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THE
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FOR THE PROVINCE OF QUEBEC.

(Published Under the Direction of the Hon. the Minister of Public Instruction.)

EDITED BY

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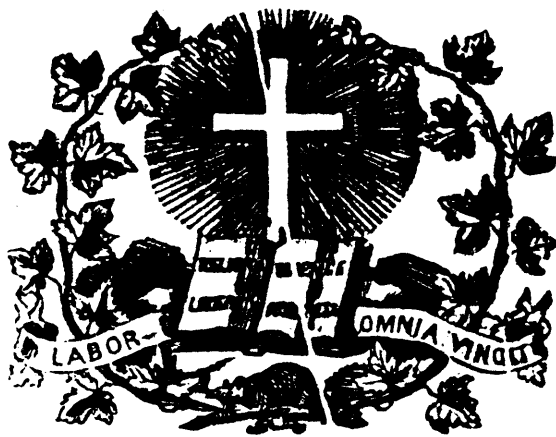
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mar; and there remains, therefore, only the two departments—Composition and Literature. Of these, Composition is out of sight the superior. It expresses emphatically the very thing that we all want to do—to compose well, whatever may be our end in composing. Few persons tolerably educated commit errors in grammar; every one is open to be indefinitely improved in style.

This is the subject of the science named **RHETORIC**, of which Aristotle presented the first methodical handling. Not much was added to what he laid down till the treatises of Campbell and Blair in the last century; from whom, together with Aristotle, Whately derived the chief part of his Rhetoric. Under the less sounding title, "English Composition," we have had a great many manuals of the same tenor, professing to lay down rules, over and above those of grammar, for effective composition in the different departments of style.

Now, I hold that the foremost task of the English teacher is to apply, and to extend, the code of instructions in this very wide region. Should he find that there is nothing of any great consequence to be said on it, he has, as I conceive, no vocation at all. In proportion as he is equipped here, he is an English teacher.

The work of discriminating excellence from defect in all kinds of composition is a great professional accomplishment, just like the law; the reducing of the modes of excellence, and the corresponding defects, to general heads, with appropriate examples, is the English master's outfit in his art. He must know the whole compass of assignable rules, and the limits where each rule ceases to operate. He must have a mind practised, up to the rapidity of an instinct, in discriminating good and evil in composition, in showing how the good may become better, and the better, best. As teachers we are nothing, if not critical. It passes our means to impart to our pupils the affluence of the language; but we can, even within our brief curriculum, do much to exercise them in the sense of good and evil; we can leave an abiding impression of what to avoid, such as will be afterward present in their own attempts at composition, and the observance of which will finally engender a habit of excellence in style.

The teaching of the classics is illustrative here. The reading of the Latin authors at school is accompanied with a series of instructions as to the minute structure of the language, which

On Teaching English.

(BY PROFESSOR BAIN, ABERDEEN UNIVERSITY.)

II.

Leaving grammar, strictly so called, we have next to consider the higher **COMPOSITION, RHETORIC, or STYLE**, comprehending all the rules, maxims, and suggestions, for rendering language more effective. To be grammatical is one thing; to be perspicuous, is another thing. Not that there is any hard line between the two departments; references to perspicuity occur under the grammar rules, as in the Order of Words under Syntax, while grammarians often introduce ultra-grammatical precepts concerning style. Nevertheless the subject is so large, and so ramified, that, under whatever name, it should take an independent start, leaving grammar decisively behind it.

Now, of all the subjects proposed to the attention of the English master or professor, this is, to my mind, the chief. At the stage we are supposing, the pupil should be done with gram-

have been gathered up and recorded by grammarians, critics, and teachers, since the revival of letters. We have a great many manuals of Latin prose, containing these critical minutiae, intended to indoctrinate the pupil into the force and the elegance of Latin expression. I doubt whether there has yet been produced with reference to our own tongue so extensive a series of observations for guiding a pupil to a high order of English composition as those existing for Latin composition. What is more curious still, there are certain points attended to in a marked manner in Latin and Greek, having a counterpart in English, and not at all attended to there. The best example of this is the participial construction. In Latin, and still more in Greek, the pupil is carefully taught the conversion of clauses with a finite verb, into participial phrases, either in the absolute case, or, as is so easy in Greek, in apposition with the main clause. Now, if there be one thing more than another where our composition is universally defective, it is in the excessive use of relatives, and in the neglect to get rid of them by a participial construction. I speak from deliberate and long-continued observation when I say that probably every writer uses more relatives than is necessary, and under circumstances where their accumulation must be a felt incumbrance. The heavy relatives "who" and "which" are the incubus of English composition. They give an Act-of-Parliament heaviness to what the writer earnestly desires to be light and easy. Yet how seldom does it occur to anybody to imitate the classical mode of reducing their number! Instead of "the man *who* wants to buy salt," how many unemployed substitutes are there? "the man wanting to buy salt," "the man in want of salt," "the purchaser of salt," and so on. When "that" can be employed, the effect is not so heavy; yet even then, we can often do better. Says Addison, "A man of polite imagination is let into a great many pleasures *that* the vulgar are not capable of receiving." Express it thus, "a great many pleasures not open to the vulgar," and you substitute terseness for a drawl.

I have chosen one illustration out of scores to show that we are not as yet half alive to the minutiae of English construction. I might advert in much greater detail to points connected with the sentence, capable of being ascertained and formulated with great precision, but hitherto almost wholly neglected. The unavoidable looseness of our sentences, as compared with Latin and Greek is habitually allowed to be worse than it need be. Qualifying clauses, which should come first, are left to dangle at the end. The fatal word "which" is a lure to add on to a sentence what does not belong to it, violating unity as well as the periodic structure. Scarcely any attention is paid to the effective disposition of the essential and emphatic clauses of a period. The formulæ for analyzing sentences, I repeat, have never been used to teach how to make a good sentence.

It is not to be expected that, with so many omissions in regard to the sentence, we should be in a high state of advancement in the rhetoric of the paragraph. Many good paragraphs have been written, especially in recent times; but the bad far outnumber the good. Yet there are obvious laws that, if attended to, would diminish the number of defective paragraphs. These laws should be sought out, exemplified, and enforced by the English teacher.

There is also much to be done in pointing out the special merits and defects of the different kinds of composition, as description; narration, exposition, persuasion. Every one of these branches has laws of its own, which do not come by instinct; they have never yet been fully complied with by any one. Exposition, for example, has made great advances since the Elizabethan times; many works have been produced realizing a high pitch of excellence in this line. Yet the general standard is very low, and one consequence is to retard the dissemination of knowledge and science in the community. The very best exponents will be found stumbling the moment they are scrutinized by the light of principles that, when stated, are almost self-evident.

Such are a few indications of the subject-matter of English

teaching in its highest aim of making people better composers by pen, or by mouth. Some remarks may next be offered on the best kind of exercises in composition. There is much to be said on this point, and nobody should insist upon a very narrow method, because different teachers may bring about the end in different ways. The one principle that I would chiefly urge, is to make exercises, as far as possible, exercises of language, and not exercises either of information or of invention. In short, the pupil should not have to go far in search of his matter. Indeed, I am convinced that, as a rule, the matter should be supplied in some one shape, and the requirement should be to transform it into some other shape. The English master, as such, has to do with the thought to be expressed, only as affording opportunities for expression. Given a certain meaning, it is his business to compare the different ways of rendering that meaning, and to point out the merits and demerits of each. He should not confine himself to feeble, inaccurate, or obsolete matter, because such matter would not serve his main purpose of aiding in the worthy expression of important meanings.

Holding these views, then, I cannot but entertain great doubts as to the value of essay-writing or theme-writing, considered as a discipline in style. The finding of the material absorbs half or more than half of the pupil's attention, so that the consideration of the style is quite secondary and subsidiary: in fact, such essays belong to scientific rather than to literary classes. Besides, the writer necessarily travels over a wide compass of expression, and commits more faults and inadvertences than it is possible for the teacher to take notice of; so that the great mass must go uncorrected. Of course, this evil is at its maximum with the junior pupil, and might be very much reduced at the end of a long training: at which point the essay-system might cease to be objectionable.

Assuming, then, that except for the higher pupils, the matter should be as far possible provided and the task consist in expressing it, we have still a choice of various kinds of exercises. We may give a poetical passage to be rendered into prose. We may give a condensed statement to be expanded, or a diffuse statement to be condensed. We may prescribe a subject, and give the heads and illustrations; this is a good form of exercise for public examinations in English. We may choose a theme familiar to the pupils, asking them to give an account of something that they know, some book they have read, some incidents of their own, or to describe a place that they are acquainted with. These modes are free from some of the objections of essay-writing; but, as regards the junior pupils, they all labor more or less under the difficulty of being adequately criticised or corrected; they are sure to manifest a number of faults that cannot be fully taken notice of. I greatly prefer, for the earlier stages, some form of exercise containing but few requirements, or aiming at some definite merit of composition; in which case a thorough corrective criticism is possible.

While wishing to leave great latitude to the teacher, subject to a few main considerations, I will point out the kind of exercise that seems to me to combine the greatest number of advantages to pupils generally. It is to give out passages of good authors for criticism and correction, each passage being chosen with a view to raising questions suitable to the progress of the pupils. A sentence or a paragraph is prescribed for examination and amendment; the pupil is required to show its merits and its defects, sentence by sentence, and to recast all the defective parts. The points involved are thus so far circumscribed that every one of them can be adverted to by the teacher; all the merits of the passage can be brought to light, and all the defects remedied. Not only is this a good testing exercise, but it is one of the very best means of imparting instruction in the first instance. An exegesis of a well-composed passage from a good modern author is as good an opportunity as can be afforded of awakening the pupils to the excellences and the deficiencies of style.

And here let me remark that I intend no disrespect to our most distinguished writers when I say that, in their very best

passages, along with much to be stamped with approbation, the critical English teacher will discover something to be improved. In point of fact, no man is as yet possessed of all the laws of good writing; even if a man knew them all he could seldom find time to embody them in a work of any length; and, finally, most of our great writers have some peculiar bias or idiosyncrasy, which has to be pointed out in setting them up as models. Macaulay is too antithetical; De Quincey is excessive in the classical part of the vocabulary; Carlyle, while exhibiting the copiousness of the language in a marvellous degree, indulges in peculiarities that are not for others to imitate.

Homes-Children.

"Home, sweet home; there's no place like home." There must be something done to make "no place like home." There must be exertion and planning to make home attractive. The sooner parents and guardians understand this, the better for the "dear ones under their charge. They are responsible for not making "home" above all other places the most inviting. They lose sight of the fact in practice that home is, and should be, the place where their children should delight to dwell. When one sees children running around in the streets, barefoot and bareheaded, it says to him those children have no suitable home, and hence their home and affections are in the streets: all the sanctity of their homes is in the wide thoroughfares; there they receive impressions that grow into tendencies and harden into habits, and make them after a while what they will be. This is their school, their training. Children should have sunlight and oxygen, and they should get these at home. There should be their little world of comfort and joy. If they are agriculturally disposed let them have their little ploughs, hoes, and harrows and fields; if horticulturally disposed, let them have their spades and rakes; paths and beds, and seeds and flowers; let them have their little gymnasiums and Olympian and Pythian games and be athletic Greeks; marbles, tops and whistles should they have, and *home! home!* should be the theatre of their action and the place of their joys, hopes and aspirations. Don't let them run the streets, for there they are to all intents and purposes waifs on the sea of life. You may not think so, but you do practically make them such. They are as much beyond your care and vigilance there as if they were in Lapland. The non-attractiveness of home is owing to neglect somewhere, and of course it lies at the door of the parents. They do not study the wants, necessities, and aspirations of their children. The mother is full of household duties, the father engaged in business; *they* can't attend to their children, and, as a consequence, these tender ones that should be educated in every thing, and made happy at home, and constantly surrounded with home delights, but finding none there, push through the gates ajar and get into the streets as eagerly as a culprit leaps the walls of his prison house, and they *are waifs*, and grow up as anything else would grow if neglected, come up some how. Two-thirds of the children come to manhood and womanhood in this way, and it is a matter of culpable oversight and ignorance on the part of otherwise fond parents. Mother, your household duties are secondary. Father, your children first, your business afterwards. Make your children happy; let them have home happiness where you can see them, watch them, care for them, love them. Administer to their little aspirations, and as they are a part of yourselves, let them not be separated from you. Don't send them to school either simply because they would annoy you at home; don't send them here to "get them out of the way." Send them to school to have them cultured for life's realities and duties, and for no other purpose, and *you* should know that those schools are rendered proper for them. Make home comfortable, delightful. There should be more study and system in regard to this than thousands of daily duties.

These words apply to "children of older growth," young men especially, who, finding no library, books and fresh reading at

home, go out to the saloon and the bowling alley, and it is all because home is "duller than any other place." Oh! that the words were true, "Home, sweet home! there's no place like home."—*Exchange.*

German Kindergarten.

Perhaps a better idea cannot be presented of the working of a kindergarten than a description of the way the principal one in Bremen is conducted, and which I have had occasion to visit. Many of the children are so small that they needed to be conducted thither by older persons, when they are met at the door by a servant, who relieves them of hats, coats, shawl, and lunch box, care being taken however, that each child aids in adjusting its own things, and having a fixed place for all. The proprietress, Miss Grabau, is assisted by two other ladies. The school is divided into two classes, either the one or the other of which is nearly always in the large hall for exercise, or working in the little gardens out of doors. In the school room each scholar is provided with a neat and comfortable desk and chair, and is taught to regard them as his own property. The employments are worsted work, knitting, elementary drawing, and every other imaginable thing which is supposed to furnish such young fingers and minds with combined skill and amusement. The children have patterns before them for everything they are to do, and the teacher personally superintends them in each little labor, when every pains are taken to impart as much elementary instruction as possible. For example, if a little girl is at work on a book mark, or a lamp mat, she is taught imitation, combination, perspective, counting, the alphabet and many other things. As soon as she is tired of one employment, she is at liberty to begin something else that she may like. Thus all weariness is avoided.

The room for exercise is very large, and, like the school room neatly ornamented with pictures, and when the children are in it they are under the care of a teacher, who has them go through many gymnastic exercises. This is the most interesting feature of the kindergarten. The children, boys and girls promiscuously, are directed to assume a certain position. It may be that of a regiment drawn up in line of battle. The teacher then commences a story about a certain battle; then comes some stirring song, when all sing it together, and then the battle commences in right good earnest. After the great victory is won, the teacher narrates a peaceful story in verse, which the children have also been previously taught, and which they repeat with her, going through with all the gymnastic exercises suggested by the verses. For instance, she tells of a great pigeon house, out of which the pigeons come one by one, some fly slowly and others more rapidly; others go off and hop around on the ground, while others light on the chairs, some get tired, and others fall down, and thus the supposed movements of a hole flock of pigeons are represented by the children.

Afterward, the teacher may begin to tell in prose about an old blacksmith, and by-and-by she reaches the verses telling of his anvils, bellows, red-hot iron, and great hammer, when the children sing with her, and the whole room is transformed for a time into a great smithy, and all the little folks industriously and laughingly playing blacksmith. Another song tells about walking over a heath, where at last a great pond is reached. The frogs are heard to croak, and seen to leap into the pond. During this time the entire class becomes a large group of similar croakers. In all these initiatory exercises the children preserve strict order, but their risible propensities are but little restrained. Just as soon as the slightest fatigue or decrease in interest is observed, the exercises are changed, when the class is immediately taken into another room, or else into the garden. About one-half of the time seems to be devoted to the gymnastic and horticultural employments.

There are a great many of these half-poetical and half-prose stories, having somewhat of a theatrical character, taught and performed in the kindergarten. I have a volume which contains

fifty in all, profusely illustrated. Some of the titles are: "The Mouse and the Cat," "The Ants," "The Stork and the Frogs," "The Butterfly," "The Grasshoppers and the Worm," and "The Horse-chestnut Tree." Each of these stories requires perhaps from ten to fifteen minutes to repeat and perform.

The exercises and employments at the kindergarten are sure to be brought away by the children, and enter largely into their home life. If you send your little folks to one of them for three months, you may expect, for a long time afterward, to see them hopping about your premises like frogs, leaping like deer, springing like cats, and, as nearly as they can, flying like swallows, barking like dogs, swimming like fish, swinging like tree-tops, sailing like boats and chattering like magpies.—*Dr. Hurst.*

Girls Should Learn to Keep House.

No young lady can be too well instructed in anything which will affect the comfort of a family. Whatever position in society she occupies, she needs a practical knowledge of household duties. She may be placed in such circumstances that it will not be necessary for her to perform much domestic labor; but on this account she needs no less knowledge than if she was obliged to preside personally over the cooking-stove and pantry. Indeed, I have thought it was more difficult to direct others, and requires more experience, than to do the same work with our own hands.

Mothers are frequently so nice and particular, that they do not like to give up any part of the care to their children. This is a great mistake in their management, for they are often burdened with labor and need relief. Children should be early taught to make themselves useful; to assist their parents every way in their power, and to consider it a privilege to do so.

Young persons cannot realize the importance of a thorough knowledge of housewifery; but those who have suffered the inconvenience and mortification of ignorance can well appreciate it. Children should be early indulged in their disposition to bake and experiment in various ways. It is often but a troublesome help that they afford; still it is a great advantage to them. I know a little girl who at nine years old made a loaf of bread every week during the winter. Her mother taught her how much yeast, salt and flour to use, and she became quite an expert baker. Whenever she is disposed to try her skill in making simple cakes or pies, she is permitted to do so. She is thus, while amusing herself, learning an important lesson. Her mother calls her her little housekeeper, and often permits her to get what is necessary for the table. She hangs the keys by her side, and very musical is the jingling to her ears. I think before she is out of her teens, upon which she has not yet entered, that she will have some idea of how to cook.

Some mothers give their daughters the care of housekeeping each a week by turns. It seems to me a good arrangement and a most useful part of their education. Domestic labor is by no means incompatible with the highest degree of refinement and mental culture. Many of the most elegant and accomplished women I have known have looked well to their household duties, and have honored themselves and their husbands by so doing.

Economy, taste, skill in cooking, and neatness of the kitchen, have a great deal to do in making life happy and prosperous. The charm of good house keeping is in the order, economy and taste displayed in attention so little things; and these little things have a wonderful influence. A dirty kitchen and bad cooking have driven many a one from home to seek comfort and happiness some where else. None of our excellent girls are fit to be married until they are thoroughly educated in the deep and profound mysteries of the kitchen.—*Presbyterian.*

Extracts from Superintendent Richards' Address. (1)

Ladies and Gentlemen, Teachers and Trustees:—As the Superintendent of the Public Schools of this city I have invited you to meet me, with the desire to make a few statements with reference to the relations to exist hereafter between us. I think you are all aware, as I am sure I am, that the office which I have the honor to fill, is no sinecure. As I am the first person who has been called to fill such an office in this city, it falls to my lot to initiate what appears to me a great and a momentous work. Having neither the example of a predecessor nor any special experience of my own in the particular work to be performed by me, I am most deeply impressed with the fact that I have a difficult task before me.

I need not say that in entering upon my work I am anxious to be successful, not so much on my own account as on account of the desire I have to add to the efficiency of our school system, and to increase the means and facilities necessary to provide for the thorough education of all our children.

During the last few years, while I have not been entirely devoted to the work of the school-room, I have been earnestly engaged in improving all the time not demanded for special duties, in making myself more thoroughly acquainted with the methods of teaching, classifying, and conducting schools. With what success I have made my investigation in this direction, I hope you may have the opportunity of judging, while I endeavor to perform what I consider to be the duties of the office to which I have been appointed.

I enter upon my duties fully conscious of imperfection and liability to make mistakes, and yet with fixed, definite purposes, and with the desire to give my best energies to the work of elevating the standard of our public schools and of increasing the efficiency of our teachers. While I am free, yea, proud to admit, that the condition of our schools and the qualifications and professional zeal of most of our teachers will compare favorably with those of our most highly favored cities, I cannot say that I believe we have arrived at perfection. I have not yet seen the school where I did not think there was room for improvement, and if I were to tell the most successful of the teachers of our city that they had reached the highest point of qualification or the most approved modes of instruction, I think they would consider me very superficial, or else guilty of unjustifiable flattery.

As a general thing I have found the best qualified and most successful teachers not only conscious of their deficiencies, but anxious to seize every opportunity to fit themselves more thoroughly for their work.

I could specify instances of teachers in this city, if it were proper to do so, who have a high reputation as successful teachers, who have never failed to avail themselves of lectures, educational conventions, professional books, and the advice of other experienced teachers, and are far from considering themselves as having nothing more to learn. I am always suspicious of a self-confident, boasting teacher; and yet I am just as suspicious of a teacher who has no confidence in his abilities.

Every teacher should know what he can do, not from having passed an examination successfully, and that his personal friends think him smart, but from a living consciousness within him that he has mastered the subjects which he is to teach; that the principles of his text books are so much a part of himself that he can stand before his class and draw from his own resources, independent of himself, the thoughts and truths he would impress upon the minds of his pupils.

It is not enough for a teacher, that he is successful in making his pupils memorize the language of their books, or even in getting the simple idea of the language.

(1) We are indebted to some friend for a copy of the Washington Evening Star, marking for our particular attention, Mr. Richards' address on his appointment as Superintendent of the Public Schools of Washington, D. C.

The teacher, who is thoroughly qualified for the work of teaching, not only gets the correct idea of what he teaches and has at command other ideas and facts to aid him in illustration, but he is able to clothe his ideas in correct and appropriate language. To this thought I invite special attention. To be a teacher of a school is much more than to be its governor, yea, more than to be a hearer of recitations and a propounder of such questions as have been prepared in the text-books.

But I have not invited you here to-day to give you a dry disquisition upon the requisite qualifications of teachers. In entering upon the untried and responsible duties of the office conferred on me by the favor of our city's chief executive officer and by the ratification of the Board of Aldermen, I have felt that the first thing necessary was for me to make the acquaintance of those who are to be my fellow-laborers. Fortunately I have a very pleasant acquaintance with a majority of our teachers, to whom, as well as to those with whom I am but slightly acquainted, I desire to say that I come as your friend, and I hope to prove myself your *best* friend, so far as your relation to the schools is concerned. That you may be freed from any apprehensions which may have been created by the false and malicious report which has been put in circulation, that I am about to assume the prerogative of sweeping out a large number of the present teachers and of importing a "batch of teachers from the North," I will simply say that I am not one of those persons who have that most unfortunate weakness to believe *change* is always improvement. But I am in favor of progress; and of reaching as near to perfection as possible; and when I find any, or all of you, ready to improve yourselves, for the sake of improving our public schools, and to devote yourselves to the legitimate work of the school room; and when I find that you are successful in performing your professional work, you need not fear that I shall be in favor of change. But if some of you should not succeed at first in coming up to my ideas of perfection, or even to your own ideas, I shall feel it my duty first to advise with you, and help you to improve and perfect yourselves as much as possible.....

One of the steps of progress, which I hope may be taken this year, and which I cannot fail to urge upon the attention of our honored Mayor and our city fathers, is that of establishing, at the earliest possible period, a High and Normal School. We have, at the present time, a sufficient number of young ladies and young men who must or ought to leave our grammar schools; and who have left them, within a year or two past, to start such a High School at once. Very many of these young people, who have made up their minds to pursue a higher course of study, are obliged to go out of town and spend their scanty means among strangers in order to fit themselves for such places as will make them more useful citizens among us. Then again, a large number are obliged to break away from the delightful pursuit of knowledge, and plunge into the business of life, unprepared or half fitted for their responsibilities.

I think it is an established fact, that the aggregate of wealth and physical prosperity of any city or community is in proportion to the aggregate of knowledge among the masses of the people. Wealth encourages education and refinement, and it cannot be successfully denied that the moral growth of a people and the aggregate of real happiness are increased in proportion to the improvement of the human mind and the increase of knowledge. As this growth becomes a part of the wealth and power of the people, it is the duty of the people to provide the schools which can furnish this higher education. At present our grammar schools, while they are doing a noble and necessary work, are doing very little more than preparing the minds of our youth for the successful pursuit of knowledge. They, on leaving school, like half-trained apprentices at a trade, are obliged to struggle along and combat with difficulties for many years; when a few years under a master workman would have enabled them to gain more knowledge and power, with far greater pleasure to themselves. As the most expensive part of inaugurating this

work usually consists in providing suitable buildings for a High and Normal School, I may be pardoned for suggesting that the noble structure, the Franklin Building, now about completed, will furnish just such accommodations as are needed without any increased expense.

While this Building may not have the most central location, it has all the necessary show and commodiousness required for the people's city college. This building should be the place for the High and Normal school, and for furnishing accommodation for a full series of perfectly graded schools, from the lowest to the highest, and where there should be a Model school of every grade. While the High and Normal school might be readily organized, for temporary purposes the present grammar schools of the First District might be accommodated in the building, and the whole series of schools perfectly graded. At once the Normal class should be organized. The principal additional expense would consist in the salary of a principal for the High and Normal school, and this salary should be sufficient to command the best talent and experience which our country affords. This is one of the steps of progress which ought to be taken at once.

I may be pardoned also for saying, that if we would secure and retain men of proper qualifications, to take charge of a well graded grammar school in each of the four districts, the salaries of the principals ought to be increased.

I do not intend to have any *pet* districts, nor any *pet* schools, nor any *pet* teachers, nor any *pet* scholars. I expect to give my energies to *all*, and my special efforts to those who need the most help. I do not expect to visit that school oftenest which has the best teacher and the best behaved scholars; and further, I do not expect to have any *pet* studies, but I shall seek to secure, as nearly as possible, equal development in all the studies required in the schools. I shall expect to call the teachers together from time to time for such lectures and drills as may seem necessary; and perhaps I need not say that I shall expect every teacher to take an active part, and hold himself or herself ready to try to do whatever may be required: and in return you may be assured that I shall always be ready to render you any assistance in my power.

In conclusion, I will say that every sign of our times indicates a glorious future for the cause of public education in this city. Our city government is awake to it; our citizens are awake to it; and I may say that Congress is not inattentive to our wants. If I may so speak, we have the best kind of material with which to build up a model system of public schools, to which we may introduce visitors from different parts of our own country, and the friends of education from other countries. We have made a good beginning and let us all, as teachers and citizens give our hands, our hearts, and our best energies to the work.

Another Year.

Another year has gone, ay, gone forever;
Dread thought! Oh, is it lost to thee, my soul?
Or shall it rise when time is thine no longer,
To lift thee one step nearer to thy goal?
O, thought of peace, or frowning ghost of fear,
Another year has gone—another year!

Another year! Our God each year has given
To be a step in that steep, narrow stair
Whose windings are to lead us home to Heaven,
Though rough the way and strewn with many a care,—
Then, never, never may our spirits hear
The awful death-knell of a wasted year.

Another has year gone; its joys and sorrows,
On glancing backward now, as trifling seem
As are the changing whims of thoughtless moments,
Or lights and shadows darting through a dream.
As trifling when eternity appears
Shall seem the joys and griefs of all our years.

Another year has gone : we're one step nearer
 To that dark valley we must tread alone—
 Alone and only once. How strong soever
 The ties that bind our hearts to earth have grown,
 No friend can cheer us on that passage drear,
 For lonely we must die as dies the year.

Another year has gone! Thank God, another
 Leaps into being from his dying sigh;
 A happy year, if folded in its bosom
 No day all blank or blurred with sin shall lie.
 A pall of clouds now hides the old year's bier,
 Then up and greet and use the bright new year.

UNA. (Western Watchman.)

A Chapter on Homographs.

It must often, we think, be a matter of surprise to thoughtful minds that so many of our English words appear to have such widely dissimilar meanings. Wit has often seized on these coincidences (though far oftener no doubt, on the coincidence of sound under dissimilarity of form) to point a joke : as when some wag assures his simple friend that if a man was on the top a house he could bring him *down* on a feather ; or when the traveller astonished his audience by telling them of some terrible mosquitoes that will sit on the trees and *bark* as you pass by. So Byron humourously asserts that if a clergyman should refute him, he *lies* ; and if a captain, he also *lies*—under a mistake. And a similar coincidence in the spelling of two distinct words has, as we all know, given the name "wide-awake" to a hat that has no tendency to a *nap*. We have no doubt, too, that much ingenuity has been spent on accounting for what has seemed to be merely a strange application of a term. Perhaps some hapless sufferer, not in grim irony but in sober seriousness, has thought that the laundress' *mangle* was rightly named from the effect it had on the linen submitted to it. Others may have conjectured that on the world-famous principle, *lucis à non lucendo*, we are said to cleave a stick because thereby we prevent its parts from cleaving to one another. Others again that a pedlar is said to *hawk* because he has a keen eye for a customer, and pounces on him like a bird of prey. Certainly our dictionaries often help the belief that the one meaning of the term is somehow derived from the other, and that we are using the same word in two different senses, by printing the word but once with its diverse meanings in a row after it. It is obvious that if we are dealing with true Homographs, *i. e.*, with words which derived from a different stock have come to be simply spelt alike, we must acknowledge them to be essentially distinct words, and ought, therefore, in a dictionary, to place each word separately. In English, such words are probably more numerous than in any other language, owing to its having, at the time that the Latin element was received into it through contact with a French-speaking nation, undergone such violent disturbances, in its orthography, and suffered the loss of nearly all its inflections. No one can open an early English book without at once noticing that no attempt was made to spell correctly. The ear was the guide for the most part, and then, naturally, in an age when no one would trouble himself about etymology words that sounded at all alike would often come to be spelt exactly in the same way. This, of course, is one of the causes which have thrown our orthography into such dire confusion. Whether it can ever be mended is a question into which we can hardly just now enter. We certainly cannot agree with the radical reformers (rightly named here, by the way, since they would pull our whole language up *roots* and all) who contend that our spelling has already so far outraged etymology that it had better once for all break with it entirely, and giving up all pretence of presenting the history of words, merely try in the simplest way, and on one uniform method, to write down sounds as they are heard. We would rather see a reform of such a kind as should reduce anomalies to principle, and simplify words by striking out of them all that ignorance has inserted, either through following a false analogy or for the sake of euphony falsely so called. But this it seems hopeless to expect. We have no body like to the French Academy whose decision would be accepted on points of literary scholarship. We should perhaps get no farther than an "Orthographical Society," which would confer the privilege (on the payment of course of ten guineas) of using the letters F.O.S., would publish a journal, and perhaps a Milton spelt orthographically, of which the first edition would hang heavily on hand. If custom and prejudice can prevent the still more necessary, and still more hugely desirable reform of our money, and our weights

and measures, which would almost banish so much unnecessary labour in schools as to give our youngsters another year's useful schooling, how completely would they block the way against the introduction of "new-fangled" notions on spelling!

But to return to our Homographs. We have selected some few which will illustrate our remarks. It will be observed that in some cases one language, either of the Teutonic or the Classical stock, has furnished the two or three distinct words, while in other cases, one has come from the one source, another from the other.

- Blow. 1. Of the wind. A.S., *blāwan*. 2. A stroke. A.S., *bleowan*, to smite. 3. To bloom. A.S., *blōwan*.
- Cleave. 1. To adhere. A.S., *clifan*. 2. To split. A.S., *cleofan*.
- Hawk. 1. The bird. A.S., *hafuc*. 2. To offer for sale. Old German. *hocke*. Compare our *huckster*.
- Lap. 1. A fold. A.S., *lappa*. 2. To lick. A.S., *lapjan*.
- Lie. 1. To recline. A.S., *licjan*. 2. To tell lies. A.S., *leogan*.
- Nap. 1. A short sleep. A.S., *hnæppjan*, to sleep. 2. A downy surface. A.S., *hnoppa*. Perhaps we may compare *knob*, a projection. *Knap*, a small protuberance.
- Ring. 1. A circlet. A.S., *hringjan*, to encircle. 2. To sound. A.S., *hringan*.
- Count. 1. A noble. Old French, *cumte*. Lat., *comes*. 2. To reckon. Old French, *cunter*. Lat., *computare*.
- Host. 1. An army. Old French, *hoste*. Lat., *hostis*. 2. A sacrifice. Lat., *hostia*. 3. An entertainer. Old French, *hoste*. Lat., *hospes*.
- Jet. 1. The mineral. French, *jayet*. Lat., *gagates*. 2. An outspirt of fluid. French, *jeter*. Lat., *jacere*.
- Kennel. 1. A dog house. French, *chenil*. Lat., *canile*. 2. A gutter. Old French, *chenal*. Lat., *canalis*.
- Mangle. 1. To mutilate. Lat., *mancus*. 2. A clothes roller. Old French, *mangonnel*.
- March. 1. The month. Lat., *mars*. 2. A timed step. Fr., *marche*.
- Rally. 1. To collect. Fr., *rallier*. Lat., *re-ulligare*. 2. To mock. French, *railler*.
- Bark. 1. To utter a certain sound. A.S., *beorcan*. 2. The covering of a tree. Scandinavian, *borkr*.
- Bull. 1. The animal. A. S., *bulluca*. 2. The document. Lat., *bullā*, the leaden seal attached. 3. A mistake. Doubtful, perhaps from a Proper name.
- Burden. 1. Weight. A.S., *byrden*. 2. A chorus. Old French, *bourdon*.
- Corn. 1. The grain. A.S., *corn*. 2. A horny excrescence. Lat., *cornu*.
- Defile. 1. A narrow pass. Fr., *défilé*. 2. To Besmirch. A.S., *fylan*. Compare : "For Banquo's issue have I *fyled* my mind"—*Macb.*
- Die. 1. To expire. A.S., *deððjan*. 2. To colour. A.S., *deðgian*. 3. A stamp. Fr., *dé*.
- Fair. 1. Beautiful. A.S., *fæger*. 2. A market. Old French, *feire*. Lat., *ferie*.
- Lay. 1. Imp. of lie. A.S., *liegen*. 2. To put down. A.S. *legen*. A song. Old French, *lai*. 4. Belonging to the people. Lat., *laicus*.
- Mould. 1. Earth. A.S., *molda*. 2. Form. Lat., *modulus*.
- Nave. 1. Of a wheel. A.S., *nafu*. 2. Of a Church. French, *nef*. Lat., *navis*.
- See. 1. To behold. A.S., *seohan*. 2. The seat of bishop. Old French, *sed*. Lat., *sedes*.

Papers for the Schoolmaster.

The Gaelic Language in Scotland.

Out of the 3395 places of worship in Scotland there are at least 561, or about one-eighth, in which services are steadily administered either in whole or in part in the Gaelic language. The six northern synods of Scotland comprehend a territorial area of nearly 11,000 square miles, or a little more than one-third of the kingdom, and in this Gaelic is the predominating language. The test of this must be held to be the language in which religious services are conducted. In, then, the Synods of Argyle, Perth, Stirling, Moray, Ross, Sutherland, Caithness, and Glenelg, the Establishment has 229, and the Free Church 155, making together 384 churches in which services are conducted either wholly or in part in the Gaelic language. Within the same area there are but 254 places of worship in which Gaelic services are not conducted. Within fifteen Established Presbyteries and thirteen Presbyteries of the Free Church in these synods, there is not a single church in which there are not Gaelic

services, although the churches within their bounds number 288. In all, in the six synods named there are 334 churches of the two leading Presbyterian denominations in which Gaelic is preached besides many others connected with other denominations, and in the majority of the large towns of Scotland there are also Gaelic churches.

Fatality of the House of Stuart.

In Scotland we can produce, in the royal line of Stuart, a race as steadily unfortunate as ever were recorded in history. Their misfortunes have continued with unabated succession during 390 years.

Robert III. broke his heart because his eldest son Robert was starved to death, and his youngest son James was made a captive.

James I. after having beheaded three of his nearest kindred, was assassinated by his uncle, who was tortured to death for it.

James II. was slain by the bursting of a piece of ordnance.

James III. when flying from the field of battle, was thrown from his horse, and murdered in a cottage into which he had been carried for assistance.

James IV. fell at Flodden Field.

James V. died of grief for the wilful ruin of his army at Solway Moss.

Henry Stuart, Lord Darnly, was assassinated, and then blown up in his palace.

Mary Stuart was beheaded in England.

James I. of England and VI. of Scotland, died, not without suspicion of being poisoned by Lord Buckingham.

Charles I. was beheaded at Whitehall.

Charles II. was exiled for many years.

James II. lost his crown and died in banishment.

Anne, after a reign which, though glorious was rendered unhappy by party disputes, died of a broken heart, occasioned by the quarrels of her favorite servants.

The posterity of James have remained wanderers in foreign lands.

The year 88 has also been, for several centuries, fatal to the royal house of Stuart:—James III. on June the 11th, 1488, lost a battle to his subjects, by whom he was pursued and assassinated. Mary, Queen of Scots, was beheaded the 8th of February, 1588. James II. of England abdicated the throne of Great Britain on the 12 of December, 1688; and in the year 1788 the last legitimate male of the Stuart family expired.

Strange News from the Australian Skies.

More than a year ago a discovery was announced by an astronomer in the southern hemisphere which seemed so strange and so perplexing, that Sir John Herschel, commenting on it, remarked "that no phenomenon in astronomy had yet turned up presenting anything like the same interest, or calculated to raise so many and such momentous points for inquiry and speculation." One of those mysterious nebulous masses which astronomers had been in the habit of regarding as galaxies, resembling in extent and magnificence the sidereal scheme to which the sun belongs, seemed to be undergoing a most astounding series of changes. During the winter months when Orion shines with full glory, the famous nebula which clings around his pendant sword presents to our northern observers an object similar to the nebula in question. Every one has heard of the strange interest which attaches to this Orion nebula, of the mysterious far-reaching arms which extend from it, the dark central vacancy, and the brilliant array of stars which the six-foot mirror of Lord Rosse has brought into view in the very heart of the nebula. But in the southern skies there is an object of the same class even more glorious and more mysterious. In the richest part of the southern heavens, a part so rich, indeed, that, according to the argument of a well-known astronomer, the splendour of the constellations comprised in it illumines the heavens as a new moon would, there lies the great nebula known among astronomers as "the Nebula in Argo." The Orion nebula can only be seen on the darkest nights, but the great Argo nebula shines as brilliantly as a third-magnitude star, and is scarcely obliterated even by the effulgence of the full moon. It is, in fact, the most splendid nebula in the whole heavens. Yet, this glorious object, whose contemplation has led our most thoughtful astronomers to form new ideas of the grandeur of the universe, whose dimensions seemed immeasurable by any unit of length men could devise, the whole of this magnificent nebula is drifting about like a cloud before a shifting wind.

For the news which seemed so surprising to Sir John Herschel has just been confirmed by the revelations of a new telescope of enormous power. The news had come, first of all, from a small telescope,—only five inches, indeed, in aperture; and it seemed quite possible that the weakness of this instrument (compared with the 19-inc. reflector used by Sir John Herschel during his survey of the southern heavens) might have led to an erroneous impression of change. But now the new four-foot mirror is at work among the southern stars. Surpassed only by the Rosse reflector and matched only by the fine reflector with which Lassell is surveying the heavens at Malta, the great Melbourne reflector is about to place our knowledge of the Southern heavens nearly on the same footing as what we possess respecting the Northern stars. And if the work to be done by this great reflector in after years is shadowed forth by its first great exploit, we may well look eagerly forward for the discoveries it will effect.

Sir John Herschel had said, a year and more ago, that the strange inquiries suggested by the news then lately received about the Argo nebula "must be settled." We cannot do better than use the *ipsisima verba* of the great astronomer:—"The question," he said, "is not one of the minute variations of subordinate features, which may or may not be attributable to differences of optical power in the instruments used by different observers, as in the case of the Orion nebula, but of a total change of form and character—a complete subversion of all the greater and most striking features—accompanied by an amount of relative movement between the star and the nebula, and of the brighter portions of the latter *inter se*, which reminds us more of the capricious changes of form and place in a cloud drifted by the wind, than of anything heretofore witnessed in the sidereal heavens.

Urged on, doubtless, by the importance thus attached to the question by the greatest astronomer of the day, Mr. Le Sueur turned the newly-mounted reflector to the great nebula. The result is now before us. There seems no longer the least room to doubt that the nebula has changed in the most marvellous manner since Sir John Herschel, a third of a century ago, mapped its most striking features. The stars which are strewn over the nebula, and which have been spoken of by Sir John Herschel as probably much nearer to us, have remained unchanged in position, and with one exception have not changed much in relative brilliancy. So that M. Le Sueur has been led to form the opinion that the nebula is much nearer to us than the stars,—a view clearly tending to diminish our ideas of the real dimensions of the nebula, and so rendering the observed changes somewhat less astounding than they otherwise would be. Forbearing to speculate, as, indeed, we have no means of forming an opinion, about the physical causes to which these marvellous changes may be due, let us consider a little the conclusion to which Mr. Le Sueur has been drawn.

Because the stars seen with the nebula have remained unchanged while the nebula itself has shifted about so strangely, the opinion is suggested, says Mr. Le Sueur, that the nebula and the stars are in no way associated. And certainly one would expect to find the changes of the nebula accompanied by very remarkable changes in the star-group, if there were any bond of association between one and the other. Changes more remarkable perhaps than have been noticed in any other part of the sidereal heavens might be looked for.

What, however, if this were actually the case, despite the fixity observed among the stars examined by Le Sueur? We have spoken of one exception to the constancy of these stars in brightness, what if that exception should be more than sufficient of itself to compensate for the fixity of the other stars?

The star that *has* changed is the famous Eta Argus, the most wonderful star in the whole heavens, and only surpassed in interest by one object,—the nebula in the midst of which it is situated.—*Spectator*.

The Tides.

The cause of the tides is to be found in the action of the sun and the moon. We know that the moon is governed, so to speak, by the sun, which is her centre of gravitation. We know, too, that the moon is similarly controlled by the earth. The obedience of the terrestrial globe to the attraction of the sun specially manifests itself by its movement of translation following the ecliptic. But we can understand that if the terrestrial masses clothed in its solid crust, preserves in this movement its almost exact configuration—thanks to the cohesion of the molecules which compose it—the same cannot be the case with the liquid, and, consequently, very mobile stratum, which partially covers its surface; in other words, we can understand that the solar attraction makes itself felt in a particular manner by the ocean. And,

in fact, under the influence of this attraction, the ocean waters are periodically upraised, and assume the appearance of a mighty liquid mountain, which follows the apparent motion of the sun, and moves consequently in a direction opposite that of our planet. But these first oscillations of the ocean, these *solar tides*, are nothing when compared with the lunar tides, and only become perceptible when combined with them. For, though the attractive force of the sun is incomparably more considerable than that of the moon, yet, owing to the far greater distance of the former of these two planets, the difference of effect which the liquid atoms experience on the diametrically opposite surfaces of the globe is much less. Thus, then, the moon, the earth's handmaid, plays the principal part in the production of the tides. As between bodies attraction is always reciprocal, as the stronger—that whose density is the greater—always controls the weaker, the moon is compelled to obey the earth and gravitate round her; but the seas, boundless as they appear to us, represent only a minimum portion of the terrestrial mass, and our satellite is strong enough and sufficiently near us to draw in her train a portion of the waters of our ocean around the planet from which it cannot separate them. The sun, on his side, influences them in the same manner, only much more feebly; the phenomenon is, therefore, two-fold. There is a solar tide and there is a lunar tide; the former is three times less than the latter. In fact, it is never seen as a distinct and isolated phenomenon; it is perceived simply in the modifications which it effects in the height and in the periodicity of the lunar tide. We shall see immediately what these modifications are. The tides usually happen twice in twenty-four hours, because the rotation of the globe brings the same point of the ocean twice under the meridian of the moon. A complete oscillation is accomplished in the space of about twelve hours fifty minutes. The ascending movement of the sea towards the coast is called the "flux," or "rising tide;" the retrograde movement is the "ebb," "flux," or "falling tide." "Spring-tides" happen at new and full moon, and, consequently, twice in a month, because in both cases the sun and moon are in the same meridian. For when the moon is new they are in conjunction, and when she is full they are in opposition, and in each case their attraction is combined to raise the water to its greatest height; while, on the contrary, the "neap," or lowest tides, happen when the moon is in quadrature, or 90° distant from the sun, for then to a certain extent they counteract each others' attraction. When the flow or flux is complete, it is said to be, "high water;" and when the tide has ebbed it is spoken of as "low water." It remains stationary for seven or eight minutes both at ebb and flow.—*Our Own Fireside.*

Electricity.

Although great advances in the science have been made since Franklin's time, the question, What is electricity? remains unanswered; and a not uncommon result of such new discoveries as have been made has been the overthrow of pre-existing theories upon the subject. . . .

The most important law of electricity is, that it seeks what is called a state of equilibrium; that is, if we consider it a single fluid, that it tends to diffusion in equal proportions throughout all matter; or, if we choose to adopt the theory of the existence of two distinct fluids, then that these two fluids tend to unite in equal proportions everywhere. When electricity is so diffused, or, (if there be two fluids) when they are so united, no electrical effects are observable, and there is then a state of rest or equilibrium. But this state of rest is constantly disturbed by the operations of nature—by evaporation, changes in temperature, friction, motion of all kinds, even the movement of our bodies; and currents of electricity are immediately set in motion to neutralize the disturbance. These currents may be of such low tension as to admit of detection only by the aid of the most delicate apparatus; or they may be developed with such spasmodic irregularity and force as to interfere with the use of the telegraph; or, again, with such constancy of direction and tension as to be made use of in sending messages on the wires. Finally, in a state of extreme tension, they exhibit themselves to us in the form of explosions or discharges of lightning.

We may familiarly illustrate the idea of these currents of varying tension by reference to the spectacle of a tea-kettle or boiler filled with water, which, when first placed on the fire, sends forth from any opening gentle clouds of vapour. As the heat increases, the steam rushes out with a spiteful hiss; and finally, when it has acquired sufficient tension, if the means of escape are inadequate, it bursts the boiler with a violent explosion. So electricity flows in currents of more or less tension, according to the degree or extent to which its equilibrium is disturbed, and manifests its great known tensional force in

the form of a discharge of lightning,—the discharge or explosion being the consequence either of interruption in the flow of currents of low tension, or of an immediate and extensive evolution of electricity; in other words, a sudden and extreme disturbance of the equilibrium.

Hence the insulation of lightning-rods is not only an absurdity—as indeed Dr. Franklin perceived a hundred years ago, when it was first suggested—but it is also a grave error; because the insulators, to some extent, arrest the flow of currents of rarefied electricity, which it is the true function of the lightning-rod to facilitate. On the other hand, the insulator amounts to nothing as a barrier against a discharge of lightning, which can either pass through it or leap the short distance between the rod and the building. The prejudice in favour of insulators arises from a misapprehension. Strictly speaking, there are non-conductors; but that term is applied to substances which conduct very imperfectly and are subjected to violent disruptive effects when a shock of electricity passes through them.

The insulation of telegraph wires is frequently referred to by lightning-rod men as exhibiting the necessity and usefulness of insulating lightning-rods; but the cases are not at all parallel: currents of electricity of low tension are used for telegraphing; and whenever a discharge of lightning strikes the wires, it breaks the insulators and passes down the poles to the earth, as the frequently splintered telegraph-poles bear witness. The object of insulating telegraph-wires is to postpone the restoring of the equilibrium, by preventing the electric currents from taking the shortest course from pole to pole of the battery; whereas the purpose of a lightning-rod is to promote the restoration of the equilibrium as rapidly as possible. If the rod be insulated, the "non-conducting" substance between the rod and building intercepts and stops the flow of currents of rarefied electricity from the building to the rod, and thence to the atmosphere and *vice versa*, thus permitting a continued disturbance of the equilibrium of the building, under the influence of a "thunder-cloud," until a discharge of lightning takes place. Then the fluid has sufficient force or tension to overcome the obstacle which the insulators present, and an explosion into or from the building is the necessary consequence. Of course, the quantity of electricity required to restore the equilibrium of the building is small compared with the whole discharge, which may come from a cloud thousands of acres in extent; but it is enough to do injury if it comes all at once and in a high state of tension. To insulate the lightning-rods, therefore, is to fasten the safety-valve and render it inoperative.

To prevent a discharge from leaving the rod and passing through the building, something more must be done than to attempt to keep it out by erecting such a flimsy and insignificant barrier. The rod must be arranged so as to prevent points for the reception and discharge of electricity at the extremities of the building, both above and below, and the different terminations in the ground must be connected by rods lying across the roof, so that lightning can be provided with a path in a horizontal direction, which, being continuous, will be preferred to any series of detached masses of conducting matter contained within the building.

In construction and application, lightning-rods should be simple, substantial, and durable, and any metal is a sufficiently good conductor for the purpose. The difference in the conducting power of iron and water, which ranks next to the metals as a conductor, is, according to Cavendish, as millions to unity. The relative conducting power of different metals is, therefore, not worth considering in this connection: hence iron is used for the telegraph instead of copper, which is theoretically a better conductor than iron. A lightning-rod made of the precious metals (which are the best conductors) would not be effective if it were improperly located and arranged. If a rod of any metal be rightly constructed and judiciously applied, there is no danger of a discharge of lightning leaving it for any less perfect conductor within the building, and it is only those substances which are poorer conductors than the metals that are injured by the passage of electricity upon them.—*Exchange.*

Interior Decoration—Management of Colours.

Painters, as a general rule, acknowledge but three primary colours—blue, red, and yellow; and whatever exception may be taken to such a statement on scientific grounds, there is no question that such a view of the subject does afford certain practical advantages. It is further assumed, that all other tints are mere mixtures of these three colours. For instance, green is made up of blue and yellow; violet of blue and red; and orange, of red and yellow. If one has no taste and no power of discriminating between colours, it is a useless task for him to undertake decoration; it is useless for him to

rely upon the painter; for what is wanted is that education which will enable us to make a judicious selection suited to the several purposes to which they are to be applied. Thus, in arranging colours, we can not put bright scarlet next to white without a tinge of green appearing on the edges of the scarlet; for in looking first at scarlet, and then at any other colour, a green hue will invariably appear about it; and again, after first looking at green, other objects will have a tinge of red. The illusion has doubtless occurred to many and to avoid these unpleasant effects is in a great measure the object to be attained in the selection of appropriate colours for wall or furniture decoration.

Where violet and green are placed in juxtaposition, each colour having one element—blue—in common, this similarity on one point makes the dissimilarity on the others stand out more clearly; so that the green on the violet appears more yellow, whilst the violet, on the other hand, appears more red. In like manner, if orange and green be taken—the yellow element in the one cancelling, so to speak, the yellow in the other—the orange will assume a reddish hue and the green a bluish. An upholsterer should be very careful in choosing the colours of stuffs used for coverings. It will not do to cover mahogany furniture with scarlet—the colour is too bright, and when placed beside it the mahogany loses brilliancy and becomes like walnut wood. Many persons, however, like the colour, and insist that it shall accompany mahogany. In such cases, the unpleasant effect produced can be in a measure relieved by putting a green or black braid or an edging of yellow silk or gilt lace on the border where the cloth and wood meet. In paper-hanging a room, it is well to remember, that on crimson-coloured grounds black looks green, and in the same way black upon green loses its lustre, and *vice versa*. Orange upon red is injurious to the eyesight; violet upon blue looks washed out; blue upon green looks spinach color, by candle light, and gray upon green would show pink. Such combinations of colours should always be avoided, as the effect produced upon the eyesight on entering a room whose side walls are decorated in green and black or red and black, or an orange figure upon a red ground, is any thing but agreeable. It is the same in dress. The most striking effects are those produced by selecting harmonious colours, whereby the eyesight is maintained in a state of repose, and not affected by the false tints caused by the improper mixture of colours. The trade in paper-hangings has now become so extensive that such faults seldom occur, and yet there are defects still noticeable in the prevailing style where a light ground is interspersed all over at equal distances apart by small gilt figures; now this, in effect, is sometimes good, but in most cases the effect is like looking at some arabesque ornament which appears all mixed up, because the eye can not take in all the figures at once. Now, if we have a pale pink blue, gray, violet, green, or other ground colour, and at the top decorated with a bright coloured border, the same at the base—or divided off into panels by stripes, ornaments, medallions, rosettes, and lines—the effects can then be at once grasped by the eyesight, and the result is interesting and pleasing.—*The Manufacturer and Builder.*

OFFICIAL NOTICES.

Ministry of Public Instruction.

APPOINTMENTS.

STANSTEAD BOARD OF EXAMINERS.

The Lieutenant Governor, by an Order in Council dated 12th, instant, was pleased to appoint the following Gentlemen members of the aforesaid Board:

- The Revd. Michael McAuley, in the room and stead of the Revd. A. D. Limoges, removed from the District,—
- Edwin R. Johnson, Esq., in the room and stead of Robert W. Hall, Esq., removed from the District,—
- Charles S. Channell, Esq., in the room and stead of the Revd. W. L. Thompson, removed from the District,—and
- William S. Hunter, Esq., in the room and stead of Joseph Breadon, Esq., M. D., removed from the District.

APPOINTMENT OF SCHOOL COMMISSIONERS CANCELLED.

The Lieutenant Governor, by an Order in Council dated the 4th, instant, cancelled the appointment (made on the 13th of August last) of

the School Commissioners for the Municipality of "St. Pierre de l'Etang du Nord" in the County of Gaspé,—as an *election* was held, within the legal time, in July last.

TEACHER'S DIPLOMA REVOKED.

The Council of Public Instruction, at a special meeting held on the 10th November last, revoked (in virtue of the powers conferred on it by clause 22, cap. 15, Consolidated Statutes for Lower Canada) the Diploma of Mr. Edward Corbeil, Teacher.

ERECTION OF SCHOOL MUNICIPALITY.

(Instead of what appeared in our December number under this title read the following.)

The Lieutenant Governor, by an Order in Council dated November 16th, 1869, was pleased to erect into a School Municipality, under the name of St. Jérôme du Lac St. Jean, the portion of each of the Townships, —Caron and Métabetchouan, in the County of Saguenay, bounded as follows, to wit:—On the North by Lac St. Jean, on the East by Belle Rivière and Hébertville, commencing at the Twenty-fifth lot, in the First, Second, Third and Fourth Ranges of the Township of Caron, and at the Fifty-eighth lot, in the North and South Ranges A of said Township of Caron; on the West by River Métabetchouan, and on the South by mountains and uncleared lands, serving as limits to the Fourth Range of the Township of Caron.

DIPLOMAS GRANTED BY BOARDS OF EXAMINERS.

PONTIAC BOARD.

Session of November 2nd, 1869.

ELEMENTARY SCHOOL DIPLOMA, (E.) 1st Class:—Miss Louisa Howe and Mr. Richard Foster.

2nd Class:—Miss Mary Letts.

OVIDE LEBLANC,
Secretary.

AYLMER BOARD.

Session of November 2nd, 1869.

ELEMENTARY SCHOOL DIPLOMA, (E.) 1st Class:—Messrs. Angus Kennedy, Thomas G. Bothwell; Misses Rebecca Smith, Mary Teresa Brady; (F.) Miss Marie Joséphine Poitras and Mr. Jean-Eugène-Guérin.

J. R. WOODS,
Secretary.

QUEBEC (PROTESTANT) BOARD.

Session of May 4th, 1869.

ELEMENTARY SCHOOL DIPLOMA, (E.) 1st Class:—Miss Dora Brown.

2nd Class:—Miss Margaret Elliot and Mr. Thomas Parks.

D. WILKIE,
Secretary.

SECRETARY'S OFFICE, Quebec, January 5th, 1870.

The following have obtained Certificates from the Civil Service Board of Examiners for this Province:

George William Colfer, Esq., Advocate,—First Clerk of English Correspondence, Provincial Secretary's Office,—obtained a First Class Certificate, with distinction, on November 29th, 1869.

M. Gustave Grenier, Clerk in the Executive Council Department of this Province, obtained a First Class Certificate, with distinction, on December 30th, 1869.

M. Zéphirin Duhamel, St. Ambroise, Co. of Quebec, obtained a Second Class Certificate, on December 30th, 1869.

M. Fabien-René-Edouard Campeau, Quebec, obtained a Second Class Certificate and a Certificate as Book-Keeper, on December 30th, 1869.

PIERRE J. O. CHAUVEAU,
Secretary.

THE JOURNAL OF EDUCATION.

QUEBEC, (PROVINCE OF QUEBEC,) JANUARY, 1870.

Regulations Concerning the Examinations for the Civil Service, P. Q.

I.

APPLICATION FOR ADMISSION TO THE EXAMINATIONS.

1. The Candidate for the Civil Service is required to produce at the office of the Board an application for admission to the examination, in his own handwriting, mentioning his age, his place of birth and his present place of residence, the length of time he has been resident in the Province, and the nature of his previous occupation, declaring his desire to enter the Civil Service and indicating if he thinks proper, the branch of the Service for which he considers himself best adapted.

2. The application of the Candidate must be accompanied by satisfactory certificates as to age, health and character.

3. No Candidate under seventeen years of age shall be admitted to the examination.

4. Every Candidate in order to show that he is of the required age shall produce an extract from the registers of the parish in which he was baptised, and if, for reasons which he must explain to the satisfaction of the Board, it should be impossible for him to do so, he shall furnish the best proof possible by certificates from credible persons, to the satisfaction of the Board.

5. The certificate of health must be in the subjoined form A signed by a practising Physician, and bearing date within one month of the date of the application for admission to examination.

6. Notwithstanding the production of a certificate of good character, the Board may require such additional evidence as to the moral character of the Candidate as it may deem expedient, and may take action in accordance therewith.

7. Candidates previously employed in the Public Service must state the Department in which they were so employed and the length of time they served.

8. The Candidate must be recommended by at least two persons who must be householders, each of whom shall answer in writing and over his own signature, the questions submitted in form B, which answers shall be produced with application for admission. When the Candidate has been previously in the employment of private individuals, commercial houses or companies or in any office or department, such private individual, or some person on behalf of such house, company, office or department, must be one of those who sign the recommendation, and when this condition is not complied with the Candidate must explain the reason.

9. In the case of a Candidate who has left school or college or other educational establishment in the year preceding his application for admission, the principal or one of the professors or teachers of the school or institution he attended last, must sign the answers to the questions in form B, and if this condition is not complied with satisfactory reasons must be given by the Candidate.

10. The five preceding articles do not apply to the actual employés.

11. Forms may be obtained by application to the Secretary of the Board.

12. The Candidate must produce his application and certificates before the third Wednesday of the month when they will be examined, and the Secretary will notify him of any objection that may be made to them.

II.

EXAMINATIONS AND CERTIFICATES.

13. The examinations shall be conducted partly orally and partly in writing.

14. The time allowed for the answer to every written question shall be indicated underneath the same.

15. The Certificates shall be divided into two classes, those of the first class will render the holder eligible for any employment in the Civil Service with the exception of that of Book-keeper, if the Candidate has not passed a satisfactory examination on that subject: the Certificates of the second class only render the holder eligible for employment as copying clerk and also as Book-keeper, if the Candidate has undergone a satisfactory examination on this subject.

16. In order to obtain a second class Certificate the Candidate must:

1. Give proof of good handwriting;
2. Write correctly from dictation in French or in English;
3. Copy correctly in both languages;

4. Pass an examination in Arithmetic as for as the Rule of Three, inclusive. He may also if he desires it undergo an examination in Book-keeping.

17. For a first class Certificate, the Candidate must in addition to what is required for a second class Certificate:

1. Translate in writing from English into French, and from French into English;

2. Write from dictation in both languages;

3. Transcribe and make abstracts of documents in both languages;

4. Pass an examination on the following subjects: 1. Arithmetic in all its branches; 2. Geography; 3. History of England, the History of Canada and the Elements of General History; he may also if he desires it undergo an examination in Book-keeping.

18. The actual employés shall be exempt from examination in No. one of the preceding article and in Nos. two and three shall only be required to pass an examination in one or other language.

19. A Candidate for a first class diploma may, if he desires it, undergo a more extended examination: but in this case he must in his application for admission mention the other subjects upon which he wishes to be interrogated and the Board shall decide whether or not he may conveniently be examined upon such subjects, and he shall at the same time be notified of the decision of the Board on his certificates.

20. There shall be endorsed upon the Certificate of examination a list of all the subjects upon which the examination has been held, with number 1 or number 2 opposite each of them; the number 1 indicating that the result of the examination on that subject was excellent, number 2 indicating merely a satisfactory result. If number one has been obtained on two thirds of the subjects of examination it shall be stated in the body of the Certificate that the examination has been passed "with distinction," and in the first class Certificates if in addition to this, the Candidate has passed in a satisfactory manner an examination on one or more of the optional subjects, it shall be stated that the examination has been passed "with great distinction."

21. There shall be published every three months under the signature of the Secretary of the Province, in the *Official Gazette* the *Journal de l'Instruction Publique* and in *The Journal of Education*, a list of the Candidates who have obtained Certificates at the three last meetings, indicating exactly the classes and the nature of the Certificates.

(FORM A.)

I certify by these presents that I have this day examined Mr. _____ and that I find him free from defects and physical or mental maladies which would prevent him from

efficiently discharging the functions of an employé in the Civil Service.

(Signature.)
(Address.)
(Daté.)
(FORM B.)

Statement concerning Mr. a Candidate for the Civil Service of the Province of Quebec :

1. Are you related to the Candidate and if so in what degree ?
2. Are you acquainted with the Candidate ?
3. Under what circumstances did you become acquainted with him ?
4. How long have you been acquainted with him ?
5. Is he strictly honest, sober and laborious ?
6. What do you know concerning his education and his mental capacity ?
7. In so far as you are able to judge of his character, is it such as to render him fit for public employment ?

(Signature.)
(Address.)
(Date.)

Quebec Literary and Historical Society.

On Wednesday, 12th inst., at 10 A.M., the annual meeting of this Society took place in their rooms, in Morrin College, the Rev. J. Douglas, President, in the chair.

The following is the report of the Council :

Report of the Council of the Literary and Historical Society of Quebec.

The Council has the pleasure to report that the past year has been one of increased and uninterrupted prosperity ; the stated meetings have been well attended, the papers read were of general interest, and some of them, owing to their more immediate bearing on the objects which the Society was founded to promote, have been published in our transactions.

It has also the pleasure to state that the " Historical Documents," published under the auspices of the Society, have been sought after by kindred associations in other countries, and have led to the formation of pleasing connections with correspondents, both in the old and new worlds, with whom an interchange of publications has taken place.

Very valuable additions by purchase and donation have been made to the Museum, especially to the Ornithological Department, and about one hundred volumes of the higher current literature have been procured for the library, which, in the opinion of the Council, are calculated to meet the varied tastes and wants ; but being desirous of carrying out to the fullest extent the wishes of all their constituents, the Council recommends that they should avail themselves more freely of the " Recommendation Book."

The convenience and comfort of the present rooms have led to their being more frequented than formerly, and the variety and high standard of the periodicals on the table have no doubt together contributed to the large increase of members.

The rooms have been visited during the past year by many strangers, first among whom in rank and place, was His Royal Highness Prince Arthur. The arrangements made with Mr. Mathison as custodian of the rooms and sub librarian, have proved very satisfactory.

The expenditure has been large, but strictly within the revenue, and it is satisfactory to find that notwithstanding the large, yet necessary disbursements, there is yet a handsome balance on hand, and it ought now to be decided whether it would not be prudent to set aside annually a certain sum to form a reserve fund. The Treasurer's account shows :—

Revenue	\$2,585.09
Expenditure.....	1,952.21
Balance	<u>\$ 632 88</u>

The balance is apportioned as follows :—

Historical Fund.....	\$ 130.42
Life Members' Fund.....	54.65
General Fund.....	447.81

Last year's report showed that there were then 170 members entitled to full privileges, 130 of whom had paid all dues. During the past year the list of members swelled to 230, of whom 174 have paid all dues, and the Treasurer's list gives now 174 as entitled to full privileges.

On referring to the 126 names to whom the original charter of the Society was granted on the 5th of October, 1831, they will be found to comprise gentlemen of every nationality, and every religious denomination, in Quebec. On turning to our present list, we may not be able to show such an array of talent and influence, but we can point with confidence to many who are imbued with as ardent a love of literature, and who for years have been zealous and no unworthy successors of the distinguished founders of the Society ; and it is gratifying to see that it has maintained unimpaired a catholicity worthy of enlightened men in an enlightened age ; and the Council cannot conclude better than by repeating the hope expressed in last year's report, that the reciprocal advantages secured under the existing arrangement between the Society and Morrin College may be maintained, while each shall continue to retain its thorough individuality and independence.

J. DOUGLAS,
President.

The Council for the ensuing year was then elected :

Patron—Sir N. F. Belleau.

President—Dr. Anderson.

Vice-Presidents—Captain Ashe, Dr. Marsden, Adolphe Caron, Esq. ; H. S. Scott, Esq.

Treasurer—T. H. Grant, Esq.

Recording Secretary—Robert Cassels, Esq.

Corresponding Secretary—C. Wilkie, Esq.

Council Secretary—Wm. Hossack, Esq.

Librarian—Faucher de St. Maurice, Esq.

Curator of Museum—J. M. LeMoine, Esq.

Curator of Apparatus—J. F. Belleau, Esq.

Additional members of Council—Henry Fry, Esq. ; Rev. J. Douglas, N. H. Bowen, Esq. ; Rev. W. Powis.

The Museum.

In the absence of the Curator, Mr. McNaughton, the members of the Society applied for information to Mr. Le Moine who has taken a most active part for years past, in the formation of the collection. Mr. Le Moine who has resigned the office of first Vice-President to accept that of Curator of the Museum for 1870 expressed himself as follows :

The vote of the meeting will provide the Society with a new staff of office bearers, selected no doubt as formerly from amongst the most zealous and experienced members. I for one will cheerfully accept the post which a unanimous vote confers on me, decided to contribute, no matter how little, to the important results which the unprecedented prosperity of the Institution and the unusual influx of influential members promises for the year 1870. The principles which have so far guided the Society in the formation of a museum are, 1st, to procure every specimen of the Canadian *Fauna*. 2nd, Canadian birds and animals being complete, to obtain specimens of Foreign *Fauna*—American and European. About 100 new specimens of birds and eggs were added during the year 1869, purchased from, and mounted by, Mr. Alfred Lechevallier, a French Taxidermist, now residing in Montreal.

The unusual outlay for book shelves, for furnishing and carpeting the rooms, for gazeliers, binding and repairing the books in the Library, naturally absorbed large sums and reduced by so much what otherwise would have been appropriated for natural history specimens. But these sources of expenditure will not exist the ensuing year, and if the museum continues to increase even at its present rate, it will soon be necessary to find additional accommodation. Many think it strange that no representative of the lordly moose, the great elk, or fleet cariboo, and other large animals, are yet to be found in the collection. Certainly these denizens of our forests ought to have a habitation and a name in our rooms and on our catalogue ;—the society naturally look to some of the Nimrods, to be found amongst its members, for the presentation of such acceptable gifts. A rare chance of increasing our ornithological collection occurred last summer : a chance which possibly may never occur again : I allude to the generous act of a learned French Professor, Brother Ogérian, sent to America by

the French Emperor, who visited Quebec in July last. He placed the whole of the birds of France at my disposal to be exchanged, for the benefit of our Society, for duplicates of Canadian birds. Unfortunately the Society had no duplicates, and this very advantageous offer would have ended without any result, had not the Laval University and the Revd. Mr. Anderson, several owners of collections and myself, procured for exchange a number of Canadian birds; as it was, one-half of these splendid specimens had to be sent back to France.

I shall avail myself of the opportunity to appeal to our successful deer stalkers and sportsmen to set aside for the Society birds and animals shot by them; as duplicates they are available for exchange. The munificence of several Quebecers towards objects of science, charity or religion, has recently afforded a most pleasant theme of conversation inside and outside of Quebec; strange to say, the Literary and Historical Society was never yet remembered. It has occurred to some, that possibly a latent cause, an erroneous impression must have at times diverted from its doors the tributes of private benevolence so abundantly showered on other institutions. Possibly, some may imagine that the society by its rules and by-laws is prohibited from receiving; if so, this is a most unfounded impression. A few gifts would enable the Board of Directors to make the Library and Museum not only a credit to Quebec,—it is that already,—but a vast storehouse of knowledge, a point of attraction to every distinguished stranger visiting this historical capital, the "Mother of Canadian Cities," old Quebec.

J. M. LE MOINE,
Vice-President.

The Library.

Having been elected by you, Librarian of one of the most important libraries in the Province of Quebec, I believed it to be my duty to carry out the wish of my predecessor, Mr. Douglass, and, therefore, with the authority of the Council expressed at the last annual meeting, caused a new edition of the Catalogue to be made.

This Catalogue is to-day finished, and only requires, to make it complete, that it should be alphabetically arranged, with the addition of notes, so that the student may have an indication of the value and rarity of the works that are to be found upon the shelves of our library.

I would also recommend that the Catalogue should contain the rules of the Library, a complete list of the reviews and magazines received by the Society, and an exact and detailed copy of the indices relating to the "Archives of London," and the M. S. correspondence of the Governors of Canada. A mass of precious materials are contained in these 24 folios, some of which have been printed in O'Callaghan's collection; but a great number of the memoirs are still unpublished, and the Society would render a great service to the *littérateurs* of this country by placing them in a position to utilize the hidden treasure.

The labours of the past year have placed me in a position to lay before the Literary and Historical Society of Quebec a detailed statement of the 8974 volumes which make up the Library.

They are classed as follows:—

Mathematics.....	314	volumes.
Natural and Physical Sciences.....	328	do
Natural and Physical History of Animals.....	215	do
Natural History of America.....	64	do
Natural and Physical History of Man.....	28	do
Engineering and useful Arts.....	138	do
Fine Arts.....	70	do
Domestic Economy.....	10	do
Encyclopædias.....	96	do
Geography and Travels.....	819	do
History.....	375	do
Modern History.....	1311	do
American History and Antiquities.....	118	do
Canadian History.....	602	do
Biography.....	657	do
Political Economy and Social Sciences.....	371	do
Language.....	176	do
Greek and Roman Literature.....	115	do
Modern Literature.....	1376	do
Catalogues of Books.....	24	do
Moral Philosophy and Metaphysics.....	315	do
Theology.....	349	do
Polygraphy.....	399	do

These works have been classified and placed in proper order on their respective shelves, but I have not included herein certain pam-

phlets and incomplete works which have been set apart in the Museum.

216 volumes have been added to the Library during the past year; 156 of which were purchased by the Association, the remaining 60 being gifts from members and corresponding members of the Society. Amongst the additions, I must mention that made to the splendid collection on America that we possess which now contains the complete series of the Cromoizz press of John Gilmary Shea, Esquire, of New York, as well as that of the librarian Edwin Tross, of Paris. During the term of my office as librarian, the benefactors of the library have been Mr. Antoine d'Abbadie, member of *l'Institut de France*; Mr. Edwin Tross, the celebrated bibliophile; the historian Shea; our French Canadian poet, Mr. Pamphile Lemay; the Hon. MM. Chauveau and Archibald; MM. Montizambert, Anderson, Bartoletti, LeMoine, Budden, Dr. Marsden, Sir Duncan Gibb, Brigadier-General Flagg and Alfred Garneau, Esq.

Since my assuming office on the 11th January, 1869, the number of books circulated amongst the members of the Society has been 1499 volumes. I believe that this circulation, considerable as it is, could be greatly increased, did the young French Canadians of our city know the treasures of literature, philosophy and history, that are to be found in our library.

On our table we have 33 of the best European and American Reviews and Magazines. Our library contains the best and the oldest editions of French classics, as it does the best works of the more esteemed modern authors. I have no doubt if publicity were given to the proceedings of our meetings in the news-papers of the city, that it would be a means of inducing our intelligent young men to inscribe their names upon our register as members, by the side of that of H. R. H. Prince Arthur.

The whole respectfully submitted,

FAUCHER DE SAINT MAURICE,
Librarian.

Art Association of Montreal,

The annual meeting of the Art Association of Montréal was held in the Mercantile Library building on the 11th inst. The chair was occupied by the Vice-President, Dr. T. Sterry Hunt.

The Secretary, Mr. J. Popham, read the report of the Council.

The Council submitted the following brief report of the proceedings of the Association for the past year:

In pursuance of the recommendation adopted at the last annual meeting, the Council purchased a water colour drawing by Mr. C. J. Way, representing a scene near Monte Rotondo, in Corsica, which has since been chromo-lithographed by Messrs. Burland, Lafrcain & Co., of this city, and a copy of the chromo is presented to every subscriber. The picture is the property of the Association, and forms part of the gallery which it is endeavouring to form from its surplus funds. It is hoped that these efforts may be an incentive to more public support.

Shortly after the last annual meeting, the Council, with the view of encouraging Canadian Art as far as its means will permit, resolved upon offering a prize of \$200 for the best original painting in oil or water colour, by an artist born or resident in Canada, with the conditions that the picture selected should become the property of the Association, and that the Council shall have it chromo-lithographed and a copy given to the subscribers for the following year. In accordance with this, a circular was printed last spring and distributed among Canadian Artists, and advertised in some of the public journals. In response to this invitation four pictures have been sent in for competition, one by Mr. O. R. Jacobi, in water colour, representing "A Scene in the Thousand Islands," one by Mr. Fowler, in water colour, "A Group of Holly Hocks," one by Mr. A. Edson, in oil, "The Shawinigan Falls;" and one by Mr. Vogt, in oil, "The Shepherd and his Flock."

The council have decided upon giving an exhibition of pictures &c., and a conversation on Tuesday, the 8th of March next. The members have much pleasure in stating that H. R. H. Prince Arthur has been pleased to signify his intention of being present upon that occasion. It is intended to make this exhibition specially interesting and attractive, and it is hoped the public will more generally show its appreciation of Art and of efforts to encourage Art, by becoming members of the Association.

The Treasurer's Report, which will be presented will show a balance on hand of \$709.46, which will be nearly required for the cost the chromos.

In accordance with the by-laws the following offices have to be filled:—President, Vice-President, and Treasurer, and six members of the Council, in consequence of the following gentlemen going out

by rotation; Messrs. G. H. Frothingham, James Ferrier, jr., John Hope, J. W. Hopkins, Dr. Hingston, and P. R. Lafrenaye.

The reports were duly adopted.

The election of officers and members of the Council was then proceeded with, and the following gentlemen were elected:—
Peter Redpath, President; Dr. T. Sterry Hunt, Vice-President; F. B. Matthews, Treasurer; John Popham—Honorary Secretary.

Members of the Council—Messrs. W. F. Kay, Andrew Wilson, John Popham, C. J. Way, O. R. Jacobi, G. H. Frothingham, Dr. Hingston, P. R. Lafrenaye, George Ferrier, John McLennan, and Bell Smith.

Mr. John Popham moved that those who may be present at the next *conversazione* of the Art Association on the 8th March, be requested to select the best from among the pictures submitted for competition for the prize of \$200, and that the selection be made on that occasion in the mode to be hereinafter determined by the Council.

Mr. Popham said this would remove an unfounded feeling among artists that the Council had already decided upon awarding the prize. Several artists did not send in pictures on this account, and two who had sent wished to withdraw them.

Mr. W. F. Kay said it would be difficult to find people who could properly decide as to the merits of the pictures, and as to the jealousy of artists he thought they should trust to the honour of the Council.

After some further discussion Mr. F. Kay seconded the motion, when, it was put and lost.

The meeting adjourned after adopting a vote of thanks to the retiring officers.—*Gazette.*

Board of Arts and Manufactures, Montreal.

The annual meeting of the Board of Arts and Manufactures was held on the 4th instant in the long room of the Mechanics' Hall, H. Bulmer, Esq., in the chair. The Secretary then read the minutes of the last annual meeting, which were confirmed. The Chairman appointed Messrs. Alexander and Heath as auditors to examine the accounts. The following institutions were represented: College de Montreal, Laval University, Petit College de Terrebonne, McGill University, Art Association of Montreal, Petite Séminaire de Ste. Thérèse, Séminaire de Nicolet, Petite Séminaire de Québec, Collège de St. Hyacinthe, Masson College, Mechanics' Institute of Montreal, Institut des Artisans Canadiens, Joliette College, College of Ste. Marie de Monnoir, and the School of Medicine, Montreal.

The report of the sub-committee was then read. It showed that during the past year the committee had presented a statement to the Provincial Government, showing the present and future necessities of the Board, together with a petition to the Lieutenant Governor, showing that the establishment of a school of art and design was of the greatest importance, and for an increase of aid for that purpose. Annexed was a statement of the cost of fitting up rooms for a school of art and design and of practical chemistry. The schools to be established by the Board if the Government would grant the amount required. A deputation was sent down during the winter to impress upon the Government the necessity of such a step. The Government, however, could not increase the present grant. During the summer the sub-committee established a school of art and design with the limited funds at their disposal. A large room was fitted up with desks and other necessities, together with models and drawings, the cost being about \$300. An efficient staff of teachers was procured, and classes established in the following branches: Elementary free hand drawing, 73 scholars; architectural drawing, 47; practical geometry, 55; linear perspective, 23; mechanical drawing, 24; modelling, 6; making in all 238 scholars, with an average attendance of 200. The committee recommend the carrying on of the school. Besides this, evening schools were carried on in the Mechanics' Institute, where mechanical drawing was taught, and at the Institut des Artisans Canadiens, at which were taught reading, writing, arithmetic, and French and English grammar. \$200 each was appropriated for these schools. The committee recommended that no money should be given for elementary schools after this year.

The Secretary's report showed that the balance on hand from the previous year was.....	\$1,232
Government Grant for 1868.....	1,000
“ “ “ 1869.....	2,000
Sundries.....	375
Total.....	4,607
The total expenditure was.....	2,533
Leaving a balance of.....	\$2,074

Mr. Heath moved that the report be now adopted.

Mr. Larivière objected to the adoption of the report as it recommended stopping the money granted for elementary schools.

Mr. Matthews thought the sooner the board left off teaching A, B, C, to children the better.

Mr. Larivière explained that those who were taught by the Institut des Artisans Canadiens, were workmen.

The president said that the sub-committee had discussed this matter a good deal, and they had arrived at the conclusion that as the sum of money at the command of the Board was small, and the moneys granted were for the purpose of giving mechanical and scientific education, they were not justified in granting money for elementary education. The city was very heavily taxed for school purposes, and he considered that they should be able to obtain money from the school-commissioners for common school education. The motion was, after a little further discussion, unanimously carried. The meeting then proceeded to the election of officers. The following is a list of the officers elected for the ensuing year: H. Bulmer, Esq., President; D. Boudrias, Esq., Vice-President; F. E. Gilman, Esq., Secretary; N. B. Corse, Esq., Treasurer. Committee,—Messrs. Gilman, Corse, Plinguet, Rolland, Weaver, Brown, Larivière, Murray, McFarlane. The meeting then adjourned.—*Evening Telegraph.*

Numismatic and Antiquarian Society of Montreal.

It is a part of our duty as journalists to record from time to time, the progress of the several Societies existing in Montreal, and to encourage them in well-doing, and on the threshold of the New Year we have much pleasure in wishing increased success to the above named Association.

It is obvious that such a body cannot boast of a large number of members, as the "antiquarium trade" does not attract the multitude; we are aware that in cities such as London and Manchester in the old country, similar associations are limited in their lists of Membership, and that the real work of such societies falls on a few who are thoroughly in earnest; we were therefore not prepared to learn the progress made by the Montreal Society during the past year.

The annual subscription (two dollars) does not leave a large margin for the purchase of any specimens; the Society has therefore to rely upon the donations of its members and any friends whom they may interest in their pursuit. In addition to a small but steady increase to the Society's cabinet from private sources, it has recently been making an effort to collect a complete series of Coins and Medals illustrative of Canadian history, and with this object in view has addressed many public Institutions in Quebec and Ontario, and so far has met with well-merited success. In addition to the medals issued by McGill College (which through the kindness of the managers have been presented to the Society some time since) the following Institutions have cheerfully responded by the donation of their medals:—

- Natural History Society of Montreal (Bronze.)
- Bishops College, Lennoxville, (do)
- Laval University, Quebec, (2 Medals, Silver and Bronze.)

and The Victoria College, Cobourg, and the University of Toronto have ordered copies of their medals in Bronze to be struck for presentation to the Society.

Further, we are glad to learn that the Secretary of State has forwarded one of the Dominion Confederation Medals to the Society. This is the more valuable as it is an acknowledgement of its existence as a body politic, and since it has obtained a Charter of Incorporation during the present Legislative session, it may be regarded as the legally constituted depository for all matters coming within its range, and it cannot fail to grow yearly into a wider sphere of usefulness. At the annual meeting held recently the following officers for the years 1870, were elected *nem. con*:—

- President Mr. H. Mott; Vice Presidents, Messrs. D. Rose and R. J. Wicksteed; Treasurer, Mr. W. Blackburn; Curator, M. R. W. McLachlan, and Secretary Mr. Gerald E. Hart.

We wish the Society all sorts of prosperity in the New Year, and believe that it is deserving our good wishes. There are of course many who take no interest in the collection of "antiques," and who are very severe on our friends, and dispose of them with an off-hand remark about "rusty coppers" &c., nevertheless we believe that such a Society working on without ostentation, or obtruding itself

unbecomingly, is doing a great amount of good, and accumulating information which probably could not be collected in any other shape. The Society hopes to increase its number of members during the present year, and is content to work on noiselessly as heretofore, bearing in mind the refrain of Charles Mackay's verses:—

"Grub little moles, grub under ground,
There is sunshine in the sky."

(Daily News, Jan. 13.)

St. Francis District Teachers' Association.

The annual meeting of the St. Francis District Teacher's Association was held at Barnston on the 23rd and 24th ult., and was one of unusual interest. It was well attended throughout all its sessions, both by the people of vicinity and parties from a distance,—nearly all the higher institutions in the District being represented.

Various topics were discussed, and interesting papers were also read. Dr. Graham, President of the Association, delivered his annual address on the evening of the 23rd. Subject: "Our winter evenings and how to spend them."

At the afternoon session of the second day the President appointed a committee to nominate officers for the ensuing year, and requested that his name should not be used, as he desired to be free from office.

The officers were elected as follows:—

President.—S. Shonyo, M. A., Hatley Academy.

Vice-Presidents—W. M. Jordan, Esq., Danville Academy; J. B. Hyndman, Brookvale Academy; Prof. Worden, Richmond.

Secretary-Treasurer—R. Robinson, Barnston.

After passing votes of thanks to the people of Barnston, to the editors of the several papers, to the President and Secretary-Treasurer, the Association adjourned on the afternoon of the 24th *sine die*.—*Gazette*.

The Peabody Education Fund.

The report of Dr. Sears, of the operations of the Peabody Education Fund, from the beginning down to last July, is a striking comment upon the sterling patriotism and wise benevolence of the dead philanthropist. The original gift by Mr. Peabody amounted to a million dollars, and about eleven hundred thousand dollars more in Planter's Bank bonds, and the object was the promotion of intellectual, moral and industrial education in the Southern and Southwestern States. In addition to this, Mr. Peabody gave, in June 1869, \$1,384,000 more in securities of various kinds. The trustees to whom these large sums were consigned were given discretion as to the localities and manner of carrying out Mr. Peabody's intentions, which considering the social position and character of the gentlemen selected, was a perfectly safe course.

The first step after organizing which the Trustees took, was to survey the fields of operation, and with that purpose Dr. Sears visited, in 1867, and afterwards, the seven Atlantic and Gulf States, beginning with the eastern portion of Virginia and ending with Louisiana. He was received with cordial welcome by all the chief towns through which he passed, and about sixty, selected with reference to their influence in their respective States, already, in July of 1868, had made arrangements at his instance to organize public free schools. It may be remarked that this method of action was from the first decided upon by the Trustees. They stated their leading object to be the promotion of common or primary school education by such means as then existed or could be created. It is remarkable that only one town of all those visited refused to co-operate in the establishment of the schools.

The cost of public and private education at the South, was illustrated in a curious way by the agencies created by Mr. Peabody's gift. It was found that the whole of the white children of the South could be educated in public schools at no more than the cost of educating half the white children in private schools. In 1868, up to July, there was \$74,000 definitely, and \$78,000 conditionally, appropriated for these schools in eight States, and other grants were subsequently made. But the money thus given was much augmented by the people to whom it was awarded, and the fund, therefore, not only promoted the education of the South directly, but stimulated the people to new exertions of their own.

It is unnecessary to go over the whole field embraced by Dr. Saer's report. The aid to the various States seems to have been given with great discrimination and care. The plan generally was to induce the establishment of primary schools, by undertaking the chief cost of such, and of helping struggling institutions where free primary were impracticable. Students at normal schools receive also some of the

benefits of the fund. There are now a considerable number of persons included in this category. The whole report, in short, indicates earnest and intelligent work. The Trustees do well to publish it, for a good reason. They are not amenable to public interference in any shape, and might, if they chose, have declined to lay themselves open to any criticism whatever. Adopting a contrary course, and inviting all who please to read their statement of accomplished results, the public is not only informed upon a very interesting and important subject, but is able to commend the spirit in which they have interpreted Mr. Peabody's wishes and the care and faithfulness with which those wishes have, so far, been carried into effect.

N. Y. Times.

Obituary.

THE DEAD OF 1869.—Last year was remarkable for the deaths of men prominent in public life. In the United States we notice the following: On Jan. 8th, John Minor Botts and Gen. Lovell H. Rousseau; Jan. 25th, Ex-Governor Francis W. Pickens, of South Carolina; on Feb. 6th, Ex-Gov. Hubbard of Maine; on March 13th, James Guthrie, of Kentucky, Secretary of the U. S. Treasury under President Pierce; March 27, James Harper, the well known book publisher of New York; on April 26th, Ex-Governor Dalton, of Ct.; on June 18th, Henry J. Raymond, Editor, N. Y. Times; on July 22nd, Ex-Gov. (twice) Grape of Michigan; on same day, John A. Roebling, an eminent Engineer; on July 30th, Hon. Isaac Toucey, Secretary of the Navy under President Buchanan: on Sept. 6th, Gen. John S. Rawlins, Secretary of War; on Sept. 8th, William Pitt Fessenden, U. S. Senate; Sept. 10th, Hon. John Bell; Oct. 8th, Ex-President Franklin Pierce; Oct. 16th, Ex-Governor Joseph Ritner, of Pennsylvania; on Oct. 26th, Ex-Gov. Retner of Pennsylvania; Nov. 4th, Geo. Peabody, the eminent philanthropist; Nov. 7th, Admiral Charles Stewart; on Nov. 9th, Ex-Governor Pratt of Maryland; Nov. 10th, Gen. John Ellis Wool; Nov. 11th, Hon. Robert J. Walker, Secretary of the Treasury under President Polk; Nov. 13th, Hon. Amos Kendall, Postmaster-General under President Jackson; Nov. 21st, Hon Benjamin Fitzpatrick, and on Dec. 24st, Hon. Edwin Macy Stanton Secretary of War under Presidents Lincoln and Johnson. In other countries the list comprises The Earl of Crawford and Balcarres, premier Earl of Scotland, aged eighty-six. He sat in the House of Lords as Lord Wigan, and is succeeded by his son Lord Lindsay, author of "Letters on Egypt" and other well-known works. The Earl of Antrim died the other day, after a serious illness, and is succeeded by his son Viscount Dunluce, at present a student at Oxford. The Countess of Fife, daughter of the seventeenth Earl of Erroll, died suddenly, in her fortieth year. Lady Harriet Cowper, wife of the Hon. Spencer Cowper, who first married the celebrated Count D'Orsey when she was only fifteen, died on the same day, aged fifty-seven. Mr. George Savile Foljambe, of Osberton, a member of an old Whig family, an ardent lover of English sports and a famed breeder of agricultural stock, died in his seventieth year. Lady Rachel Adela Scott, sister of the Earl of Eldon, died at Mentone a short time ago, in her twenty-first year. The Earl of Derby; Lord Stanley of Alderly; The Marquis of Westminster; General Lord Gough; Admiral Sir James Gordon, who brought a British Fleet up the Potomac in 1814; Prince Menschikoff; General Dulce; Marshal Neil; General Regnault St. Jean d'Angely; Jomini, Troplong, Fuad Pasha; Art deploras the loss of Grisi, Berlioz and Overbeck; Science mourns Hengstenberg, Reichenback, Jukes and many lesser lights. To the foregoing may be added such names as William Carleton, Professor Conington, Peter Cunningham, Alexander Dyce, Lamartine, and St. Beuve.

DEATH OF JOHN THOMSON, ESQ., OF WESTFIELD, QUEBEC.—Gone! Well nigh all the merchants, whose footsteps, five and twenty years ago, left a daily impression upon St. Peter street, Quebec, have disappeared. Burstall, Lemesurier, Price, Forsyth, Symes, Young, Lowndes, Caldwell, Tilstone, Roberts, Dean, Gillespie, Ryan, Burnet, the Patersons, the Gibbs, the Pembertons, MacKenzie, and now John Thomson, are in the grave. Mr. Thomson, almost the last of an association of well-known, honorable men, died on New Year's Day, at the advanced age of 77. Engaged in business for very many years, Mr. Thomson preserved a character for unbending integrity, and in all the relations of life was a most exemplary man. For nearly half a century he was an Elder of St. Andrew's Church, and between him and the learned and excellent Minister of that Church, Dr. Cook, almost a feeling of personal affection sprang up. There are many who will mourn Mr. Thomson's loss—There are some who will mourn him here—but there are few of this present generation who can supply the want of that fine Scottish *bonhomie* which was a marked trait in the character of Mr. Thomson.—*Ottawa Times*.

THE LATE MR. McDONALD OF THE "TRANSCRIPT."—By the death on Jan. 12th. Aged, 71, of Mr. Donald McDonald, formerly proprietor of the *Transcript*, Montreal has lost one of her oldest and most highly-esteemed citizens. and the printing profession one of its oldest and best

members. Mr. McDonald was born in 1798 in the parish of Chronyardt, Inverness-shire, but the family moved to Glasgow when he was five years old. In that city he learned the printing business, and in 1815 emigrated to Canada. The family went to Lochiel, in the County of Glengarry, but Mr. McDonald remained in Montreal, working at his trade in the *Gazette* office, then owned by Mr. Brown. In 1824 he became foreman of the *Herald* office, then owned by Archibald Ferguson, Esq, and continued to fulfil in a very able manner the duties of that responsible position till Mr. Ferguson sold the establishment in 1834. Mr. McDonald then formed a partnership with Mr. John Lovell and commenced the *Transcript*, of which he afterwards became sole proprietor, and which he carried on for thirty years. He then, on account of advancing age, disposed of it, and under the name of the *Daily News and Weekly Transcript* it is still continued by his first partner.—*Witness*.

Books and Exchanges Received. (1)

- The California Teacher*, January, 1870.
 - The Illinois Teacher*; Devoted to Education, Science, and Free Schools, January, 1870.
 - The Manufacturer and Builder*, January, 1870.
 - The Rhode Island Schoolmaster*, January, 1870.
 - The Journal of Speculative Philosophy*, December, 1869.
 - The Pennsylvania School Journal*, January, 1870.
 - The Illustrated Educational Bulletin*, January, 1870.
 - Journal of Education*, Ontario; December, 1869.
 - The National Normal*, December, 1869.
 - The American Sunday School Worker*, for Parents and Teachers,—Vol 1. No. 1.
 - Typographic Messenger*, November, 1869.
 - Hitchcock's New Monthly Magazine of Choice Music, Art Notes and Select Reading for the Family Circle*,—December, 1869. New York: Benjamin W. Hitchcock, 24 Beekman Street.
 - The Mount Auburn Index*, December, 1869.
 - Advertisers Gazette*, vol. IV, No. 3., January, 1870.—New York: Geo. P. Rowell & Co., Publishers.
 - New Dominion Monthly*, February, 1870.
 - The Massachusetts Teacher*, January, 1869.
 - The Maine Journal of Education*, January, 1870.
 - The Nursery*, February, 1870.
 - The American Journal of Education*, February, 1870.
 - Notes on the Principles of Population*.—Montreal compared with London, Glasgow, and Manchester, with an examination of the vital statistics by Philip P. Carpenter, B. A., Ph D., One of the Hon. Secretaries of the Montreal Sanitary Association,—By Andrew A. Watt.
 - Vick's Illustrated Catalogue and Floral Guide* for 1870. Rochester, N. Y.; James Vick.
- A copy of this beautifully illustrated catalogue is to hand. It contains about two hundred engravings of flowers and vegetables. Those wishing to plant flowers and vegetables in the spring should send 10 cents to Mr. Vick for a copy.
- Public Ledger Almanac*, for 1870.
- We have to thank the Publisher, George W. Childs, Philadelphia, for a copy of this Almanac, upon the preparation of which great care and no doubt a large outlay have been bestowed. It cannot fail to prove valuable as a reference. Seventy-two thousand copies of it have been distributed gratis to subscribers to the *Public Ledger*.
- The Farmer's Advocate*, Vol V. No. 1., Edited by Wm. Weld, a practical Farmer, London, Ont. Single subscriptions from 1st prox. 75 cents per annum.
- Peters' Musical Monthly*, January, 1870.—No musical family can afford to be without this monthly of 36 pages. It is printed from full-size music plates and each no. contains at least twelve pieces of choice new music. Send \$3 American currency to J. L. Peters, 599 Broadway, New York and secure the Monthly for 1870.
- Arkansas Journal of Education*, Vol. 1. No. 1, January, 1870.—\$2 per annum. We cordially welcome our new fellow-labourer in the great work of education. The salutatory has the ring of the pure metal.
- From Dawson Bros: Montreal; New York: Harper and Brothers: A German Course; adapted to use in Colleges, High Schools, and Academies,—By George F. Comfort, A. M., Professor of Modern Languages and Esthetics in Alleghany College, Meadville, Pa.

Educational.

—*British and Foreign School Society*.—After the annual examination of the boys, at the Borough-road Schools, the sixty-fourth general meeting of the society was held. Earl Russell as usual presided. From the abstract of the report for the past year, which was read by the secretary, Mr. A. Bourne, it appeared that 76 students had left the

(1) On our table are many other valuable publications, but received too late for notice in this number.

training colleges to take schools in various parts of the country, and 98 candidates had been admitted; that the number in residence up to Christmas had been 169, and since, 191; that the college at Stockwell is quite full; while at the Borough-road there are only eleven vacancies. Of 169 students presented for examination, not one failed. In the schools under the direct control of the committee 1,300 children receive instruction from seven teachers and nineteen pupil teachers. In three of the schools students in training have been regularly employed in teaching under supervision. The principal subjects of instruction are reading, writing, arithmetic, scripture, grammar, history, geography and drawing. The boys have also been taught animal physiology; the girls domestic economy and needlework. The general operations of the society have been carried on vigorously. To assist in the work of education at home grants of books and materials have been made to the managers of seventy-five schools. The depository has offered facilities for the purchase of school requisites at greatly reduced prices. Teachers have been sent to take temporary charge of 43 schools, which would otherwise have been greatly injured, if not altogether closed. Permanent teachers have been provided for 134 schools; agents have been employed to give needed assistance in the several districts conducting public examinations, attending meetings, and aiding in the establishment of new schools, of which 17, with accommodation for 3,150 children, have been opened in South Wales alone during the year. Thirty Colonial and other schools abroad have received grants of books and school materials, and teachers have been provided in several cases. From the financial statement made by the treasurer, Mr. J. G. BARCLAY, it appeared that the money received from all sources, without including the balance in hand at the beginning of the year, amounted to £13,486. 12s. 11d.; the payments, inclusive of legacies invested, being £13,635. 6s. 5d.

The President, in the course of a long speech, said that he considered it a great misfortune that at the beginning of its school career, now more than 60 years ago, the Established Church did not consent to proceed on the same principle—viz., to give that religious instruction which they thought right according to the doctrines of the Church of England, but omitting all distinctive religious teaching in the schools, and combining all in their schools through the teaching of the Bible. It was a great misfortune that she then established a system of her own, but that cannot be now repaired, and we must look to other means to supply the wants of the present generation.

He trusted that religious instruction would not be lost sight of in any plan of education which the Government might think fit to introduce to Parliament, and that while systematic education should pervade the land, and while schools should be established throughout it, we should be permitted to give that instruction in the Bible which had always been the mark and distinction of that society.

He hoped that those who had hitherto been taxed unduly to maintain schools would no longer be called upon to bear the burden alone, but that those who have shown themselves unwilling, and yet have plenty of means, would be rated fairly to provide and maintain schools.

Lord LYVEDEN, in moving the adoption of the report expressed a hope that in any scheme of education, Government might propose, nothing would be done to damp voluntary education, believing as he did that any system of compulsory education carried out by means of rates and taxes would cramp the object in its ead of promoting it.

STATISTICAL.

—*British Coinage*.—An interesting Parliamentary paper was issued recently, showing the amount of gold, silver, and copper money coined at the Mint from the 1st January, 1859, to the 31st December, 1868, and showing also the real cost or value of the metal and the amount represented by the coin. During the period named the gold converted into currency weighed a fraction over 12,208,007 ounces. It produced 4,129,641 sovereigns, the actual value of which, however, was £4. 3s. 6d in excess of the amount represented by the sovereigns; and it produced 12,482,565 half-sovereigns, the value of which was £6,241,284. 13s. 10d., the total value of the gold currency manufactured during the decade being £47,534,929. 17s. 4d. The total weight of silver manufactured into coins of different value ranging from florins to three-half-penny pieces was 72,400,661 ounces. The real cost of this metal was £3,388,532. 8s. 11d but its representative value was £3,410,182. 18s. 10d. No silver groats have been coined during the last twelve years nor any half-crowns since 1851. The last batch of three-half-penny pieces was made in 1862; but silver pennies are still in existence somewhere, 120 ounces of the value of £33 having been so converted in each of the last ten years. The weight of copper (since 1861,) bronze manufactured into pence, halfpence, and farthings, was slightly over 2,418 tons. The purchase value of this metal was £493,033. 18s. 2d., but its value as coin was £1,000,845. 1s. 6d. The period of most activity at the Mint was 1864 for the manufacture of gold, over nine millions and a half having been coined in that year; 1859 for silver; and 1862 for copper. The nominal value of the silver purchased for recoinage was £1,084,900, the Mint value of which, however, at 5s. 6d. per ounce, was only £938,566 6s. 5d., so that the loss by the recoinage during the ten years was £146,833. 13. 7d. The average price paid for silver bullion purchased during the same period for manufacture into currency varied from 5s. 0½d. in 1857 to 5s. 1½d in 1859 and 1866.

METEOROLOGICAL INTELLIGENCE.

—From the Records of the Montreal Observatory, lat. 45° 31 North; Long. 4h. 54m. 11 sec. West of Greenwich, and 182 feet above mean sea level,—For Dec., 1869,—By CHAS. SMALLWOOD, M.D., LL.D., D.C.L.

DAYS.	Barometer corrected at 32°			Temperature of the Air.			Direction of Wind.			Miles in 24 hours.
	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.	7 a.m.	2 p.m.	9 p.m.	
1	29.601	29.997	30.125	33.0	23.9	15.7	W	W	W	209.20
2	30.187	30.151	.101	6.9	8.8	6.2	W	NE	NE	311.19
3	.175	.274	.327	2.1	10.0	6.1	NE	NE	NE	177.24
4	.126	29.902	29.753	10.2	18.0	21.2	NE	SW	SW	97.11
5	.050	30.149	30.249	19.6	22.0	8.1	W	W	N	124.00
6	.301	.300	.249	2.1	13.0	8.0	nbyw	nbye	wbye	197.44
7	.101	.192	.181	1.9	17.0	8.8	W	W	W	301.19
8	.301	.433	.437	0.0	24.4	13.3	W	W	W	219.21
9	.550	.501	.500	17.9	29.0	24.1	W	SW	SW	97.00
10	.401	.349	.311	23.6	39.2	29.0	W	SW	SW	101.44
11	.249	.249	.248	33.0	37.9	38.8	W	W	W	91.00
12	.152	.150	.151	24.9	28.7	24.2	NE	NE	NE	67.10
13	.463	.500	.601	20.0	22.2	20.0	NE	NE	NE	311.10
14	.621	.569	.548	12.2	28.0	14.1	NE	NE	SE	94.44
15	.426	.311	.248	6.4	24.1	18.0	NE	N	N	70.19
16	.401	.036	.001	22.1	31.9	30.2	NE	NE	NE	87.74
17	.087	.170	.148	31.9	36.2	31.7	W	W	W	91.11
18	29.987	29.900	29.521	31.2	30.0	29.0	W	N	NE	61.29
19	.375	.599	.748	28.1	34.0	18.1	W	W	W	94.21
20	30.025	30.201	30.231	18.1	24.2	19.1	W	W	W	189.00
21	.549	.611	.643	16.0	19.2	14.5	W	W	W	97.10
22	.011	29.711	29.451	18.0	33.1	33.6	NE	SE	SE	88.11
23	29.912	.939	30.051	21.1	26.0	24.0	W	W	W	114.24
24	30.497	30.402	.300	16.3	22.7	21.1	W	SW	W	101.00
25	.364	.372	.391	25.0	37.9	29.8	W	SW	W	88.84
26	.382	.364	.300	26.1	40.7	27.9	W	SW	W	74.00
27	.199	.037	29.960	25.2	30.1	29.9	NE	NE	NE	90.94
28	29.801	29.811	.820	36.0	39.9	33.7	SE	W	SW	84.44
29	.801	.843	.887	33.1	33.8	32.0	SW	W	W	70.00
30	.651	.646	.650	31.7	32.0	31.6	SW	SW	W	104.10
31	.887	.998	29.149	24.0	38.1	25.8	W	wby N	wby N	89.74

REMARKS.

The highest reading of the Barometer was 30.643 inches; the lowest was 29.375, giving a monthly range of 1.268 inches.

The highest reading of the Thermometer was 40° 7, and the lowest 2° 3, the monthly mean was 22° 88, which is 4° 18 higher than the Isotherm for Montreal for the month of December, deduced from observations during a long series of years.

Rain fell on five days amounting to 2.004 inches, and snow fell on nine days, amounting to 25.95 inches.

—Meteorological Observations taken at Quebec, during month of December, 1869; Latitude 46° 48' 30" North; Longitude 71° 12' 15" West; Height above St. Lawrence 230 feet,—by Sergt. John Thurling, A. H. C., Quebec.

Barometer, highest reading was on the 21st.....	30.395 inches.
“ lowest “ “ 19th.....	28.856
“ range of pressure.....	1.539
“ mean for month (reduced to 32°).....	29.831
Thermometer, highest reading on the 26th.....	36.6 degrees.
“ lowest “ “ 4th.....	5.0
“ range in month.....	41.6
“ mean for month.....	19.2
Hygrometer, mean of dry bulb.....	20.0
“ “ wet bulb.....	18.2
“ “ dew point.....	5.4
“ elastic force of vapour.....	.055 inches.
“ vapour in a cubic foot of air.....	0.7 grains.
“ “ required to saturate do.....	0.6
“ mean degree of humidity (Sat. 100).....	52
“ average weight of a cubic foot of air.....	577.4 grains.
Cloud, mean amount of, (0-10).....	7.1
Ozone, “ “.....	2.9
Wind, general direction.....	W. S. and E.
“ mean daily horizontal movement.....	159.9 miles.
Rain, number of days it fell.....	3
“ Amount collected (rain-gauge, frozen).....	none.
Snow, number of days it fell.....	15

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