conferred on him:

1. To annex to the municipality of Harrington, No. 2, county of Argenteuil, the properties of the following rate-payers, to wit: Messrs. George Bowen, James Thompson and John Cleland, of the township of Montcalm, in the same county, there being no school in the said township.

2. To divide the township of Roxton, county of Shefford, into two district school municipalities, as the said township is actually divided for rural purposes, one of these municipalities comprising the village of Roxton Falls, and other the remainder of the township.

3. To erect into a school municipality the new parish of Sainte Théodosie, county of Verchères, with the same limits which are assigned to it for its civil erection by Proclamation dated the twenty fourth day of July last.

4. To erect into a distinct school municipality such as erected for rural purposes, Saint Joseph de Ham Sud, county of Wolfe, comprising the whole of the township of Ham South, ranges 10 and eleven of Ham North, and ranges 10 and 11 of Weedon.

These erections and charges will take effect from the first of July next, 1879.

By order in council, dated the 24th day of April 1879:

1. To separate from the Côteau Saint Louis, county of Hochelaga, the new rural municipality known under the name of "Saint Louis de Mile End," and to erect it into a distinct school municipality under the same name, and with the same limits.

2. To detach from East Farnham, in the county of Shefford, the following lots of the 6th range, to annex them to the parish of Saint Alphonse, whereof they form part for religious purposes, to wit: lots Nos. 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 and 27.

3. To erect into a distinct school municipality, under the name of "Ham South West," in the county of Wolfe, the fourteen first lots of ranges 1, 2, 3, 4, 5, 6, 7, 8 and 9, of Ham, in the same county, such as erected into rural municipalities.

The whole to take effect from and after the first of July next, 1879.

## SCHOOL COMMISSIONERS.

By order in Council, dated the 24th December 1878:

County of Hochelaga, Côte des Neiges.—Mr. Pierre Claude, continued in office, no election having taken place in July last.

County of Kamouraska, village of Sainte Anne.—Messrs. Charles Hudon and Jean Hudon dit Beaulieu, *vice* Messrs. Louis Alfred Paquet and Pierre Grondin, whose term of office is expired.

By order in Council, dated the 9th of January 1879:

Argenteuil, Saint Jérusalem de Lachute.—Messrs. William McQuat and John Smith, whose election was not legal.

Bagot, Saint André d'Acton.—Mr. François Xavier Gagnon, *vice* Mr. Pierre McClure.

Champlain, Sainte Flore.—Mr. Thomas Blouin, *vice* Mr. Pierre Bellerive.

Maskinongé, Hunterstown.—Mr. Jacques Brodeur, *vice* Mr. M. St. Onge, Son.

Montmorency, Sainte Brigitte de Laval.—Mr. Jean Verret *vice* Mr. Célestin Thomassue.

Rimouski, Dalibaire.—Mr. Sévérin Verrault, *vice* Mr. Cyprien Ouellet.

Saint Hyacinthe, Saint Denis, No. 2.—Mr. Jean Gariépy, *vice* Mr. George Guertin.

Vaudreuil, Sainte Justine de Newton.—Mr. Alexandre Lalonde, *vice* Mr. Bénoni Sévac.

Yamaska, Saint Bonaventure.—Messrs. Antoine Lapierre and Daniel Vanasse, *vice* Messrs. Joseph Joyal and Honoré Beauchemin.

By order in council, dated the 13th of March instant 1879 :

County of Champlain, Sainte-Anne Lapérade.—Mr. Marcel Trudel, *vice* Mr. A. Lanouette, deceased.

County of Mégantic, Nelson.—Messrs. Joseph Laflamme and Joseph Garon.

County of Saguenay, Escoumains.—Mr. Hubert Caron, *vice* M. E. Barry.

County of Saint Hyacinthe, Saint Hyacinthe, (parish).—Mr. Charles Girard, *vice* Mr. Bazile Dumaine and Mr. Narcisse Benoit, *vice* Mr. Pierre Morin.

By order in council, dated the 29th of March last 1879 :

County of Rimouski, Saint Paul des Capucins.—Mr. Paul Côté, *vice* Mr. Edmond Desgagné, who has definitely left the municipality.

County of Rimouski, Saint Edmond du Lac à Saumon.—Messrs. Thomas Berthelemi Frechette, Prudent Michaud, Thomas Moreau, Elie Lavoie and Jeremie Jean ; new municipality.

#### SCHOOL TRUSTEES.

Compton, Marston, (Piopolis).—Mr. Frédéric Boucher de Grosbois, *vice* Mr. A. Champagne.

Maskinongé, Sainte Ursule.—Mr. Jesse Turner, continued in office, the election held in July last, not having been regular.

By order in Council, dated the 27th of February last 1879 :

Shefford, Roxton.—Mr. Shem Davidson, *vice* Mr. John Wood, retired from office in July last, no election have taken place.

By order in council, dated the 13th of March instant 1879 :

County of Arthabaska, Warwick.—Messrs. Levi Judd, Sherman Pope and John Perkins.

#### ERECTION OF SCHOOL MUNICIPALITY.

His Excellency the Lieutenant Governor has been pleased, by order in council, dated the 19th day of March instant, 1879, and in virtue of the powers conferred on him, to erect the whole of township Lepage, township Amqui including therein the inhabited portion of the seigniorie of Metapediac, to Samuel Low's lot inclusively, into a distinct school municipality under the name of Saint Edmond du Lac à Saumon, in the county of Rimouski.

His Excellency the Lieutenant Governor has been pleased by order in council dated the 4th day of April instant, 1879, and in virtue of the power conferred on him to erect "Aldfield," in the county of Pontiac, into a school municipality such as it is already erected for municipal purposes, and to have such erection date from the fifteenth of June last 1878.

### McGill College.

#### ANNUAL MEETING OF CONVOCATION.

The annual meeting of Convocation of this College for the conferring of degrees and honours in the Faculties of Arts and Applied Science, was held yesterday afternoon 30 April at 3 o'clock. The meeting was of

more than ordinary interest, due to the increasing fame of the institution, and also to the fact that several distinguished gentlemen of other colleges were to receive *ad eundem* and honorary degrees. The Convocation met at 2.30 p. m. in the Library. There were present—Mr. Peter Redpath (Chairman), Andrew Robertson, MA., QC. ; The Hon. Christopher Dunkin, MA., DCL. ; Peter Redpath, Esq. ; The Hon. Sir Alexander T. Galt, KCMG. ; The Hon. Sir Francis Hincks, KCMG, CB. Principal—John William Dawson, MA., LL. D., FRS., Vice-Chancellor. Fellows—Ven Archdeacon Leach, DCL., LL. D., Vice Principal and Dean of the Faculty of Arts. ; George W. Campbell, MA., MD., LL. D. ; Alexander Johnson, MA., LL. D. ; Rev. George Cornish, MA., LL. D. ; Rev. Wilkes, MA., DD., LL. D. ; R. A. Ramsay, MA., BCL. ; John Reddy, MD. ; Rev. John Jenkins, DD. ; J. J. McLaren, MA., BCL. ; John R. Dougall, MA. ; Rev. J. Clarke Murray, LL. D. ; Henry T. Bovey, MA., CE. ; David R. McCord, MA., BCL. ; Arthur A. Brown, BA., MD. ; C. H. McLeod, MA., E. ; John Fraser Torrance, BA., Registrar—Wm. Craig Baynes, BA. ; Professors.—William E. Scott, MD. ; William Wright, MD. ; Robert P. Howard, MD. ; Rev. A. De Sola, LL. D. ; Hon. William Badgley, DCL. ; Charles F. A. Markgraff, MA. ; D. C. McCallum, MD. ; Alexander Johnson, MA., LL. D. ; Rev. George Cornish, MA., LL. D. ; Pierre J. Darcy, MA., BCL. ; Rev. J. Clarke Murray, LL. D. ; George Ross, MA., MD. ; William Osler, MD. ; Charles E. Moyses, MA., Lecturers—C. H. McLeod, BA App Sc ; Francis J. Shepperd, MD., Guests—The Hon. P. J. O. Chauveau and the Hon. Gedeon Ouimet, Superintendent of Public-Instruction in this Province. Graduates—Doctors in Medicine, Drs. George Ross. ; Brigham. ; A. A. Browne, BA. ; W. Nelson. ; R. Bell and many others. Masters in Arts R. J. Wickstead, BA. ; L. Cushing, BA. ; H. H. Lyman, BA. ; M. Hutchinson, BCL. ; W. S. Walker, BCL. ; J. R. Dougall, BCL. ; Thos Nichol, MD., BCL. ; J. Carmichael, MA. ; Rev. J. Wellwood, BA. ; Francis W. Hicks. ; James McGregor, BA. ; Thos Nichols, MD., LLB., and others. Bachelors of Arts—A. W. Atwater, BA. ; M. B. Bethune ; R. Dawson. ; J. T. Donald. ; C. J. Keet. ; Rev. E. J. Rexford.

The Registrar read the minutes of the Convocation held on the 30th April, 1878, as also the minutes of a special meeting of Convocation convened for the presentation of an address to His Excellency the Marquis of Lorne on his visit to the University.

The minutes were approved.

The Registrar read the statute empowering the Convocation to elect two representatives of the different faculties, whereupon scrutineers having been appointed, the Convocation elected to represent the graduates :—

In Law.—J. J. Maclaren, M. A., and R. A. Ramsay, M. A., B. C. L.

In Medicine.—Dr. Reddy and Dr. A. A. Brown.

In Arts.—J. R. Dougall, M. A., and Rev. E. J. Rexford, M. A.

In Applied Science.—Dr. R. Bell and John Frazer Torrance, Bac. Ap. Science.

The Convocation then proceeded to the William Molson Hall, where a very large audience of citizens, including many ladies, were in waiting to witness the proceedings.

The Chairman, Mr. Peter Redpath, called upon the Dean of the Faculty, the Venerable Archdeacon Leach, to open the Meeting with prayer, after which the Vice-Dean of the Faculty of Arts read the following lists of passing, honours and Standing and of exhibitions and scholarships in the Faculty of Arts :—

## FACULTY OF ARTS.

PASSED FOR THE DEGREE OF B. A.

*In Honours—(Alphabetically Arranged.)*

First Rank—Alex S. Cross, Robert Eadie, Robert J. B. Howard, Wm. D. Lighthall, Wm. McClure, Richard, G. McConnell.

*Ordinary—(In order of Merit.)*

Class 1—William H. Stevens, Holton H. Wood, Campbell Lane and Wm W. Redpath, equal. Class 2—None. Class 3—Robert McKibbin.

(1) *McGill College.*

Passed the Intermediate Examination—Class I—Falconer, Gregor, Tucker, Weeks, Jones, McLeod (Arch), Ferguson. Class 2—Robertson, Gowanloch, Powell, Elder, Ami (Hy M), Bracq, Lyman, McLeod (Alvan), White, Rutherford, Macpherson. Class 3—Black, Weir, Gamble and McNabb, McDonald and Lawford.

(2) *Morrin College.*

Class 1—Duclos. Class 2—None. Class 3—None.

(3) *St. Francis College.*

Class 1—None. Class 2—Pritchard. Class 3—Ramsay. Bachelors of Arts proceeding to the Degree of M. A. in Course—Wm B. Dawson, B. A., John Empson, B. A., George H. Chandler, B. A.

Masters of Arts proceeding to the Degree of LL. D. in Course—Richard J. Wicksteed, M. A., Lemuel Cushing, M. A.

## FACULTY OF ARTS.

GRADUATING CLASS.

B. A. Honours in Mathematics and Natural Philosophy—William McClure, First Rank Honours and Anne Molson Gold Metal.

B. A. Honours in Classics—Robert Eadie, First Rank Honours and Chapman Gold Medal.

B. A. Honours in Natural Science—Robt J. B. Howard, First Rank Honours and Logan Gold Medal; Rich G. McConnell, First Rank Honours and Logan Prize.

B. A. Honours in Mental and Moral Philosophy—Alex S. Cross, First Rank Honours and Prince of Wales Gold Medal.

B. A. Honours in English Language, Literature and History—Wm D. Lighthall, First Rank Honours and Shakspeare Gold Medal.

Dufferin Prize for Historical Essay—Wm D. Lighthall. Stewart Prize in Hebrew—John Matheson, B. A.

THIRD YEAR.

J. Herbert Darey, First Rank Honours in Classics and Prize; Second Prize in Zoology; First Rank General Standing. Thomas E. Cunningham, First Rank Honours in Mental and Moral Philosophy; and Prize. Harcourt J. Bull, First Rank Honours in Mental and Moral Philosophy and Prize; First Rank General Standing. Paul T. Lafleur, First Rank Honours in English Language and Literature and Prize; Prize in Classics. Charles A. Molson, First Rank Honours in Natural Science and

Second Prize in Zoology. George T. Roberts, Second Rank Honours in Mental and Moral Philosophy; Prize in Zoology, James A. Craig, Second Rank Honours in Mental and Moral Philosophy. Dugald Currie, Second Rank Honours in English Language and Literature; First Rank General Standing; Prize for Collection of Plants; Prize in Rhetoric. Archibald Ogilvie, Second Rank Honours in Natural Science.

Passed the Sessional Examinations—Darey, Currie, Bull, Lafleur, Cunningham; Molson and Roberts, equal; Pillsbury, Bayne and Craig and Ogilvie, equal; Raynes, Lariviere, Allen, McIntyre, Klock, Muir, Keays Sriver, (*aeger*).

SECOND YEAR.

William A. Weeks, Prince of Wales College, P. E. I., First Rank Honours in Mathematics and Prize. Alexander Falconer, High School, Montreal, First Rank General Standing; Prize in Logic; Prize in Botany; Prize in English; Prize in German. John W. Tucker, Normal School, Montreal, First Rank General Standing; Prize in French. George Robertson, Douglas School, Garafra, O. Prize in Hebrew. Henry M. Ami, Ottawa Collegiate Institute, Prize in Botany. Frank Weir, High School, Montreal, Prize in English Literature. Leigh R. Gregor, Prince of Wales College, P. E. I., Prize in English Literature.

Passed the Sessional Examination—Falconer, Gregor, Tucker, Weeks, Jones, McLeod (Arch.), Ferguson, Robertson, Gowanloch, Powell, Elder, Ami (Hy. M.), Bracq, Lyman, McLeod (Alvan), White, Rutherford, Macpherson, Black, Weir, Gamble and McNabb, McDonald and Lawford.

FIRST YEAR.

P. C. McKillop, Canadian Literary Institute, Woodstock, Second Rank Honours in Mathematics and Prize. Henry Fry, High School, Quebec, First Rank General Standing; Prize in Classics and History; Prize in Classics and History; Prize in Chemistry. Henry J. Hague, Upper Canada College, First Rank General Standing; Prize in Classics and History. Norman G. Rielle, Proprietary School, Montreal, First Rank General Standing; Prize in English Essay. Henri A. Lafleur, High School, Montreal, Prize in Classics; Prize in English Literature and Second Essay Prize; Prize in French. George Williams, Ottawa Collegiate Institute, Prize in Hebrew, Joseph L. Morin, Presbyterian College, Montreal, Prize in French. Alfred W. Martin, High School, Montreal, Prize in German.

Passed the Sessional Examinations—Fry, Hague, Rielle, Lafleur, Williams, Morin, Trenholme, Fraser, McKillop, Martin, Smith, Richardson J. S. Thomas, Stirling, Clipsham, Barron, Cockfield, Stewart.

At the examinations in September, 1878, the following Scholarships and Exhibitions were awarded:—

Third Year—Currie and P. T. Lafleur—W. C. MacDonald; Darey—the Charles Alexander Scholarship.

Second Year—Falconer and Ferguson—W. C. MacDonald Exhibitions.

First Year—H. A. Lafleur and Fry—W. C. MacDonald Exhibitions; Rielle, the Jane Redpath Exhibition; Fraser, the Governors' Exhibition.

## SESSIONAL EXAMINATIONS, 1879.

ORDINARY COURSE IN ARTS.—GREEK.

B. A. Ordinary, Class 1—Eadie, Stevens. Class 2 Wood, Mercer, McKibbin. Class 3 None.

Third Year, Class 1—Darey, prize, and Keays, equal; Bull and Paul T. Lafleur, equal; Roberts; Craig and D. Currie, equal. Class 2 Raynes, Bayne, Ogilvie, Cunningham, Molson; Lariviere and Pillsbury, equal; Klock. Class 3 McIntyre, Allen, Muir.

Second Year, Class 1—Falconer, Gregor, A. McLeod; Elder and Tucker, equal; Jones, Ferguson, Weeks, Gowanloch. Class 2 Bracq, Lyman; Gamble and Robertson, equal; McNabb; Black and Alvan McLeod and Powell, equal. Class 3 McDonald and Macpherson, equal; Hy M. Ami and White, equal; Lawford and Weir, equal; Rutherford.

First Year, Class 1.—Fry, prize, and H. J. Hague, prize, and H. Lafleur, prize, equal; Rielle. Class 2 Williams, J. S. S. Richardson, Morin, Fraser, Smith; Cockfield and McKillop and Trenholme, equal; Stirling, Clipsham. Class 3 Thomas; Barron and Martin, equal; Stewart, Sheriff, Macrae, Fuller, Belcher.

## LATIN.

B. A. Ordinary, Class 1—Eadie; Mercer and Stevens and Wood, equal. Class 2 Lane, Redpath. Class 3 McKibbin.

Third Year, Class 1—Darey, Lafleur, prize, Keays, Bull. Class 2 Molson, Roberts, Bayne, Ogilvie, Pillsbury; Raynes and Scriver, equal; Klock and Lariviere, equal; Cunningham. Class 3 McIntyre, Muir, Allen.

Second Year, Class 1—Falconer Gregor, Arch McLeod, Jones, Lyman, Tucker, Weeks, Elder, Ferguson. Class 2 Powell, Gowanloch; Black and Bracq and McDonald and Macpherson, equal. Class 3 Robertson; Alvan McLeod and Rutherford and Weir, equal; Hy M. Ami, White, Lawford.

First Year, Class 1—Fry, Hague, H. A. Lafleur, Rielle, Whillans. Class 2 Morin, J. S. S. Richardson, Fraser, Smith, Belcher, Cockfield; Stirling and McKillop, equal; Trenholme, Martin. Class 3 Shirriff and Thomas, equal; Clipsham and Macrae, equal; Stewart, Fuller, Barron.

## GREEK AND ROMAN HISTORY.

First Year, Class 1—Fry and Hy Hague, prizes, equal; Hy A. Lafleur; Rielle and Thomas, equal; Trenholme and Martin, equal. Class 2, Fraser; Clipsham and Williams, equal. Class 3, Morin; Smith and Jas S. S. Richardson, equal; Fuller and Stirling, equal; Barber and Aelcher and Cockfield and Macrae, equal; McKillop, Hitchcock.

## LOGIC, AND MENTAL AND MORAL PHILOSOPHY.

B. A. Ordinary, Mental and Moral Philosophy—Class 1—Cross. Class 2 Lane. Class 3 McGibbin.

Occasional Students in Fourth Year, Mental Philosophy... Class 1—Bowers. Class 2 Mitchell, Ford. Class 3 Mallory, Balmer.

Third Year, Moral Philosophy—Class 1—Keays; Bull and Cunningham, equal; Lafleur, Darey. Class 2 Craig; Bayne and Currie, equal; Allen, Roberts, Lariviere; †Morrison and Pillsbury, equal; †Henderson, †Saer, Molson. Class 3, Raynes, Ogilvie, McIntyre, Klock, Muir.

Scriver, eager.

Prize in Mental and Moral Philosophy—Bull and Cunningham, equal.

Second Year, Logic—Class 1—Falconer, prize; Ferguson, Weeks; Robertson and Tucker, equal; Elder; †Bowers and Powell, equal; †Ford, Gowanloch and

Arch McLeod, equal. Class 2 H. M. Ami and †Bareham, equal; Bracq; Gamble and White, equal; Lyman; McDonald and Rutherford, equal; Alvan McLeod, Jones. Class 3 Macpherson and Scott, equal; Lawford, McNabb; Black and †Thicke and Weir, equal.

## ENGLISH LITERATURE.

B. A. Ordinary, Class 1. Lighthall and Wood, equal; Lane and Redpath, equal.

Third Year, Rhetoric—Class 1. Currie, prize; Raynes. Class 2. Lafleur, Craig, Roberts, Bull, Darey. Class 3. Molson and Pillsbury, equal; Klock, Ogilvie and Scriver, equal; Muir.

Second Year—Class 1. Weir, prize, and Gregor, prize, and Falconer, prize, equal; Ferguson, Jones, Tucker, Elder. Class 2. Gowanloch; Black and Rutherford, equal; Robertson; Lyman and Powell, equal; McPherson, Weeks; Bracq and Archibald McLeod and McNabb, equal; Alvan McLeod, Gamble, Scott, White, Lawford. Class 2. H. M. Ami, McDonald.

First Year—Class 1. Lafleur, prize; Rielle and H. J. Hague, equal. Class 2. Trenholme, Fry, Thomas, Currie, Martin, Belcher, Smith, Clipsham, Cockfield, Whillans, Fuller, Stirling; Morin and J. S. S. Richardson, equal; Barron and Fraser and Macrae, equal. Class 3. Baker and A. Richardson, equal; McKillop, Chaffee, Shirriff and Stewart, equal; Hitchcock, Westlake.

## HISTORY.

B. A. Ordinary—Class 1. Lighthall, Wood, Mercer, Redpath. Class 2. Lane.

## FRENCH.

Third Year—Class 1—None. Class 2—Internoscia. Class 3—Klock.

Second Year—Class 1—Tucker, prize, Bracq, Gregor, Falconer and Weeks, equal. Class 2—H. Ami, Jones, McLeod, Ferguson, Elder and Lyman, and Macpherson, equal. Class 3—White, Rutherford, Weir, Scott.

First Year—Class 1—Lafleur and Morin, equal, prize; Hague and Rielle, equal; Fry, Js. Richardson. Class 2—Trenholme, Barron, Smith. Class 3—Martin, Stirling, Cockfield; Fraser and Thomas, equal; Belcher, A. Richardson.

## GERMAN.

B. A. Ordinary—Class 1—Mercer. Junior Division—Class 1—Stevens.

Second Year—Senior Division: Class 1—Falconer, prize, Lyman. Class 2—Jones. Class 3—None. Junior Division—Class 1—Arch McLeod, H. M. Ami.

First Year—Class 1—Martin, prize; H. A. Lafleur, Rielle. Class 2—None. Class 3—McKillop.

## HEBREW.

Stewart Prize, John Matheson, B. A.

Senior Class—Class 1—Robertson, prize; McLeod and Powell, equal; Gowanloch, Bowers; Mallory and McNabb, equal; Gamble. Class 2—Orme, Pritchard, Black, Ford, Geddes. Class 3—McFarland.

Junior Class—Class 1—Whillans, prize; Internoscia, Morrison, Clipsham. Class 2—Westlake, Currie. Class 3—Stewart, Shipperley.

† Occasional Students.

## MATHEMATICAL PHYSICS.

B. A. Ordinary—Class 1—McClure, Stevens. Class 2—Lane and Redpath, equal; Wood. Class 3—Eadie, Howard, McKibbin.

Third Year—Class 1—Darey, Currie, Bull. Class 2—Molson, Cunningham. Class 3—Pillsbury, Keays, Roberts, Allen, Lafleur, McIntyre, Ogilvie, Raynes, Bayne, Larivière, Klock, Muir, Craig.—Scriver, *aeger*.

## MATHEMATICS.

Second Year—Class 1—Falconer, Weeks, Tucker, Jones, Gregor, Arch McLeod, Ferguson, Henry M. Ami. Class 2 Robertson, Powell, Gowanloch, Bracq, Alvan McLeod. Class 3 White, Rutherford, McNabb, McDonald, Macpherson, Elder, Gamble, Lawford, Black, Lyman, Weir.

First Year—Class 1—Fry, McKillop, Fraser, Rielle, Whillans, H. J. Hague, Class 2 Morin, Trenholme. Class 3 Lafleur and Stewart, equal; Martin, Smith, Barron, Thomas, Stirling, J. S. S. Richardson, W. T. Currie, Barber, A. W. Richardson, Cockfield, Clipsham.

## EXPERIMENTAL PHYSICS.

B. A. Ordinary, Class 1—McClure and Stevens, equal; Lighthall, Cross, Wood, Redpath. Class 2 McConnell. Class 3 None.

Third Year, Class 1—Dary, Bull; Lafleur and Pillsbury, equal; Currie, Keays. Class 2 Roberts, Molson. Class 3 Ggilvie, Raydes, Craig; Klock and Muir equal.

*Honour Examinations in Mathematics and Natural Philosophy.*

B. A. Honours, First Rank—Wm McClure, Anne Molson Gold Medal.

Second Year, Mathematics, First Rank—Weeks Prize.

First Year, Mathematics, First Rank—Nome. Second Rank, McKillop Prize. \*

## NATURAL SCIENCE.

B. A. Ordinary, Geology and Mineralogy, Class 1—Roward, McConnell, Stevens, Class 2 Mercer Class 3 Mitchell, McKibbin; Geddes, in Geology alone; Morkill, in Mineralogy alone.

B. A. Honours—R. J. B. Howard and R. G. McConnell, First Rank Honours.

Third Year, Zoology, Class 1—Roberts, Prize; Dary and Molson, equal, and prize; Currie, Lafleur, Ogilvie, Cunningham Class 2 Pillsbury, Klock, Craig, Scriver, Muir, Larivière Class 3 Bayne, Allen, McIntyre, McFarland.

Third Year, Honours—C. A. Molson, First Rank, A. Ogilvie, Second Rank.

Second Year, Botany, Class 1—Ami and Falconer, equal, prize; Robertson, Gowanloch, Eider Class 2 Jones; Scott and Tucker, exnal; Ferguson, Lyman, Rutherford, White, Powell, Weeks, Macpherson, Arch McLeod, Gamble, McNabb, Weir, Bracq. Class 3 Alvan McLeod, McDonald, Lawford, Black.

## CHEMISTRY.

First Year—Class 1, Fry, prize; Hague Argue H. J. Class 2, Smith, Trenholme, Lafleur, Barron Class 3—Whillans, Rielle, Clipsham, Martin, Stirling, Stewart, Morin, McKillop, †Currie, †Fuller, Shirriff, Thomas,

Fraser, Richarson J. S. Barber, Westlake, Richarson A. W.

## METEOROLOGY.

Class 1, McClure, Stevens Class 2, Nelson Class 3, None.

## MORRIN COLLEGE.

## INTERMEDIATE EXAMINATION.

Greek—Class 1, Duclos.

Latin—Class 1, Duclos.

Mathematics—Class 1, Duclos.

Logic—Class 1, Duclos.

English Literature—Class 1, Duclos.

French—Class 1, Duclos Class 2, none Class 3, none.

## ST. FRANCIS COLLEGE.

## INTERMEDIATE EXAMINATION.

Greek—Class 1, none Class 2, Pritchard, Ramsay.

Latin—Class 1, none Class 2, Pritchard Class 3, Ramsay

Mathematics—Class 1, none Class 2, Pritchard Class 3, Ramsay.

Logic—Class 1, none Class 2, Pritchard Class 3, Ramsay.

English Literature—Class 1, none Class 2 Pritchard, Ramsay.

French—Class 1, none Class 2, none Class 3, Ramsay.

The graduates for the degree of B. A., were presented by Dr. Leach, and the Registrar having administered the affirmation to the Graduating class, the degree was conferred by the Principal.

M. Campbell Lane, of this city, read the valedictory, in which he referred to the advantages secured by a college education, spoke in the highest terms of Professor Moyses, and in referring to the ladies, expressed pleasure at the efforts made to open the colleges to them, and said that they exercised a very great, though indirect influence over the studies of the graduates.

Professor Moyses, B. A., in his address, remarked on the latest extensions of University work in England, and discussed the applicability of some of those extensions, referring with pleasure to the successes attending in the efforts for the higher education of women.

At the clos of Professor Moyses's address, the Dean, referring to the list above published, said that the candidates having performed all the exercises for the degree MA., and L. L. D., the Registrar called upon them to sign the register, and the degree was conferred.

Thos. L. McLeod, Master of Engineering, read the lists of passing, honours and standing, and Scott exhibition in Applied Science, as follows:

## FACULTY OF APPLIED SCIENCE.

## THIRD YEAR.

John S. O'Dwyer, Scott Exhibition for Session 1878-79; Wm. W. H. Smith, Prize for Technical Subjects and Mathematics; John S. O'Dwyer, Second Rank Honours in Natural Science. Prize for Technical Subjects.

Passed the Sessional Examination—O'Dwyer, Skaife,

Dudderidge. Civil Engineering ; Smith, Mechanical Engineering ; Robertson, Mining Engineer.

SECOND YEAR.

Thos. Drummond, Special Prize in Sanitary Engineering.

Passed the Sessional Examination—Archbald, Drummond, Richard, Busteed, Bolton, Collins.

FIRST YEAR.

Richard Green, Prize for Mathematics and Chemistry. Passed the Sessional Examinations—Green, Low, Stephen, Waddell, Foster, Burland, Gnædinger.

STANDING IN SPECIAL SUBJECTS.

DESCRIPTIVE GEOMETRY.

Third Year, Civil and Mechanical Engineering—Class 1, Smith. Class 2, Dudderidge, Skaife, O'Dwyer. Class 3, None.

Mining Engineering—Class 1, None. Class 2, Robertson. Class 3, None.

Second Year—Class 1, Richard. Class 2, Collins. Class 3, Busteed and Drummond, equal ; Bolton, Archbald, Waddell.

FREEHAND DRAWING.

First Year—Class 1, Foster, Low and Waddell, equal ; Green, Stephen. Class 3, Gnædinger.

SURVEYING.

Third Year—Class 1, O'Dwyer. Class 2, Dudderidge and Skaife, equal. Class 3, None.

Second Year—Class 1, Busteed, Drummond. Class 2, Archbald, Collins and Richard, equal. Class 3, Morkill, Bolton and Waddell, equal.

PRACTICAL ASTRONOMY.

Third Year—Class 1, O'Dwyer. Class 2, Skaife. Class 3, Dudderidge.

MATERIALS.

Third Year—Class 1, O'Dwyer and Skaife, equal ; Smith. Class 2, Dudderidge.

Second Year—Class 1, Drummond, Busteed. Class 2, Waddell, Archbald, Bolton and Collins, equal. Class 3, Richard.

APPLIED MECHANICS.

Third Year—Class 1, O'Dwyer, Wm. H. C. Smith. Class 2, W. Skaife. Class 3, Robertson, Dudderidge.

THE CONSTRUCTION OF WALLS AND DAMS FOR RETAINING WATER (*Essay*).

Third Year—Class 1, W. Skaife, O'Dwyer. Class 2, Dudderidge. Class 3, None.

THE SECTIONAL FORMS OF SEWERS (*Essay*).

Second Year—Class 1, Drummond, R. W. Waddell. Class 2, Busteed, Archbald, Bolton, Richard. Class 3, none.

SANITARY ENGINEERING.

Third Year—Class 1, O'Dwyer, Skalfe, Class 2, none. Class 3, Dudderidge.

Second Year—Class 1, Drummond. Class 2, Busteed, Archbald, R. W. Waddell, Bolton. Class 3, Collins and Richard, equal ; Morkill.

GEOMETRY OF MACHINERY.

Third Year—Class 1, none. Class 2, Wm. H. C. Smith. Class 3, none.

Second Year—Class 1, Drummond. Class 2, Archbald, Richard, Waddell, Busteed, Bolton. Class 3, Collins.

MECHANICAL WORK.

Third Year—Class 1, Wm. H. C. Smith. Class 2, none. Class 3, none.

SCREW-CUTTING (*Essay*).

Third Year—Class 1, Wm. H. G. Smith. Class 2, none. Class 3, none.

AGGREGATE CLASS LIST (PROFESSIONAL SUBJECTS.)

Third Year, Civil Engineering—Class 1, O'Dwyer. Class 2, W. Skalfe. Class 3, Dudderidge.

Second Year, Civil Engineering—Class 1, Drummond. Class 2, Busteed and Richard, equal ; Archbald, Waddell. Class 3, Bolton, Collins.

MECHANICAL ENGINEERING.

Third Year—Class 1, Wm. H. C. Smith. Class 2, none. Class 3, none.

MINING ENGINEERING.

Third Year—Class 1, none. Class 2, none. Class 3, Robertson.

MATHEMATICS.

Third Year—Class 1, Smith. Class 2, none. Class 3, O'Dwyer, Skalfe.

Second Year—Class 1, none. Class 2, Drummond, Bolton. Class 3, Collins, Richard, Archbald, Busteed.

First year—Class 1, Green. Class 2, Stephen, Low, Waddell, Burland. Class 3, Foster, Gnædinger.

MATHEMATICAL PHYSICS.

Third Year—Class 1, Smith. Class 2, O'Dwyer, Robertson. Class 3, Skalfe.

Second Year—Class 1, none. Class 2, Archibald Class 3, Drummond, Morkill, Collins.

EXPERIMENTAL PHYSICS.

Third Year—Class 1, Robertson, Smith. Class 2, none. Class 3, Skalfe, O'Dwyer, Rudderidge.

Second Year—Class 1, Archibald, Morkill. Class 2, none. Class 3, Busteed, Richard, Collins ; Bolton and Drummond, equal ; Waddell.

GEOLOGY.

Third Year—Class 1, none. Class 2, O'Dwyer, Robertson. Class 3, Skalfe, Dudderidge.

## ZOOLOGY.

Second Year—Class 1, none. Class 2, Bolton, Busteed, Waddell. Class 3, Drummond, Archbald, Collins, Mor-kill, Richard.

## ANALYTICAL CHEMISTRY.

Third Year—Class 1, none. Class 2, None. Class 3, Robertson.

## CHEMISTRY.

First Year—Class 1, Green, Low, Stephen. Class 2, Waddell. Class 3, Drummond, Burland, Skalfe, F. Hague, Foster.

## ENGLISH.

First Year—Class 1, none. Class 2, Low, F. Hague, Green, Stephen, Waddell, Burland. Class 3, Foster, Skalfe, Gnædinger.

## FRENCH.

Third Year—Class 1, W. Skalfe. Class 2, O'Dwyer. Class 3, Wm. H. C. Smith.

Second Year—Class 1, none. Class 2, Bolton. Class 3, Richard, Archbald.

## GERMAN.

Third Year—Class 1, none. Class 2, none. Class 3, Dudderidge and Skalfe, equal; Robertson.

Second Year—Class 1, none. Class 2, none. Class 3, Busteed.

Third Year—Class 1, none. Class 2, none. Class 3, Gnædinger.

The Principal announced the following degrees *ad eundem* and *honoris causa*, granted by Corporation:—

The degrees of M. A. *ad eundem* to Rev. James Roy, M. A., of Montreal, and to George Dickson M. A., Principal of the Collegiate Institute, Hamilton.

The honorary degree of LL. D. to Francis Parkman, M. A., of Boston, and to Rev. John Jenkins, D. D., of Montreal.

In connection with the degree granted to Mr. Parkman, reference was made to his large and valuable contributions to the literature of early Canadian history, and in connection with that to Dr. Jenkins to his eminent services to education in this country, and more especially to his large share, in the capacity of Chairman of the Board of Protestant Commissioners of Schools, in building up the school system of this city, of which the citizens are so justly proud and which is second to none.

The degrees being conferred.

The Hon. Gedeon Ouimet, Minister of Public Instruction in this Province, was invited by the Chancellor to address the graduates and students.

The following appropriate Latin address was then delivered by the Hon. Mr. Ouimet, Superintendent of Public Instruction:—

*Domine Chancellerie, Domini Præses, Professores, Doctores et alii Conventus socii, universitatisque alumni.*

Pergratum mihi est vobiscum hodie adesse et letor, benignâ vestrâ invitatione acceptâ, partes quantumvis parvas in rebus hujusce conventus habere.

Breviter loquar, audire magis quam audiri cupio, quia hucusque tali celebrationi quâ annus academicus vester clauditur nunquam interfui.

De hac ipsâ die vobis omnibus imo corde gratulor:

tibi, domine Chancellerie, eoquod in his ceremoniis dux, hujus Universitatis roboris ac vigoris testimoniorum perpetuitatem videas, quippe qui inter eorum primos qui, ab initio usque ad hanc diem, ad Universitatem McGill promovendam se contulerunt, laboraveris; vobis, doctissimi, professores et studiosissimi alumni, eo quod anni scholastici laboribus perfuncti, otio haud immerito fruituri sitis; vobis etiam, Baccalaurei et Artium Magistri hodie creati, quod debitis honoribus academicis cumulati, inter civis vestros mox versabimini ad lumen doctrinæ et scientiæ diffundendum et ad exemplum virtutis et fidei in omnium conspectu constanter exhibendum.

Nihilominus, oh! novi Baccalaurei et Artium Magistri, oro et postulo ne finem curriculae Academicæ existimetis esse studiorum limitem extremum quum reverâ, ultra laboris difficilius initium non progressissetis.

Honores à vobis tanto cum sudore comparati novum et vehemens incitamentum esse debent, ad ignorantiam repellendam, ad vitia superanda, et ad malos mores compescendos.

Juvenes studiosissimi, quos nunc alloquor, mihi in votis est, ut omni vitæ tempore felices sitis, hominum laudem merentes, patriæ amorem excolentes, sed estote præsertim—quod cæteris omnibus bonis melius est—Deo optimo favente, cunctis virtutibus præditi, et beneficiis divinis constanter ornati.

Hoc sane modo, lumina Almæ matris vestræ dereliquentes, viam optimam et auxilium potentissimum invenietis, dummodo tamen eorum consilia, præcepta et exemplum qui ad hanc usque diem Magistri vestri fuerunt, memoriâ et universâ agendi ratione sedulo teneatis. Valet.

30 Aprilis 1879.

*Mr. Chancellor, Messrs. Principal, Professors, and other members of Convocation, Alumni of the University:*

It affords me much gratification to be present with you on this occasion; and I am glad to appear before you, in response to your courteous invitation, and to take some part in the proceedings by which your celebrate convocation day and close your collegiate year.

This being the first opportunity which I have enjoyed of attending your annual celebration, I shall not occupy much of your time in addressing you, being naturally desirous, under the circumstances, to be more of a listener to others, and an observer, than a speaker.

Permit me then to advert, in the first place, to the sentiments with which I cannot help regarding the occasion itself. This day is one whose advent may well be, to you all, a special cause for rejoicing—to you, Mr. Chancellor, because, presiding over its ceremonies in virtue of your high academical office, you witness, anew, evidence of the unimpaired vitality and vigor of an institution of learning which owes not a little to your own services and enlightened efforts, exerted, I believe, in its behalf during the greater portion of the period which has elapsed since its foundation. The ceremonies themselves strike my mind as being very important in their tendency, and I cannot help remarking that a strict adherence to them is worthy to be perpetually conserved, since they bring prominently into view, from year to year, the results of much valuable work successfully performed within the College walls—done out of sight—as it were, and at the same time furnish to an appreciating public an opportunity of encouraging that work, as well as the objects of University education generally. It must be, sir, to you a very gratifying thing to witness such proofs

of the enduring and ever increasing success of your handiwork.

To you, Messrs. Principal and Professors, it must be no less gratifying to find yourselves again in the act of sending forth a *brigade* of young men into society, upon whose well-being, their training and instruction under you is sure to tell with an effect proportional to their numbers. I say *brigade*, because, although by their avocations they must necessarily be separated, their influence, inspired from one common source, must unceasingly operate upon society, just the same as if it were that of a united band engaged in the battle of life.

I ought, perhaps, also to congratulate the other members of Convocation upon what is here passing to-day. You, gentlemen, having already experienced the value to you of University training and culture, cannot but rejoice in seeing that your ranks and force in the community, and especially in the several professions, are about to be recruited and extended by the allies you will presently have in the younger men, who, this day, receive their academical degrees and honours. But I must forbear to dwell on these points, that there may be time left for uttering a few words of encouragement to those young men themselves, as well as to those who, now in the position of alumni, are following in their footsteps. May you all prosper in the new life you are about to enter; and, in order that you may do so, I am confident that your success will mainly depend upon your faithful observance of the precepts and example of the men whose paternal charge you are about to leave. Whatever your respective attainments may be, and that they are in many cases worthy of admiration, witness the honors which have been showered on you this day—do not leave these academical precincts under the impression that you have little or nothing more to acquire in the way of learning. You will have done well, if among your attainments, the principal one be an aptitude for practising the best and most certain methods of increasing a given stock of knowledge upon any subject to which you may hereafter chose to devote your attention.

And to you, young gentlemen, who are Alumni, I would say that I heartily congratulate you upon the advent of your holidays. The members of convocation, and your learned Preceptors, will, I hope, excuse my seizing upon such a sentiment as grounds upon which to express congratulation. The oldest among us were once young, and neither can nor do forget that the commencement of the long vacation was always, after all, the most joyous epoch of academical life.

I ought, perhaps, before closing my remarks, to advert more particularly to the *advantages* of university education and to express my views thereon with special reference to the future of our young country—to cast an eye forward to the time which *must* eventually come, when, in the interest of our community, there ought not to be found wanting the services of men of the highest culture and not inferior, in any respect, to the most accomplished men of other countries—to refer to the necessity of maintaining a high standard in our highest seats of learning in order to enhance to the utmost, the character of our professions, the qualifications of our teachers of all grades, the efficiency of our schools. Nor do I make the allusions with the idea that anything I could say would be of a nature to afford instruction to the members of this learned body, but merely to hint that I am in sympathy with you as regards all such topics, I can only say, in conclusion, that I wish all success to McGill University, and I beg of the Convocation to accept my assurance that in what ever respect,

in the position which I have the honor to occupy in connection with public education in this Province, my cooperation can be made useful, I shall always be ready and most happy to exert it.

The Hon. P. J. O. Chauveau, ex-Superintendent of Education, next spoke. He referred with gratification to the association he had formerly had with McGill University. He admired the spirit of enterprise and earnestness with which the Governors of this University had devoted themselves to the cultivation of knowledge in so many different branches. Reference had been made to sectarian Universities; he was a member of three Universities, two of which were sectarian, and of one of these he then wore the costume. Sectarian institutions were not of choice but of necessity. Although a Professor of Roman Law, he had found that necessity knows no law. He did not object to institutions disagreeing so long as they agreed to disagree for the purpose of agreeing. The speaker created a good deal of amusement by saying, that, as his successor in office (Mr. Ouimet) had spoken so eloquently in French and Latin, there was nothing left for him to do by way of originality than to come out with the only verses in German that had ever succeeded in mastering. [Laughter.] He proceeded to read the quotation, and was greeted with much applause on resuming his seat.

The Vice Chancellor read his report of the past session, referring particularly to the improvements made, and to which reference will hereafter be made.

Tho Rev. J. F. Stevenson, L. L. B., closed the meeting by pronouncing the Benediction.

#### THE DINNER.

The annual dinner of the Graduates' Society, a custom that is followed out in all well-established Universities in other countries, is one that is carried out to the fullest extent by the passed men of old McGill. Certainly, our University cannot as yet boast of its own dining hall, wherein might be held the annual dinner, as those of Oxford or Cambridge, but, if the hall is wanting, the goodfellowship that exists among the members of McGill is as strong and hearty as ever existed among those who hail as their *Alma Mater* the Universities of the Motherland.

The McGill dinner this year was, perhaps, possessed of more importance than former ones. Among the guests were many of the most eminent men of the Dominion and the United States. About eight o'clock some 100 or 120 gentlemen were seated round the table in the ladies' dining room of the Windsor. The scene was a pleasant one. Gray-headed *savants* were chatting and joking as lively as the beardless young graduate who had had the good fortune not to get "ploughed." It was, certainly, in every sense of the word, a friendly brotherhood of scholars. There were there men who had passed the best years of their life in spreading knowledge, and who had the satisfaction of seeing round them their pupils, one and all standing high in the ranks of the several professions, and doing honour to their *Alma Mater*.

We are very sorry that want of space precludes our giving more than a brief notice of the many eloquent speeches that were made during the evening, both in English and French. Many of the younger graduates, in their remarks, displayed high oratorical abilities that bids fair to some day place them in very high positions in the councils of the country.

Mr. J. J. Maclaren, Q. C., President of the Graduates' Society, acted as Chairman, having on his right Prin-

principal Dawson, and on his left Hon. G. Ouimet. Messrs. R. A. Ramsay and Dr. Osler as Vice-Chairmen. During the discussion of the *menu*, which was a very fine one, some fair music was played by a string band, stationed in an ante-chamber. After due justice had been done to the choice *viands*, the Chairman called the meeting to order, and in a few brief, but well selected remarks, gave the first toast of the evening—

"The Queen"—The toast was received with loud cheers and the singing of the National Anthem.

"The Governor General" was the next toast, and was warmly received.

The third toast—"The Founder," called forth a warm eulogium from the Chairman to the memory of the late Mr. McGill. The toast was drunk in solemn silence.

Letters of apology for non-attendance were received by the Secretary from His Excellency the Marquis of Lorne, Hon. Ed. Blake, Professor Elliott, of Harvard, U. S., Hon. Mr. Laurier, and many other distinguished personages.

The toast of the "University" was replied to by Dr. Dawson and Hon. Senator Brouse. Both gentlemen paid a high tribute to the good work that old McGill was doing for the youth of the Dominion, and for those of our kin who came to it from the United States.

"The Chancellor and Governors" was replied to in a most eloquent speech by Sir A. T. Galt.

"The Sister Universities" called forth able replies from Hon. Pierre Chauveau and Dr. Murray.

The Rector of the High School proposed. "The Superintendent and Council of Public Instruction." The worthy Doctor, in the course of his remarks, alluded to the great facilities that were given in the Dominion for educational purposes. The Hon. G. Ouimet and W. W. Lynch, M. P. P., replied to the toast in most gratifying terms.

"The Press" was proposed by Mr. D. Macmaster, who alluded to its great power, and also to the fact that it numbered in its ranks some of the ablest University men. Mr. Russ Wood Huntington ably replied on behalf of his *confreres*.

"The Ladies" received hearty cheers, and Dr. Ritchie made a pleasing and and amusing reply on their behalf.

Volunteer toasts were now in order, and, with old College songs and eloquent speeches, the McGill Graduates' annual dinner was carried on well into the morning, when one and all separated with a hearty wish for the success and prosperity of their *Alma Mater*.

#### **Report of the Principal—Remarks by Professor Moyses on the Furtherance of Higher Education in Canada.**

In our report of the annual meeting on Thursday of the Convocation of McGill College for the conferring of degrees and honours in the Faculties of Art and Applied Science, we were compelled, by pressure of space, simply to refer to the report of the Principal and to the interesting address of Professor Moyses, both of which we now give:—

The Principal then reported on the history of the University in the past year, in history as follows: The number of students in the McGill College, in the Session just closed, was 419, and in the affiliated Colleges of Morrin, Quebec, and St. Francis, Richmond, 55, or 474 in all. The number of degrees in Course conferred at the two meetings of Convocation was 74, and it is to be observed in the present year no graduates present themselves in Applied Science

in consequence of the Course in that Faculty being extended to four years. In the two Faculties more especially represented in this meeting of Convocation important changes have occurred. The Faculty of Arts has been strengthened by the appointment of Professor Moyses, from whose labours we anticipate a great extension and improvement of our work in English Literature and History. For the Faculty of Applied Science we have secured the valuable services of Lecturer Chandler in the special mathematical work. As a distinct Faculty and with its course of study extended to four years, the late Department of Applied Science has completed its first session. As might have been anticipated, it has experienced some of the difficulties incident to the first working of new machinery, but these have been overcome, and next year we hope for greater success and an enlarged number of students. For the full and satisfactory development of this Faculty, we must, however, look forward to the time, I trust not distant, when it shall possess a building of its own. Improvements and additions, which will be found noticed in the printed report of the University, have been made in the Library, Museum, Apparatus and Gymnasium. The subject of extending and rendering more definite the requirements for the advanced degrees of the University has been attracting the attention of the Corporation and the Faculties, and it is hoped that all the members of the University will cheerfully acquiesce in such measures as may be adopted towards that end. Among changes leading to closer co-operation with other educational institutions and to the extension of the influence of the University, may be named the enactment of regulations respecting affiliation of schools with reference to matriculation, the re-affiliation of St. Francis College, which sends up this year successful candidates for the intermediate examinations, then introducing the University of Bishop's College into alliance with this University in the matter of the school examinations. The Principal then alluded to the evils arising from injudicious local legislation, with regard to professional degrees, and to the importance of introducing Dominion Boards of Registration in medicine and other important professions, so as to open up to our young men a Dominion career, and to give free scope to the development of professional education, and to secure, if possible, reciprocity with the Mother Country. In conclusion, he alluded to the honour done to the University by His Excellency the Governor-General and Her Royal Highness the Princess Louise in visiting the University, and in the interest which they had been pleased to express in its work.

Prof. Moyses, in his address to the Chairman and Graduates, said:—In the short time at my disposal today, I propose to make a few remarks on the latest extensions of University work in England, and to discuss the applicability of some of those extensions to the furtherance of higher education in Canada. I speak of England, because it is evident, at a glance, that Canada, imitates and wishes to imitate English methods of teaching in preference to those of the United States. Quite within the memory of the present generation the Universities of Oxford and Cambridge stood isolated, as it were, from the progressive intellectual life of the nation. They were recognized everywhere as institutions whose very age entitled them to reverence, recognized, too, as embodying all that was highest in "culture and scholarship." But a vast section of the teaching power of England viewed them from afar, considering them them simply as feeders of the Church and the few large public schools, or as a convenient, not to say fashionable, resort for the sons of the noble and the wealthy. In

short, with broad scholastic work they had little to do. Yet, that work had been growing apace and its fruits were claiming acknowledgment at worthy hands. Men who were able to forecast the education future of the great middle class saw that the old Universities could do a great and noble work by stepping forward to meet the wants of schools whose curriculum implied more than a smattering of the subjects they taught. Bishop Temple and Oxford led the way, and Cambridge soon followed in their steps. Their ouvertures were welcome for they were opportune. Give us, said the schoolmasters, give us a scheme of school work, examine our boys in that work, and those who have acquitted themselves creditably send into the world with your testimony that they have attained some degree of proficiency in the subjects you have selected. This was done, and the result was evident from the first; it may be summed up in one word, *success*. To-day the whole of England is thickly dotted with examination centres, and from the Land's End to Berwick there is scarcely a school of repute which does not present every year some of its brightest lads at the Oxford and Cambridge Locals as they are familiarly called. So rapidly has this wise and great movement progressed that last year not less than one thousand six hundred and seventy boys and six hundred and thirty girls were examined by Oxford, and three thousand and two boys and one thousand six hundred and seventy-nine girls by Cambridge. The good which these examinations have done to the early education of young England is incalculable, the objections which might be made to them in that they lead to cramming, and to an implicit reliance on that educational bugbear, the text-book, are far outweighed by the thoroughness of the instruction as compared with the teaching in vogue when England was entrusting the children of her poorer classes to the hands of a Squeers, whose picture, as drawn by our great novelist, is not a caricature but a likeness.

New it is this part of the field of education which I believe can be worked with great success by Canada. Here, as in England, we a University, should be constantly checking our own work and playing our important part in the reflex action which is the vital principle of the scheme. We should in very possible way be kept abreast with the times, should foster to the utmost of our power those local centres of much promise, should welcome the men who demand and opportunity of showing the results of their teaching, remembering that they are in many cases scions of the University doing their best to present to their *Alma Mater* for her commendation those, in many instances likely to follow the career of their first instructors. But the parallelism between the Mother Country and the Dominion does not end here; in both the higher education of women has come, or is coming, to the front. No longer is the censure of Slade in the *Spectator* true. There he tells the English that the general mistake they make in educating their children is that in their daughters they take care of their persons and neglect their minds; in their sons they are so intent upon adorning their minds that they wholly neglect their bodies. No longer is it time for the University of London, called into existence by the sectarian narrowness of Oxford and Cambridge—narrowness so abiding that but ten years have elapsed since Cambridge fellowships were bestowed upon Dissenters—the University of London set on foot examinations for women whose aim was to promote a thorough knowledge of such subjects as were taught in the best schools, and she awarded special certificates of higher proficiency to those who passed a subsequent and more difficult examination in specified branches of learning.

Cambridge has done a similar thing. She has established throughout the land higher examinations whose specialities are some guarantee of thoroughness, has erected almost under the shades of her colleges, institutions, Girton and Merton, where her professors teach ladies the advanced parts of the subjects likely to be of use to them in after life, and has found that when the best lady-students were submitted to the mathematical sciences examinations, some of them would have borne the distinguished title, of *wrangler*, had they been admitted to degrees in Arts. I must not omit to mention the memorable and stormy debate in the London University Convocation of April, 1878, when a large majority declared themselves in favour of throwing open the courses of the University to women. Consequent upon this University-College announced her intention of establishing mixed classes in the subjects required for the London degree, and this step has been crowned with extraordinary success. I believe that the McGill University has just taken an interest in this branch of education and has framed a scheme akin to the germs of those I have been mentioning.

Whether development will ensue here, remains to be seen, but many of our efforts will be paralysed unless centres of instruction are established where the specified subjects are rightly taught. If we trust to candidates preparing themselves privately we may be doing well, but we might do better. There is just one cause for anxiety in regard to the educational future of Canada—the multiplication of Universities. It will be no happy day when the Canadians, like the Americans, persuade themselves that one swallow makes a summer or in other words that one eminent man makes a University. England, with all her intellectual wealth, is loath to have even one new University established in her midst. It was only the other day that the Owens's College, Manchester, a provincial institution second to none in England, asserted that she was entitled to be raised to the rank of Oxford and Cambridge and London. Her patrons pointed with pride to her magnificent buildings, her wealth of apparatus, her highly competent staff of Professors, almost every one of whom has attained European eminence. They argued that Owens was fully able to impart the highest instruction and to grant degrees to her deserving students. But the thinking part of the nation looked with disfavour on the scheme. Leeds, Sheffield, Birmingham at once protested and said they had Colleges which would soon become what Owens then was; that to favour Manchester would be to do them an injustice. Let us, they said, let us join to found a Northern University. Yet valid objections to this are easily found. Unless Universities are absolutely needed, University rivalry is carried on at the expense of brains on the part of over-worked students. Indeed, I think I am right in saying that Owens openly avowed an intention of fixing a standard higher than that of London. Again, of many Universities some soon fall into the background, soon become enervated and produce from time to time batches of very indifferent graduates. Did I need any confirmation of the misery likely to ensue from superfluous Universities, I should find it in the outcry now being raised against the many institutions granting diplomas in medicine and surgery, diplomas very different in value.

There is scarcely a medical man of note in England who has not pronounced himself in favour of amalgamation and of a uniform standard; but "vested interests" stand in the way of achievement. And thus the boon, which worthy medical students would gladly hail, is as yet denied to them. Canadian legislation, too, seems to be firmly impressed with the idea that

the fruits of medical science should be fettered by such things as Provincial boundaries, and that rivers and mountain chains should be all-availing obstacles to him who desires to profit by and to practise the ripest knowledge of the times. I am tempted to say just a word concerning sectarian Universities. In England they have had their day. It is a matter of congratulation that the English mind at last sees that sectarianism has no element of universality about it, no right to found for itself a University. The judgment of thoughtful Englishmen has declared of the sectarian Colleges, which must of necessity exist, and which are entitled to much respect, that only such subjects as can be said to belong to them in common are fit matter for Universities to enforce on all alike. A word to the Graduates of to-day and I have done. Gentlemen, from the time when you entered on your courses of study at McGill you have looked forward to this occasion as the crowning of all your hopes. I can easily imagine the feelings with which you regarded the future. The world seems at your very feet, and you ask yourselves what more you can do now that the goal of your ambition has been reached. You will, however, find that world hard to overcome, and the goal but a passing illusion. When the realities of life face you in sober earnest you will learn that the relation in which you stood to McGill was not one sided, that you were nother passive victims released on a happy day of triumph. Do not believe that the sentiment I heard expressed by one of you when he had finished his examinational work is a true one. He had, written the last pen-stroke for McGill, he said. Nay, rather should it have been in McGill. You must, indeed, be wanting in gratitude if you look upon this University as a mental torture-house from which you have at length escaped. Your education is but just begun, believe me; it should end only with your lives. The University will expect you to maintain her fair fame, and, wherever you may be placed, she believes that some of you will not forget this, but will remember to repay her care by good honest work, work which she may at no distant day herself take in hand and make as honourable and honoured as that which you have just wrought. What you are destined to become is, in some measure, due to the training you have received within these walls. But the aim of that training should have been not to cram into you during four short years a large portion of the sum-total of human knowledge, not to make those men who cared little for books mere mechanical readers for the rest of their lives; its aim should have been to make you *think* and *think rightly*; to make you discern the value of that sweetness and light we have heard so much about of late years; in short, to give you a keen appreciation of the golden worth of culture. And perhaps I shall not be wrong if I affirm that you will reccho the words of a man whose mind was eminently healthy, of a man who did his full share of life's toil, of a man whose character needs no meed of praise—I speak of Sir Walter Scott—and that you will tell the graduating class of 1880, as you leave them, how much you feel the truth of his sentiments when he speaks of his University career in words like these:—"If it should ever fall to the lot of youth to peruse these pages, let such a reader remember that it is with the deepest regret that I recollect in my manhood the opportunities of learning which I neglected in my youth; that, through every part of my literary career, I have felt pinched and hampered by my own ignorance, and that I would at this moment give half the reputation I have had the good fortune to acquire, if, by doing so, I could rest the remaining part upon a sound foundation of learning and science."

## MISCELLANY.

*Practical lessons in the Kindergarten.*—The nurseries and other picture-books are all being gathered up, for it is now time for the Kindergarten and school, because children from four to ten years of age all unite in the morning exercises. The bell rings and all rise to sing, except one very small boy, who has only been a day or two, and has not yet experienced the home feeling of wishing to be one with the rest. First they sing their little morning prayers:

"We meet again in gladness," or  
 "Now I awake and see the light,  
 'Tis God who kept us through the night,  
 To him I lift my thoughts in prayer,  
 And thank Him for His watchful care,  
 Oh, keep me Lord, throughout this day,  
 And drive all naughty thoughts away."

Then:

"Happy every morning,  
 When the hour comes round,  
 To the Kindergarten,  
 Flocks of children bound,  
 La la la, la la la, la la la.  
 Shaking hands together,  
 Pleased to learn, and spending  
 Not the time in vain. La la la, etc."

The Kindergarten now calls on each child to recite various verses, which all repeat in concert. As these verses were being taught, each one in turn has been carefully explained and associated in the children's mind by an example or story.

To day they learn: "The Lord loves a cheerful giver."

"But what has a little child to give?" Several children hold up their hands.

"Well, Eddie?" "We can give love." "Yes, certainly, the best gift of all."

"Lula?" "We can give kind words."

"Daisy?" "We can be sunshine." "That is right, dear child, how well you remember what I told you, when we were learning, 'Kind hearts are the gardens,' etc. Yes, you can be either a sunbeam, or bring darkness where you go, by being either good and kind, or bad-tempered and selfish. Who wants to give sunshine?" All the hands are up, some children even hop up from their seats. Well, then, let us sing it once. All sing, standing up:

"Kind hearts are the garden,  
 Kind thoughts are the roots,  
 Kind words are the flowers,  
 Kind deeds are the fruits."

"Love is the bright sunshine  
 That warms into life,  
 For only in darkness  
 Grow hatred and strife."

"Take care of your garden,  
 And keep it from weeds,  
 Fill, fill it with flowers,  
 Kinds words and kind deeds."

What will happen to mamma, if you give her sunshine?"

"She will be happy," Willie replies.

"Yes, she will be happy and will live longer, than if she is worried all time by her selfish little boy or girl."

"What does Addie wish to tell me." "We can make Christmas presents."

Yes, indeed, you can give your time and the skill of your little fingers, and here in the Kindergarten you shall learn how to make up all your work to be some pretty and useful present for your friends.

But now I must tell you what happened to little Benjamin, a few years ago, who was taken very sick and could not come to my Kindergarten for quite a long time. His father called one day to tell me how sick his little boy was, said: "I am afraid he never will get well again." He could only stay a few minutes; when he was gettin up to go, I asked the children, if they would like to send something to little sick Bennie. "Yes, yes, let him have my grapes, or my weaving." "No, he is too sick to enjoy those."

One little pet, Gertie J., only five years old, held up her hand. "What does Gertie wish to give to poor sick Bennie." "I can pray for him." So you shall; let us all remember him this evening in our prayers. Not long after that Benjamin's papa called expressly to tell the children that God has been pleased to answer their prayer, and that his little boy would soon be able to come to the Kindergarten again.

The verses they recited were not all Bible texts; these were some of them:

Honor thy father and thy mother, that thy days, etc.

A soft answer turneth away wrath, but grievous words stir up anger.

If you are angry, count ten before you speak; if very angry, count one hundred.

Suffer little children to come unto me, etc.

All things work together for good, to those who love the Lord.

He who ruleth his own spirit, is greater than he who ruleth a city.

Never trouble another for what you can do yourself.

Never put off for to-morrow what you can do to-day.

Bless the Lord, oh my soul, and forget not all His mercies.

The sluggard says, there is a lion in the street, I shall be slain.

("Georgie, what is meant by a lion?" An excuse!)

Do to others as you would, etc. He who digs a pit for others, etc.

But seek ye first the Kingdom of God and his righteousness, and all those things shall be added unto you.

Ask, and it shall be given unto you, seek, etc.

Not my will, but Thy will be done.

Thou shall not covet.

"The Lord loveth a cheerful giver," being the verse for this week to be learned.

The children were then asked if they remembered the last story told them, about the Lily, which was not grateful for God's many blessings. Two or three of the children told each a part of the following story:

#### "STORY OF THE LITTLE WHITE LILY."

Once there was a lovely little Lily looking gayly about in a fine garden, which stood in front of a house in New-York avenue. She was so lovely and smelled so sweet, she was petted by every one that saw her, and I am afraid she was getting spoiled by so much praise. She did not seem very cheerful and happy this morning, but looking up at the bright sunshine, she said: "This heat is terrible; I cannot bear it much longer. I do wish I never saw the sun again." "Good-by, little Lily," whispered the bright sunbeams, "we will leave, you do not want us any more," and away went the sun behind a dark cloud. A rainstorm was coming on, but before it began to rain, the wind blew and rocked the little Lily, harder than she liked. "Oh, this wind is so rude," she sighed, "I wish it would never blow any more." "Good-by, Lily," said the wind, "we will leave you, if you do not want us any more." And now it began to rain; the little Lily was not pleased with the rain either, but shaking her head, so that the water ran out of the pure white cup, she cried "Haven't we had rain enough yet? Do go away, rain, and never come back!" "Good-by, Lily," said the rain, "you need not have any more of me, unless you want it." As soon as it had finished raining, little Clara, who lived in the house to which Lily's garden belonged, stepped out to go to visit a little friend. "Oh, how sweet you smell," she said, and broke Lily off. Soon she spied her little friends coming to meet her, and she threw the Lily on the grass of the square, through which she was passing. The poor little flower began to shiver. "Oh! how cold I am, if the sun would only come and warm me a little." "Here I am, poor little thing, I'll forgive you, now that you are sorry for sending me away." The sun warmed her, but she still felt uncomfortable: "What shall I do for air, I cannot breathe," she sighed. The kind wind heard her complaint, and began to fan her white cheeks. She seemed to brighten up. "Oh, for some water, it is just what I need, or I shall surely die." A gentle shower began to fall, in answer to her wish, and she felt much refreshed, when Clara, with a whole party of children were coming by. "Why, there is my Lily, which I threw away." "Let me love it," "Let me love it," pleaded Emma, Clara's little friend. She took it to her home and placed it into a tall, white vase, where Lily lived for quite a long time, feeling very happy, and thinking how foolish and wicked it was to be discontented and not enjoy the blessings God had given her.

This is the manner, I understand, in which the moral and affectional element is cultivated and developed in the Kinder-

garten. Another time the children's attention is directed during their morning exercises towards observing God's wisdom in so wonderfully making their bodies, and they are asked what good they can do with their little hands, then what evil. They make amusing experiments with their fingers and find out how much one little finger depends upon the other. Then a sweet story follows, where each finger is made to tell what he saw, and is made to move so as to afford a good finger exercise, with the moral that little children must live to be helpful and peaceful with each other.

Mrs. LOUISE POLLOCK,

Principal K. G. Normal Institute, Washington, D. C.

—Prof. Huxley says one is constantly asked, when should scientific education be commenced? I should say, with the dawn of intelligence. A child seeks for information about matters of physical science as soon as it begins to talk. The first teaching it wants is an object lesson of one sort or another; and as soon as it is fit for systematic instruction of any kind, it is fit for a modicum of science.

#### An evening Game.

The play called "Who Wears the Ring?" is an elegant application of the principles involved in discovering a number fixed upon, and is a splendid way in which to pass an evening. The number of persons participating in the game should not exceed nine. One of them puts a ring on one of his fingers, and it is your object to discover, first, the wearer of the ring; second, the hand; third, the finger; fourth, the joint.

The company being seated in order, the persons must be numbered, 1, 2, 3, etc.; the thumb must be termed the first finger, the forefinger being the second; the joint nearest the extremity must be called the first joint; the right hand is one, and the left hand two.

The preliminaries having been arranged, leave the room in order that the ring may be placed unobserved by you. We will suppose that the third person has the ring on the right hand, third finger, and first joint; your object is to discover the figures 3,131.

Desire one of the company to perform secretly the following arithmetical operation:—

1. Double the number of the person who has the ring; in the case supposed this will produce..	6
2. Add 5.....	11
3. Multiply by 5.....	55
4. Add 10.....	65
5. Add the number of the hand.....	66
6. Multiply by 10.....	660
7. Add the number of the finger.....	663
8. Multiply by 10.....	6,630
9. Add the number of the joint.....	6,631
10. Add 35.....	6,666

He must apprise you of the figures now produced, 6,666; you will then in all cases subtract from it 3,535; in the present instance there will remain, 3,131, denoting the person No. 3, the hand No. 1, the finger No. 3, and the joint No. 1.

#### Sick room hints.

Enter and leave the room quietly.

Carry a cheerful face, and speak cheerful words.

If the sickness is serious, do not fall into gay and careless talk in the attempt to be cheerful.

Don't ask questions, and thus oblige the invalid to talk.

Talk about something outside, and not about the disease of the patient.

Tell the news, but not the list of the sick and dying.

If possible, carry in something to please the eye and relieve the monotony of the sick room—a flower, or even a picture which you can loan for a few days. Highly perfumed flowers, however, should never be carried into the sick room.

Some little delicacy to tempt the appetite may be well bestowed.

Stay only a few minutes at the longest, unless you can be of some help.

#### Poisons and Antidotes.

Acids.—These cause great heat and sensation of burning pain from the mouth down to the stomach. Remedies—Magnesia, soda, pearlash, or soap dissolved in water. Then use the stomach pump or emetic.

Alkalies.—Best remedy is vinegar.

Ammonia.—Remedy—Lemon juice or vinegar.

Alcohol.—First cleanse out the stomach by an emetic, then dash cold water on the head and give ammonia (spirits of hartshorn).

Arsenic.—In the first place evacuate the stomach, then give the white of eggs, lime water, or chalk and water, charcoal and the preparations of iron, particularly hydrate.

Lead, white lead, and sugar of lead.—Remedies—Alum, cathartic, such as castor oil and Epsom salts especially.

Charcoal.—In poisons by carbonic acid gas remove the patient to open air, dash cold water on the head and body and stimulate the nostrils and lungs by hartshorn, at the same time rubbing the chest briskly.

Corrosive Sublimate.—Give white of eggs freshly mixed with water, or give wheat flour and water or soap and water freely.

Creosote.—White of eggs and the emetics.

Belladonna (night henbane).—Give emetics, and then give plenty of water and vinegar or lemonade.

Mushrooms (when poisonous).—Give emetics, and then plenty of vinegar and water, with doses of ether if handy.

Nitrate of Silver (lunar caustic).—Give a strong solution of common salt, and then emetics.

Snake Bites, &c.—Apply immediately strong hartshorn, and take it internally: also give sweet oil and stimulants freely; apply a ligature right above the part bitten, and then apply a cupping glass.

Tartar Emetics.—Give large doses of tea made of galls, Peruvian bark, or white oak bark.

Verdigris.—Plenty of white of eggs and water.

White Vitriol.—Give the patient plenty of milk and water.

Opium.—First give a strong emetic of mustard and water, then strong coffee and acid drinks' dash cold water on the head.

Nux Vomica.—First emetics, then brandy.

Oxalic Acid (frequently mistaken for Epsom salts).—Remedies—Chalk, magnesia, or soap and water and other soothing drinks.

Prussic Acid.—When there is time administer chlorine in the shape of soda or lime. Hot brandy and water, hartshorn, and turpentine are also useful.

It would be well for every mother to paste the above on the inside of her medicine chest or closet. Children often tamper with medicine bottles, and we frequently hear of deaths caused by inadvertently swallowing poison. Many of the above remedies are old, but none the less effectual.

### Poisonous tin Plate.

The *Boston Journal of Chemistry*, after commenting upon the many hidden dangers that surround us in our daily life, goes on to say:—"Attention has recently been called to a new risk of chronic poisoning by the old enemy, lead. What we call 'tin' vessels—that is, sheet iron coated with tin—are in daily use in every household in the land. They are cheap, durable, and convenient, and have been considered perfectly safe for the thousand culinary purposes to which they are devoted. They are safe if the tin plate is honestly made, but unfortunately this is not always to be counted upon. Tin is comparatively cheap, but lead is cheaper, and an alloy of the two metals may be used in place of the dearer one with profit to the manufacturer, though with serious detriment to the user. The alloy is readily acted upon by acids, and salts of lead are thus introduced into food. The Michigan State Board of Health has lately been investigating this subject, having been led to do so by a letter from a physician who found that certain cases of what had been taken for chorea were really *paralysis agitans*, which could be traced to this kind of lead poisoning. Other cases were brought to light in which children had died of meningitis, fits, and paralytic affections, caused by milk kept in such vessels, the acid in the fluid having dissolved the lead. Malic, citric, and other fruit acids are of course quicker and more energetic in their action upon the pernicious alloy. The danger is the greater, because lead salts are cumulative poisons. The effect of one or two small doses may not be perceptible, infinitesimal doses, constantly repeated, will in the end prove injurious, if not fatal. Analysis of a large number of specimens of tin plate used in culinary articles showed the presence of an alloy with lead in almost every instance, and

often in large quantities. It is safe to assert that a large proportion of the tinned wares in the market are unfit for use on this account.

*Plants in the House.*—Mr. J. M. Anders, in the *American Naturalist* for December, 1878, shows that the transpiration from plants has an appreciable influence in modifying the humidity of the air of a room. This furnishes an additional reason than the æsthetic one for the cultivation of house plants, and is especially worthy of the consideration of invalids who are confined to the house, and of those of sedentary occupations.

*Ammonia in the Kitchen.*—The pantry shelves are getting grimy, or finger-marks around the door latches and knobs are looking dark and unsightly. For lack of time they are left day after day, for it is hard work to scour all the time, and it wears off the paint too. The husband keeps his bottle of oil, or perhaps a large can holds it, for he never stints in that. Now, suppose his wife has her bottle of spirits of ammonia to use; she takes her basin of water and a clean cloth, just puts on a few drops of the fluid and wipes off all the dirt; it is worth more than a half day's labour, and does not hurt the paint either. She could put a few drops in her dishwater, and see how easily the dishes could be cleaned; a few drops on a sponge would clean all the windows in the sitting-room, making them shine like crystal. It would take the stains off the teaspoons, too, and a teaspoonful in the mop pail would do more towards washing up the kitchen floor than ten pounds of elbow grease applied to the mop handle. A house-wife has just as much right to make her work easy and expeditious as her husband has. If she does not do it the fault is her own in a great measure.

—Count Arnim in his new pamphlet ascribes to the late M. Thiers the telling of a good story of Napoleon, which the ex-President used to illustrate a point respecting the Falk laws. A contractor on the field of Waterloo, noticing that the French army was falling to pieces, tried to revive the Emperor's spirits by telling him that the English had lost an enormous number of men. "Yes," was the prompt reply, "but I have lost the battle."

—*London Truth* tells this:—"A marine insurance case came before a distinguished judge during the recent sittings, the scene of the disaster which led to the litigation being Tub Harbour, Labrador. Lamentable to relate, his lordship was reduced to inquire of the learned counsel, "Where is Labrador?" To which that gentleman replied, "Labrador is the place where Tub Harbour is! What do the Civil Service Commissioners say to this?"

—It will make some middle-aged people feel very old to hear that the Princess Royal who was born within their remembrance, is on the point of becoming a grandmother. Her daughter, the Hereditary Princess of Saxe-Meiningen, is expecting her confinement next month: so that, if all goes well Her Majesty the Queen will be a great-grandmother before she is sixty. Up to this time no Queen of England has ever lived to see her great grandchildren; but Her Majesty may now reasonably hope to be a great-great-grandmother and to see her grandchildren's grandchildren.

—Says the *London Truth*:—"One day, as he was musing on these things in sore perplexity, he entered his wife's dressing-room and saw a box of pastilles on the table. The lid was marked "Lavender Drops." Mechanically Jenny's husband opened the box and put one or the pastilles in his mouth. They were large white things like *dragees*, but instantly John Armeroy had crunched one, his mouth was filled with undiluted alcohol of fearful strength. So again he had his wife's secret. She got drunk off these pastilles, specially prepared by a roguish chemist for persons like herself, and innocently styled "Lavender Drops."

—The Tendency of European military authorities is to abolish the distinctive uniforms of different regiments, and clothe all the men of each arm of the service in the same dress. Eight years ago there were thirty uniforms in the French army; now there are half a dozen. Bearskins and busbies the French have entirely discarded, and, owing to the scarcity of furs, their

example is likely to be soon followed by the British. Russia has lately abolished the queer head-dress of the Guards, and given a mere Kepi as head-dress to all the infantry of the line. Austria has abolished her Lancers, reduced the number of Hussar uniforms from twelve to one, and has done away with the white tunic of her infantry regiments. The English Household Cavalry are now unmatched in the world for the luxury of their accoutrements, and indeed all her cavalry present a very dashing appearance. They will probably soon be shorn of their fine feathers, on the score of thus obtaining greater efficiency at less cost. As for the drummers of the Guards' fife and drum band, the blue fleurs-de-lys on the white braid of their tunics symbolizes nothing less than the sovereignty which the British Crown claimed nominally over France until 1801. Seeing how sensitive our neighbours are, it is almost a wonder that no French ambassador has ever taken offense at these drummers' coats; though, to be sure, the "lilies of France" have ceased to be regarded as national emblems by the French since 1840.

## ADVERTISEMENTS.

### AMERICAN HEALTH PRIMERS.

EDITED BY W. W. KEEN, M. D.,

Fellow College Physicians, Philadelphia.

It is one of the chief merits of the Medical Profession in modern times that its members are in the fore-front of every movement to prevent disease. It is due to them that the Science of what has been happily called "Preventive Medicine" has its existence. Not only in large cities, but in every town and hamlet, the Doctor leads in every effort to eradicate the sources of disease. These efforts have been ably seconded by intelligent and public spirited citizens of many callings. The American Public Health Association and the Social Science Association, with their manifold and most useful influences, are organizations which have sprung from, and still further extend and reinforce, the efforts to improve the public health.

But the great mass of the public scarcely recognize the importance of such efforts, or, if they do, are ignorant of the facts of Anatomy, Physiology, and Hygiene, and of their practical application to the betterment of their health and the prevention of disease. Such knowledge does not come by nature. In most cases, in fact, it is a direct result of the most laborious research and the highest skill. Accordingly, it is the object of this series of American Health Primers to diffuse as widely and as cheaply as possible, among all classes, a knowledge of the elementary facts of Preventive Medicine, and the bearings and applications of the latest and best researches in every branch of Medical, and Hygienic Science. They are not intended (save incidentally) to assist in curing disease, but to teach people how to take care of themselves, their children, their pupils, and their employés.

The series is written from the American standpoint, and with especial reference to our Climate, Architecture, Legislation, and modes of Life; and in all these respects we differ materially from other nations, Sanitary Legislation especially, which in England has made such notable progress, has barely begun with us, and it is hoped that the American Health Primers may assist in developing a public sentiment favorable to proper sanitary laws, especially in our large cities.

The subjects selected are of vital and practical importance in every-day life. They are treated in as popular a style as is consistent with their nature, technical terms being avoided as far as practicable. Each volume, if the subject calls for it, will be fully illustrated, so that the text may be clearly and readily understood by any one heretofore entirely ignorant of the structure and functions of the body. The authors have been selected, with great care, and on account of special fitness, each for his subject, by reason of its previous careful study, either privately or as public teachers.

Dr. W. W. Keen has undertaken the supervision of the series as Editor, but it will be understood that he is not respon-

sible for the statements or opinions of the individual authors.

The following volumes are in press and will be issued about once a month.

- I.—HEARING, AND HOW TO KEEP IT, by CHARLES H. BURNETT, M. D., of Philadelphia, Surgeon in charge of the Philadelphia Dispensary for Diseases of the Ear, Aurist to the Presbyterian Hospital, etc.
- II.—LONG LIFE, AND HOW TO REACH IT, by J. G. RICHARDSON, M. D., of Philadelphia, Professor of Hygiene in the University of Pennsylvania, etc.
- III.—SEA AIR AND SEA BATHING, by WILLIAM S. FORBES, M. D., of Philada., Surgeon to the Episcopal Hospital, etc.
- IV.—THE SUMMER AND ITS DISEASES, by JAMES C. WILSON, M. D., of Philadelphia, Lecturer on Physical Diagnosis in Jefferson Medical College, etc.
- V.—EYESIGHT AND HOW TO CARE FOR IT, by GEORGE C. HARLAN, M. D., of Philada., Surgeon to the Wills (Eye) Hospital.
- VI.—THE THROAT AND THE VOICE, by J. SOLIS COHEN, M. D., of Philadelphia, Lecturer on Diseases of the Throat in Jefferson Medical College.
- VII.—THE WINTER AND ITS DANGERS, by HAMILTON OSGOOD, M. D., of Boston, Assistant Editor Boston Medical and Surgical Journal.
- VIII.—THE MOUTH AND THE TEETH, by J. W. WHITE, M. D., D. D. S., of Philadelphia, Editor of the Dental Cosmos.
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Other volumes are in preparation, including the following subjects: "PREVENTABLE DISEASE," "ACCIDENTS AND EMERGENCIES," "TOWNS WE LIVE IN," "DIET IN HEALTH AND DISEASE," "THE ART OF NURSING," "SCHOOL AND INDUSTRIAL HYGIENE," "MENTAL HYGIENE," etc., etc. They will be 16mo in size, neatly printed on tinted paper, and bound in paper covers. Price, 30 cents; flexible cloth, 50 cents.

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Of their work projected for the coming season, we have not room to speak in detail; it will suffice for the present to say that it is wide in range, including substantial and elegantly illustrated books, all in the line of the practical and useful, and fresh in character and treatment.

Their two juvenile magazines, *Wide Awake* and *Babyland*, are warmly welcomed in every part of the English-speaking world.

We advise any of our readers who desire to know more about these publications, to send to D. Lothrop & Co., Boston, for an illustrated catalogue.

All who visit their establishment, corner of Franklin and Hawley streets, will not only be courteously welcomed and entertained, but will have the pleasure of seeing one of the most spacious and attractive bookstores in the country.

**D. Lothrop & Co's Publications.**

The autumn and holiday list of D. Lothrop & Co. is peculiarly valuable and attractive, not only for the character of the publications it represents, but for the variety of subjects it covers, and for the elegant and substantial style in which the books it includes are brought out. The catalogue of the past and present works issued by this house numbers more than 700 titles, and it is a remarkable fact that nearly all of them fulfil a special want of the public, and meet with a steady sale. Of the more important books in the present list are new editions of standard works, among them, Bunyan's *Holy War*, in clear large type, on heavy paper and with a large number of illustrations, one of the finest editions ever issued in this country; Dr. Adams' *At Eventide*; Dr. Dorchester's volume, *Concessions of Liberalists*, which has met with unexampled success; a new and elegant edition of *Pilgrim's Progress*, uniform in style with the Golden Treasury series, with gilt edges and containing seventeen full page illustrations. Several works by prominent authors are in preparation, which will be duly announced.

In the line of books for young people the list of this firm is especially rich. No other American house furnishes a catalogue more attractive, or draws a sharper line between what is good and what is bad in literature. Among the books now in active preparation, and which will be issued the coming summer and fall, are Miss Yonge's series of *Young Folk's Histories*, one volume of which will be issued monthly. The first volume will be upon *Ger-*

*many*, to be followed by others upon *Greece, England, France and Rome*. They will be brought out in handsome style, in clear type, on fine white paper, beautifully bound and illustrated. A book of special interest which will appear in the fall is entitled *Amy's and Marion's Voyage Around the World*. It is from the pen of a daughter of the Rev. Nehemiah Adams, who, with her sister, really made the journey about the globe, in company with their brother, Capt. Adams. It will be fully illustrated from original photographs. *Royal Lourie*, a story for the older boys, by Charles R. Talbot, will create a decided sensation among those for whom it is specially intended. It is one of the most fascinating books published for the last half-dozen years, and is as pure in tone as it is lively in incident. Pansy (Mrs. Alden) and Faye Huntington, two of the best writers of religious literature in the country, appear as joint authors of a story for girls, called *From Different Standpoints*. Two other volumes, *That Boy of Newkirk's* and *Corrie Ellsworth*, also appear in the list, together with a new book of poems for home and school. New editions in quarto form of *Yound Rick*, *Cooking Club of Tu Whit Hollow*, *Good for Nothing Polly*, and *Nan, the New-Fashioned Girl*, all popular and rapidly selling books, are announced for early issue.

The house has in preparation an elegantly illustrated work which is intended as a religious gift book for the holidays. It is called *Out of Darkness into Light*. The designs are from the pencil of Mary A. Lathbury, whose talent for illustration is well known. It is proposed, to make it the most popular presentation book of the season, not only in style and character, but in price.

The popular belief that anything was good enough for children to read has undergone a very decided change during the past few years. Thirty years ago the books which made up our Sunday-school libraries were dull beyond belief. They repelled rather than attracted, not because they were moral in tone, but because they lacked sympathy and interest. The writers were good people, and imbued with the best of motives, but they seemed to forget that children required altogether different literary pabulum from grown people. The result was what might have been expected. The books which ought to have attracted them were discarded for sensational stories whose literary style was execrable and whose morals were always doubtful. One of the first bookpublishing houses in the country which attempted to reform this condition of things was that of D. Lothrop & Co. Mr. Lothrop had long believed in the possibility of a pure and elevated standard of literature for the young, which should combine talent of a high degree with moral and religious teaching, and which, in addition to these qualifications, should be bright, sharp and entertaining. It required determination, courage and money to carry out this idea, but it was carried out, and to-day Mr. Lothrop stands at the head of a house which publishes more and better books for juvenile and young people's reading than any other in the country. The best available talent is secured, and the dress in which his books appear is unsurpassed for beauty and durability. Many publishers exhaust themselves in bringing out a single illustrated juvenile for the holidays, while this firm offers perhaps a dozen, equally attractive, and immensely superior to the reproduction of English juvenile publications with which the book-market is flooded during the holiday season.

Of the works lately published by this house in the special juvenile list, the four *Wide Awake* Pleasure Books, "A," "B," "C" and "D," are prominent. They are as seasonable one time as another, and will be a perpetual pleasure to young readers. *Sunshine for Babyland*, *Mother's Boys and Girls*, *Our Darlings*, and *Little People*, the last three by "Pansy," also appear in the same catalogue, and with a score or more others are brought out in illustrated board covers.

The books which are now preparing in the same popular style, make a long and attractive catalogue. Chief among them is *Wide Awake Pleasure Book "E,"* which is announced to be ready for the trade August 1st. It will contain a large number of delightful stories and poems by well known authors, splendidly illustrated. Among the contents are *Sophie May's "Solomon's Seal," "Child Marion's" adventures in Rome, Venice and Vienna, poems by Celia Thaxter, Mrs. Whiton, R. H. Stoddard, Nora Perry, Edgar Fawcett, Mrs. Piatt, Clara Doty Bates, etc.* The volume is intended specially for the holidays, and in elegant appearance as well as intrinsic merit will compare in the way of a juvenile gift book with anything yet published. A new book by Adam Stwin, and one that will make

a sensation, is entitled *Eyes Right*. It is not only highly entertaining, but it contains a large amount of practical information for boys. *Four Feet, Wings and Fins* is the title of a new illustrated book on natural history for children: *Pen and Pencil Pictures, Babyland* for 1878, three new books by "Pansy," *Two Boys, Getting Ahead and Pansies*, three large print books by Tracy Towne, and a new work on Astronomy called *Overhead*, are especially attractive. *Little Miss Mischief and Her Happy Thoughts*, adapted from the French by Ella Farman, will make one of the most beautiful gift books of the season. In similar style will appear *Little Miss Muslin of Quintillion Square*, whose adventures will be a never-ending source of entertainment for other Miss Muslins the country over. Another volume of *Classics of Babyland*, by Clara Doty Bates, is in preparation, which will surpass that of last year in general style and beauty of illustration. Those who remember that charming book, *Poems for our Darlings*, issued last season, will be glad to know that a companion volume is announced, called *Music for our Darlings*, prepared by Dr. Eben Tourjée. It will be brought out in equally attractive style, and will make a standard book of songs for the household and school-room. *Sidney Martin's Christmas*, a splendidly illustrated volume of 600 pages, specially prepared by "Pansy," is another holiday publication. In addition to these there is *The King of Picture Books, Baby Bunting*, and a large variety of smaller illustrated volumes, all handsomely bound in illustrated covers.

### A Card.

*To the Teaching Profession  
in the United States and Canada:*

A pleasant and constantly increasing relation with Teachers and Educators throughout the land, extending over the past twenty years, has given the undersigned ample opportunities to study their special wants, and to discover, to a certain extent, their needs and desires.

In consequence of this, he has become (as he thinks, in the true sense of the term) interested in, and a sympathizer with, the members of the Teaching Profession, his constant endeavor being to do, so far as he is able, whatever may be thought to conduce to the advantage of the American Teacher.

Believing it to be proper that the motives which prompt any special course of action should be explained, and, further, that it is well to mention any facts which may induce others to labor for the best interests of the community, he does not hesitate to refer, in this card, to what may, at first sight, appear to be purely personal and private matters.

A hard worker himself, alike from inclination and from necessity, he has felt it his duty, as each new year has shown fresh work to be performed, new tasks to be accomplished, to endeavor to set an example to those around him by his own energy and application. That this is practice and not precept merely, is evidenced by the fact that within the last nineteen years, he has not missed a single working day. As a result of this constant application and personal supervision of his business, he has learned that the path of success lies in persistent and unflinching attention to details, and in watchful care over even the smallest interest, and that, without this, failure is next to inevitable.

As interest begets interest, it has come to pass that his labors for the benefit of Teachers have caused a mutual relation to grow up, the steady increase of which has been noted and watched by him, and has become a source of great pleasure. Indeed, the manifestation of the good-will of others and of their sincere appreciation, which have recently come to his notice, are so numerous and so encouraging, that he feels convinced that he has wisely sacrificed what most persons would perhaps consider a fortune uselessly thrown away. Recognizing the true dignity of labor—that quiet, steady, unswerving, and progressive work which attains its ends simply because it lends brain and heart as well as hands to every task—he has grown more and more in sympathy with the earnest laborer in every sphere of duty, high or low, but with none more than with the conscientious and faithful Teacher, whose arduous task and great responsibility are, alas! in too many cases entirely disproportionate to the pecuniary and other remuneration received.

Therefore, as the undersigned has found the opportunity, and as the increasing demands of business have permitted, he

has endeavored to be of service to teachers and to their grand Profession, and has labored unceasingly to forward the best interests of Educators, individually and collectively—irrespective of the inevitable pecuniary and other sacrifices which to the eyes of most persons seem, to show an utter disregard of common business principles.

Numerous bibliographical and educational publications which gave no promise of commensurate remuneration, save in the nature of good wishes and personal acknowledgments, have thus been undertaken; and it is proper to say that a sufficient reward has been found for these labors in the appreciation of Educators both at home and abroad. One of these publications, *The Cyclopædia of Education*, after having been received with uncommon favor in America, has recently been honored by the award of a Medal at the Paris Exposition Universelle—a recognition which is to be regarded as a high compliment to American Teachers, authors, and educational workers.

The *Year-Book of Education* (like the *Cyclopædia*, the first book of its scope in the English language) is being everywhere received with equal favor; and this suggests the hope that the continued publication of this annual volume will result in marked benefit to all educational interests.

It is expected that the recent establishment of *Steiger's Educational Bureau* will also be regarded in the light intended: as a valuable accommodation to Teachers. There is surely no question that the long-established custom of paying a "registration fee" of several dollars and an additional commission or percentage on the salary obtained, has been a severe tax upon all applicants, especially in these days of hard times and poor pay. By opening to the whole Profession—what for ten years past he has gladly granted to the few who applied to him—the extended facilities of his educational acquaintance and information without fee, commission, or charge of any kind to any person, the undersigned hopes to prove, in this direction also, the extent and sincerity of the interest he professes.

If in this and other endeavors he is able to secure the confidence of, and the acceptance of favors by, Educators in addition to those who are already his friends, their appreciation will be sufficient acknowledgment.

The undersigned feels and knows that there is enough yet remaining to be accomplished in the interest of Education to occupy his whole care, time, and attention for the remainder of his life, and, ready and anxious to labor unceasingly in the cause, he asks each and every earnest, working Teacher:

"How, or wherein can I help you?"

"What further can I do to elevate the Profession above mere mercenary considerations?"

"To what good purpose can I devote a certain portion of my time and my business in aiding the Teachers of America?"

In conclusion, the hope is expressed that whenever and wherever a Teacher desires to be advised in relation to any matter or question concerning which the undersigned may be able to give either information, assistance, or suggestion, no hesitation will be felt in addressing him at once.

September, 1878.

E. STEIGER.

Our thanks are due to Mr. Steiger for a copy of the "Educational Directory for 1878."

### Wanted.

For this Municipality two School Teachers, one holding a Model Diploma for English and French, and one holding Elementary Diploma French and English; salaries liberal.

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(FOR THE PROVINCE OF QUEBEC.)

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**ABSTRACT FOR THE MONTH OF FEBRUARY, 1879.**

OF TRI-HOURLY METEOROLOGICAL OBSERVATIONS TAKEN AT MCGILL COLLEGE OBSERVATORY, HEIGHT ABOVE SEA LEVEL, 187 FEET.

Day.	THERMOMETER.				BAROMETER.				+ Mean pressure of vapor	† Mean relative humidity.	WIND.		SKY CLOUDED IN TENTHS.			Rain and snow melted.	Day.
	Mean.	Max.	Min.	Range	Mean.	‡ Max.	‡ Min.	Range			General direction.	Mean velocity in m. p. hour.	Mean	Max	Min.		
Sunday 1	10.69	17.7	1.9	15.8	29.6287	29.652	29.594	.058	.0517	73.0	N. W.	17.9	6.2	10	0	0.23	1
2	22.5	2.3	20.2								W.	33.1				0.25	2 Sunday
3	23.22	29.0	16.8	12.2	29.6666	29.774	29.637	.077	.0962	77.5	W.	18.5	9.2	10	4	Inapp.	3
4	26.01	34.4	22.2	12.2	29.8400	29.955	29.697	.258	.1036	71.2	W.	14.7	7.0	10	0		4
5	23.45	29.0	19.6	9.4	29.8429	29.958	29.760	.198	.1025	81.7		1.2	8.9	10	3	Inapp.	5
6	20.40	26.0	13.2	12.8	29.8582	29.911	29.772	.139	.0909	82.6	W.	4.5	7.4	10	0		6
7	26.96	30.0	16.6	13.4	30.0174	30.081	29.940	.141	.0990	79.5	W.	8.0	9.4	10	6	0.01	7
8	17.27	26.2	12.7	13.5	30.2677	30.362	30.096	.266	.0709	67.5	W.	12.1	4.2	10	0		8
Sunday 9	26.9	4.5	22.4									21.1				0.44	9 Sunday
10	3.67	8.3	-6.2	14.4	30.3886	30.548	30.089	.459	.0356	68.4	E.	9.7	4.6	10	0		10
11	14.24	22.5	2.2	20.3	29.8725	30.046	29.585	.461	.0765	85.9	E.	12.7	9.5	10	6	0.60	11
12	16.27	23.8	1.7	22.1	29.3014	29.485	29.112	.372	.0789	82.4	N. W.	21.2	8.2	10	0	0.47	12
13	1.80	8.8	-3.3	12.1	29.7699	30.013	29.545	.468	.0365	78.2	W.	24.0	2.7	10	0		13
14	-2.01	5.7	-8.4	14.1	30.1132	30.171	30.031	.140	.0280	71.4	W.	12.5	0.7	3	0		14
15	1.92	12.0	-9.3	21.3	30.2707	30.324	30.208	.116	.0356	76.0	S. W.	11.3	2.6	9	0		15
Sunday 16	25.6	3.0	12.6								S. W.	15.0				0.01	16 Sunday
17	5.74	15.0	-4.1	19.1	30.4837	30.580	30.341	.239	.0393	69.4	N. E.	12.4	3.2	10	0		17
18	7.51	13.0	2.0	11.6	30.2954	30.384	30.235	.149	.0471	76.7	N. E.	17.5	6.0	10	0	0.01	18
19	6.25	18.3	-3.3	21.6	30.3665	30.448	30.243	.205	.0436	74.4	N. E.	9.7	1.2	8	0		19
20	11.57	17.3	0.9	16.4	30.1166	30.193	30.063	.130	.0620	82.9	N. E.	12.6	6.4	10	0	0.32	20
21	6.15	12.7	2.0	10.7	29.0980	30.144	30.046	.098	.0400	89.1	N. W.	15.6	0.0	9	0		21
22	7.06	14.6	-4.1	18.7	29.8489	30.080	29.564	.516	.0431	70.1	S.	11.2	5.6	10	0	0.02	22
Sunday 23	22.8	11.0	11.8								W.	13.4				0.03	23 Sunday
24	8.11	17.8	0.6	17.2	29.7286	29.963	29.560	.403	.0419	65.5	W.	18.4	3.0	10	0	0.08	24
25	5.52	14.9	-9.7	24.6	30.0275	30.132	29.877	.255	.0416	71.9	N. E.	8.2	6.6	10	0	0.12	25
26	25.14	37.3	8.6	28.7	29.6875	29.914	29.480	.434	.1151	80.6		15.7	10.0	10	10	0.23	26
27	0.51	23.0	-8.4	31.4	30.3492	30.646	30.017	.629	.0329	70.3	W.	21.0	1.0	8	0		27
28	-3.27	8.9	-14.5	23.1	30.7171	30.854	30.695	.159	.0235	62.7	N.	6.8	1.1	8	0		28
Means.....	10.924	20.14	2.52	17.62	30.0257			.2655	.05963	74.67		14.32	5.02				

\* Barometer readings reduced to sea-level and temperature of 32° Fahr. † Pressure of vapor in inches mercury. ‡ Humidity relative, saturation being 100. § Observed.

Mean temperature of month, 10.924. Mean of max. and min. temperatures, 11.33. Greatest heat was 37.3, on the 26th; greatest cold was 14.5 below zero on the 28th,—giving a range of temperature for the month of 51.8 degrees. Greatest range of the thermometer in one day was 31.4 on the 27th; least range was 9.4 degrees on the 5th. Mean range for the month was 17.6 degrees. Mean height of the barometer was 30.02574. Highest reading was 30.854 on the 28th; lowest reading was 29.112 on the 12th; giving a range of 1.742 in. Mean elastic force of vapor in the atmosphere was equal to .05989889 in. of mercury. Mean relative humidity was 74.7. Maximum relative humidity was 100 on the 28th. Minimum relative humidity was 44.9 on the 21st. Mean velocity of the wind was 14.3 miles per hour; greatest mileage in one hour was 39 on the 2nd. Greatest velocity in gusts was equal to 56 miles per hour, on the 26th. Mean direction of the wind, W. N. W. Mean of sky clouded, 50 per cent. Rain fell on 1 day. Total rainfall was 0.03 inches. Snow fell on 16 days. Total snow fall was 27.4 in., equal to 2.79 in. of water. Total precipitation in inches of water 2.92. Rain or snow fell on 16 days.

ABSTRACT FOR THE MONTH OF MARCH, 1879.

OF TRI-HOURLY METEOROLOGICAL OBSERVATIONS TAKEN AT MCGILL COLLEGE OBSERVATORY, HEIGHT ABOVE SEA LEVEL, 187 FEET

Day.	THERMOMETER.				BAROMETER.				† Mean pressure of vapor.	‡ Mean relative humidity.	WIND.		SKY CLOUDED IN TENTHS.			Rain and Snow melted.	Day.
	Mean.	Max.	Min.	Range	Mean.	‡ Max.	‡ Min.	Range			General direction.	Mean velocity in city in m. p. hour.	Mean	Max	Min.		
Sunday 1	15.05	27.8	-5.4	33.2	30.3325	30.675	30.126	.549	.0770	75.4	S. E.	17.3	9.9	10	9	0.30	1
Sunday 2	.....	24.1	8.5	15.6	.....	.....	.....	.....	.....	.....	W.	15.5	.....	.....	.....	.....	2 Sunday
3	20.66	28.5	7.4	21.1	30.5664	30.636	30.52	.134	.0762	69.6	S. W.	12.5	0.6	10	0	.....	3
4	30.17	41.2	18.7	22.5	30.1261	30.433	29.967	.466	.1331	77.3	S. W.	22.6	5.1	10	0	0.12	4
5	11.12	25.8	1.6	34.3	30.591	30.718	30.090	.628	.0626	67.4	N. W.	9.9	0.5	4	0	.....	5
6	9.65	21.3	4.2	25.5	30.165	30.639	29.782	.857	.0646	85.1	S. E.	11.4	10.0	10	10	0.33	6
7	17.87	29.6	10.6	19.0	30.1205	30.377	29.806	.571	.0695	70.7	N. W.	8.2	5.4	10	0	Inapp.	7
8	29.92	31.9	8.2	23.7	30.347	30.440	30.241	.199	.0827	74.9	N. E.	5.7	6.2	10	0	.....	8
Sunday 9	.....	36.9	22.9	14.0	.....	.....	.....	.....	.....	.....	S. E.	18.5	.....	.....	.....	0.20	9 Sunday
10	39.90	49.2	34.3	14.9	29.9010	29.960	29.814	.146	.2031	82.6	S. W.	20.5	5.1	10	0	0.09	10
11	37.87	46.0	27.2	18.8	29.7162	29.923	29.567	.356	.1562	67.2	W.	22.7	4.6	10	0	0.02	11
12	28.10	35.8	23.3	12.5	30.0445	30.130	29.949	.181	.1010	65.2	W.	17.1	5.6	10	0	.....	12
13	23.80	27.8	19.9	7.9	29.9564	30.107	29.797	.310	.1091	80.0	N. E.	6.9	7.5	40	0	0.25	13
14	30.62	36.6	22.6	14.0	29.8040	30.002	29.630	.372	.1482	84.7	.....	8.0	10.0	10	10	0.21	14
15	21.54	34.3	11.7	22.6	39.7932	30.016	29.633	.333	.0889	72.7	S. W.	18.2	6.0	10	0	Inapp.	15
Sunday 16	.....	24.2	5.7	18.5	.....	.....	.....	.....	.....	.....	S. W.	10.2	.....	.....	.....	Inapp.	16 Sunday
17	14.42	20.0	9.4	10.6	29.9569	30.134	29.797	.337	.0729	85.5	N. W.	9.6	8.0	10	0	0.65	17
18	18.74	29.0	10.5	18.5	30.0477	30.099	26.983	.116	.0734	71.6	S. W.	11.0	0.4	1	0	.....	18
19	18.77	28.8	9.5	19.3	30.0681	30.161	30.060	.101	.0691	66.5	S. W.	11.2	1.7	9	0	.....	19
20	24.36	33.9	17.6	16.3	30.1006	30.122	30.070	.052	.0866	66.4	S. W.	13.4	3.5	10	0	.....	20
21	23.19	32.5	16.5	16.0	30.0189	30.157	29.935	.222	.0885	70.4	S. W.	11.0	5.2	10	0	0.09	21
22	21.84	28.1	12.6	15.5	30.1944	30.357	29.905	.452	.0965	79.5	.....	8.8	7.5	10	0	0.15	22
Sunday 23	.....	37.0	22.9	14.1	.....	.....	.....	.....	.....	.....	W.	13.6	.....	.....	.....	0.14	23 Sunday
24	27.42	34.5	12.7	21.8	30.0031	30.133	29.873	.260	.1229	78.1	S. W.	15.0	6.4	10	0	0.01	24
25	32.16	38.1	17.3	10.8	30.0161	30.168	29.850	.378	.1490	81.1	N. W.	9.4	10.0	10	10	0.45	25
26	24.72	34.0	16.9	17.1	30.1884	30.240	30.130	.110	.0940	68.0	N. E.	6.1	0.2	1	6	.....	26
27	27.69	36.0	16.7	19.3	30.1270	30.161	30.01	.060	.1366	85.0	N. E.	5.7	9.4	10	5	0.22	27
28	38.75	48.0	32.4	15.6	30.0989	30.196	29.876	.320	.1792	76.1	S. E.	5.0	4.6	10	0	0.01	28
29	36.92	38.0	34.3	3.7	29.2874	29.825	29.424	.401	.2027	91.9	S. W.	14.5	9.4	10	5	0.83	29
Sunday 30	.....	36.0	24.0	12.0	.....	.....	.....	.....	.....	.....	N. W.	8.8	.....	.....	.....	0.50	30 Sunday
31	24.22	32.8	16.9	15.9	29.5474	29.628	23.401	.227	.0997	75.4	W.	11.4	8.5	10	3	.....	31
Means.....	27.957	33.47	15.90	17.57	30.0529	.....	.....	.3126	.10897	82.22	.....	12.25	5.85	.....	.....	.....	.....

\* Barometer readings reduced to sea-level and temperature of 32° Fahr. † Pressure of vapor in inches mercury. ‡ Humidity relative, saturation being 100. § Observed.  
 Mean temperature of month, 24.957. Mean of max. and min. temperatures, 24.69. Greatest heat was 49.2 on the 10th; greatest cold was 5.5 below zero on the 1st,—giving a range of temperature for the month of 54.6 degrees. Greatest range of the thermometer in one day was 34.3 on the 5th; least range was 3.7 degrees on the 29th. Mean range for the month was 17.6 degrees. Mean height of the barometer was 30.05296. Highest reading was 30.718 on the 5th; lowest reading was 29.324 on the 30th, giving a range of 1.394 inches. Mean elastic force of vapor in the atmosphere was equal to .109 in. of mercury. Mean relative humidity was 82.2. Maximum relative humidity was 98 on the 22nd and 29th. Minimum relative humidity was 48 on the 11th and 20th. Mean velocity of the wind 12.25 miles per hour; greatest mileage in one hour was 31 on the 4th; greatest velocity in gusts was equal to 37 miles per hour, on the 4th and 11th. Mean of sky clouded, 59 per cent. Rain fell on the 10 days. Total rainfall 1.23 inches. Snow fell on 16 days. Total snow fell 32.6 in. Rain or snow fell on 21 days. Total precipitation in inches of water 14.57.