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ERRORS IN RESPECT TO SCHOOLS CORRECTED,

(By the Rev. Dr. Sears, Secretary of the Massachusetts' Board of Education, in his last Annual Report.)

It may be improper to begin our observations with an examination of certain vague ideas which are carelessly entertained, and yet have sufficient efficacy to be highly detrimental to the schools. Many seem to suppose, if their opinions may fairly be inferred from their actions, that the whole duty of the teacher is to instruct his pupils in "the common branches," as they are usually termed, and to maintain so much discipline as is necessary to that end. But every man of reflection will perceive that this platform is altogether too narrow; that neither the individual nor the community can realize the benefits of a true education if the Public Schools are conducted simply on this plan. In order to answer its purpose, any system of popular education must embrace, in addition to those branches, the cultivation of the manners, of the private and social virtues, and of the religious sentiment. The most perfect development of the mind, no less than the order of the school and the stability of society, demands a religious education. Massachusetts may be regarded as having settled, at least for herself, the great question of the connection of religion with the Public Schools. She holds that religion is the highest and noblest possession of the mind, and is conducive to all the true interests of man and of society, and therefore she cannot do otherwise than to seek to place her schools under its beneficent influence. The constitution and laws of the Commonwealth enjoin it upon teachers to inculcate piety and Christian morals, love to God and love to man. But the Government does not in this, or in any other instance, regard religion as one of the legitimate ends of its own organization. The maintenance and

propagation of the Christian faith it very properly leaves to ecclesiastical bodies. It employs religion only as a means of its own security and prosperity, and even then only so far as it can do so without violating the rights of conscience. What it needs for its own safety and well-being is the spirit of the decalogue as expounded by the Great Teacher of mankind, while varying creeds, which are so much in controversy, are not indispensable as a means of public education, especially in a country where such ample opportunities exist for peculiar doctrinal instruction in other ways. Each family has, or may have, its religious tenets inculcated around its own fireside. It has also access to a Sabbath School of its own faith, or at least of its own choice; and may, moreover, always enjoy instruction from the pulpit in accordance with its own preferences. In the exclusion of distinctive creeds from the schools, religious persons, of almost every name, are singularly agreed, and thus we have the sentiment of the people at large in support of the law as it now stands.

The formation of a virtuous character is the natural result of a right religious training. Still, as the principles of religion and moral truth may be taught without producing a corresponding character, it is more important for the teacher to lead his pupils to the practice of virtue than it is to instruct them in the theory of it. The school furnishes peculiar facilities for cultivating all the social virtues. Though the family may be regarded as the primary society where the principles of government are first taught and exemplified, there are many important lessons to be learned preparatory to general society, for the inculcation and practice of which the school presents more frequent occasion than the family. The number of persons associated together is greater in the former than the latter; social equality is more perfect; and the application of the principles of justice in regulating the little community is made more conspicuous. The authority of the teacher is less permanent and absolute than that of the parent. As the number of persons and the variety of character and dispositions increase, the machinery of government becomes more complicated. Beside the multitude of questions of equity which arise within the organization of the school, there are others growing out of peculiar external relations, as those of the school to the family, to the trustees, to the children not belonging to the school, and to the citizens at large. Here is ample scope for the exercise of all the social virtues; and the teacher who, while governing the school, aims at training his pupils to an intelligent view and voluntary discharge of all their duties, will find that his office invests him with an almost unlimited power for expanding and ennobling the character of the young. The comprehension of all such relations as those above-named, and the application of just principles in regulating the conduct in each of them, are among the most appropriate and most important ends to be attained in the public schools. It is not enough to teach the rudiments of knowledge and to govern the school for the time being. The mind is to be educated for freedom by gradual growth in both knowledge

and virtue, which shall render liberty safe by causing a voluntary self-control, and submission to rightful authority.

Manners are to be regarded as a necessary accompaniment to morals. Indeed, there is no line of division between the two. They are related to each other as thought and expression are, and should be cultivated together. In the immature state of our society as compared with that of the old world, and in the engrossment of the general mind with enterprises for the accumulation of wealth, it is not strange that there should be some want of refinement, and that the national manners should, to cultivated Europeans, appear somewhat unpolished. But the time has now arrived when it is not so easy as it once was to apologize for these defects. Such are now our means of intellectual culture and improvement in all that adorns human nature and society, that it is inexcusable longer to allow this blemish to adhere to us as a people. It is in the power of the public schools to change the whole aspect of society in this respect. They can be made to act simultaneously upon every family in the Commonwealth. While refined manners would otherwise long continue to be limited mostly to certain favored circles, they might easily, by means of an improvement in our system of education, be made a blessing and an ornament to all classes in the community. Why should not the same hand that deals out knowledge indiscriminately to all the children of the Commonwealth, aim to engraft as universally upon the manners of all these children the amenities and courtesies of life? Let but the school trustees select their teachers to conduct their schools with reference to this object, and a change would come over the manners of the young which would add a new charm to society. The erection of new and beautiful schoolhouses, and the introduction of neat and elegant furniture, have greatly facilitated the task of the teacher in regulating the intercourse and personal habits of his pupils. In a free country like ours, where children have, of late, been becoming more democratic than their seniors, parents would do well to second the efforts of teachers in training the young to that deferential deportment, and to those common civilities, the absence of which can never be noticed but with grief.

SECOND LECTURE ON FREE SCHOOLS.

BY THE REV. JOHN ARMOUR, PORT SARNIA.

The second argument for "Free Schools," which I propose to consider is, "That the early intellectual education, and moral training, of the rising generation, is the cheapest, as, it is also the best preventive of crime. We assume that the "free school system" is the best adapted, to introduce universal education, entire mental, and moral training, and thus be a preventive of crime.

Public crime, what is it? It may be defined as the infringement of another's rights and privileges. It is an act done, or something said whereby the peace of a person, family, or neighbourhood, is disturbed; or the safety of another person's character, or property is endangered. Experience proves that educating the young, is the surest, as it is also the cheapest, and best conservator from criminal habits. Corporeal punishment has failed to produce any salutary reform upon the criminal. Even the terror of capital punishment, has not restrained the vicious from the perpetration of crime. The culprit has been found to brave danger of all kinds, and reiterate his crime.

But what has been the prior history, and circumstances of the vast majority, of those who have required the enormous cost to the community, of court-houses, jails, and penitentiaries; and expenses connected with them. Their general character is such, as renders it painful to point them out. They have been poor, in their circumstances, and unhappy in their parentage, and education. They have in youth, received no thorough intellectual culture, except such as inducted them into the mysteries of villany, and fraud. Their parents were in multitudes of cases, intemperate, and vicious themselves—if they had parents. But prison statistics, would lead us to believe, that they were mostly orphans, thrown upon the tender mercies of unkind relatives, or the world at large. Ye young persons here present, who have kind and pious parents, see that ye esteem them while ye have them! In Worcester, out of 476 prisoners, placed upon the calendar, and to be tried for crimes of various descriptions, committed during one year, only two of these had anything like a superior education. 204, or nearly one-half could neither read nor write. There were only 20 of that number, who could read and write well; whilst 121 could read only very imperfectly. Lord Ashley, (now the Earl of Shaftesbury), who

has made some noble efforts, to reclaim the thieves of the metropolis of Great Britain from their dangerous and criminal course, states the appalling fact, that of 372 of these desperadoes, with whom he had conversation, 278 had received no education whatever.

One who has particularly studied this subject, states the following facts, as the result of this investigation. "The proportion of these criminals, who had lost both their parents, before they were 10 years of age, averaged 32 out of the 100, or about one-third. One half of them had lost both parents before they were 15. Seventy-two, or about three-fourths of the hundred, had never been taught any mechanical business. And only four, out of the hundred, had ever wrought at any trade. They were generally deplorably ignorant, as also desperately vicious. Seldom is one found among this class, who has obtained a liberal education. One-half generally, can either not read at all, or read very imperfectly. Only one in twelve, could read, write, and cipher; and all were very defective in the knowledge of moral relations, and duties; and ignorant of religious truth." Thus, ignorant, and following every vicious course, they became adepts in crime. Men who break away from the restraints of early training, after the age of 21, have been found to be those who are not bound to society, by property, respectability of character, wife, or home. The most of criminals have been unmarried persons, and those who have broken out into crime, who were otherwise, have been unhappy in their domestic relations.

These statements, exhibit strikingly the important fact, that public crime is perpetrated, not so much by man, as a depraved and fallen creature, as from bad example, and the unrestrained sway of evil passions. Youthful depravity, if curbed by discipline and instruction in youth, can be so far subdued by education, as to make men, at least, good citizens, and useful members of society. To this accords the statement of the wise monarch of Israel, "Train up a child in the way he should go; and when he is old he will not depart from it." Youth is the season for cultivation and training; and the cases, wherein this training has failed, are so few, that the conclusion we would come to is, that if all were well trained, there would be few of those pests of society, who have gone forth among their fellow-men, unrestrained in the course of crime. In youth, let their intellect be improved by instruction. Let their passions and propensities be curbed; and let them be taught the rules of equity and propriety. The state ought to see that all her children are being educated; and it is the duty of every member of a state to do his part, not only to maintain the good order of society, but by preventive means also, to banish crime from among men. It is righteousness that exalteth a nation. And every patriot, and philanthropist, should be ready to promote the righteous character of the people.

The Free School system provides the means for the education of all—all contributing to its support. It puts it in the power of destitute children to have a good common school education; widows, and guardians of children may, from self respect, or necessity, feed and clothe such destitute children; but they may be unwilling, or unable to purchase books, or pay a rate-bill for them. The free School removes this obstacle. Let the sectional school be the sanctuary, open to all, where every child will receive a thorough common school education. Let the schoolroom, the teacher, the furniture, and the apparatus be common to all. Let not such children be entered, or educated as paupers; but as it is their right and privilege. Let us have Teachers of high attainments, and teaching of the best description. Let equal privileges be given to all, whether rich, or poor, and all will be induced to attend the school. Thus will these orphans, and destitute ones, have placed before them an open door, where they will be trained as others, to become useful members of society. The ratebill, however, either closes the door against them, or they must be degraded by the epithet, *pauper*. Under the rate-bill system, these, the most destitute, and most to be sympathized with, among our race, would be deprived of this important privilege. Ye who are parents yourselves, and would wish to see your children wise and honorable; and your whole neighbourhood also, rising in intelligence, and moral character,—fing open the school-house door to all. Let the whole be invited, and pressed to come without money, and without price. It is your greatest wisdom, to get the entire neighbourhood educated. That thereby peace, and industry, and prosperity may be the lot of all. And by this universal training, crime will be greatly prevented and much thereby gained.

In reckoning the expense of crime, I only looked at the expense necessary to maintain the strong arm of the law. But in this cost, we see but very little of that expense; consequently, we see but a fractional part of the gain which will be made by universal education. The cost of court-houses, jails, and the maintenance of judges, &c., is but a drop, in the bucket, in comparison to the actual loss a country sustains by crime. The loss by robberies, by thieving, by fraud, by drunkenness, by gambling, by prodigality, by waste of time, and strength, put forth to do evil, is immense. And this waste is the result of bad early training. An excellent writer has said, "Were what is engulfed in the vortex of crime, in each generation, collected together, it would build a palace of oriental splendour, in every school district, in the land. It would endow it with a library, beyond the ability of a life-time to read. It would supply it with apparatus, and laboratories for the illustration of every study, and the exemplification of every art. And it would requite the teacher for his services, in presiding over, and conducting the exercises of such a sanctuary of intelligence and virtue." And shall this waste of human means, and energies be perpetuated? Shall we not rather put forth one general and continuous effort, to raise society to general intelligence, and propriety of conduct. Who is there, that has an interest in the well being of his country, who will not come forward to aid in the benevolent enterprise, of educating the whole mass. Let us put forth effort, to try the mighty experiment. Let objections be laid aside, and objectors be silent, before such an important project as this. And if all were so trained, and became producers, beyond their consumption, poverty would be banished from our land and misery to a great extent from our world. Shall we not give the rising generation the highest blessing, which parents can give to children; a sound, and a thorough education. By this means they will be raised to respectability and honour, to usefulness, and comfort. They will thus have the power of raising themselves in society, of creating riches, of filling important stations among men. Remember what the wise man saith,—“A wise son maketh a glad father, but a foolish son is the heaviness of his mother.”

In concluding this argument, allow me to observe, that we who believe the Holy Scriptures, shall see the time approaching, when jails and penitentiaries, will become mere matters of history. They will then only be referred to, (as also the destructive implements of war,) as illustrations, and evidences of the barbarism, the crime, and the impiety of former generations. And by what steps, and means will it be that mankind shall be brought to such a perfection in morals and virtue? Doubtless, it will be the result of many combined influences; the schoolmaster will have a special share in bringing about this new state of things. Let teachers, therefore, be stimulated to widen the range of their own personal qualification. Let them rise high in mental, and moral attainments. Thereby their usefulness will be enlarged, and their profession become the more honourable. For in those days we have alluded to, the light of science in every department, and among all nations, from the least, even unto the greatest, shall be perfected. Moreover, in those days the light of the moon shall be as the light of the sun, and the light of the sun shall be seven-fold; as the light of seven days. Even now this day begins to dawn upon a benighted world, and the shadows of former ignorance, are fleeing away. If we would wish to be honoured with a share of the glory of bringing our world to this state of happiness, let us get, by "Free Schools," the door of education opened wide for all mankind; and every impediment, and obstruction removed, to obtain the diffusion of universal education, intelligence, and religion.

SUGGESTIONS AS TO THE MANNER OF HEARING LESSONS, OR OF CONDUCTING RECITATIONS.

On the right manner of conducting recitations, depends the future usefulness of the scholar. His ability and capacity successfully to discharge the duties of life, and to meet his responsibilities, result from a judicious development of his faculties, a proper early training, and actual discipline of the mind.

The prime object to be secured in conducting recitations, is the greatest possible permanent improvement of the student. To accomplish this object, the teacher must secure the interest, and gain the confidence of his pupils. Thus his instructions will be rendered useful, and his labours profitable. Confidence is gained by exerci-

sing a spirit of kindness. Scholars should be faithful in preparing their lessons for recitations, and fix their minds intently on the instructions of their teacher. If they respect him, they will value the instruction he imparts. A proper digestion of the materials of study, if furnished with suitable mental aliment, promotes vigorous intellectual growth. If a judicious direction is given to the course and manner of study, the student, when put on the track, will pursue his onward journey with pleasure, profit and delight. Every opportunity and circumstance should be improved to inspire a scholar with confidence in his ability to do what he undertakes to do. The teacher should express his thoughts in language adapted to the capacity of the scholar. If he would be intelligent, his language should be intelligible. He should be able to perceive, almost by intuition, whether his questions or explanations are clearly comprehended by the learner. If he finds that they are not, he should vary his manner of expression, and present the same idea in different aspects, until it is fully understood. He must find access to the mind of a child, that he may be able to ascertain what *he already knows*. This pre-supposes on his part, an acquaintance with the principles of mental philosophy.

The instructors of youth should aim to call the thinking powers into exercise, teach them to observe, to discriminate, to compare, to investigate, to reason, and to judge, that they may be able to concentrate their thoughts, and express their ideas in chaste and appropriate language. Teach a person *how* to think, and he will soon find out *what* to think. Let him be made to *set out right*, and then so directed that he will form correct intellectual habits. The foundation will thus be laid for him to discharge his own duty towards educating himself; and he will go on increasing in knowledge and intelligence.

The teacher should frequently discourse on the benefits which will be derived by the learner from the studies he is pursuing, informing him that it will strengthen and invigorate his mind, augment his capacity for business, and mature and qualify him for greater usefulness. Scholars, where practicable, should recite in classes. The teacher should be familiar in his intercourse with his pupils, yet dignified—show by the kindness and benignity of his mien, that he is sincerely their friend,—should take scholars by surprise, put thought on the wing. He should be ever vigilant.

"To aid the mind's development, to watch
The dawn of little thoughts, to see and aid
Almost the very growth."

If there are difficulties in the lesson that have not been learned, or studied, these should be previously explained. Words above the capacity of the student should be defined in a manner that will call the judgment into exercise. The capacity of mental comprehension is increased by use. A direct telling a scholar a rule or reason for a scientific operation without thought on his part, is oftentimes an injury, especially to him who has hardly entered the vestibule of the temple of wisdom.

The *why* and *wherefore* should never be omitted, when it is apparent that the lesson is not understood by the scholar. There should frequently be a succession of questions to lead the scholar to the final answer. Scholars with proper restrictions, should be encouraged to correct each others' error. This will keep up an interest in the recitation, and serve to secure the attention of the wayward and indifferent. Every school and every class has an atmosphere peculiarly its own. The teacher should labor to regulate this atmosphere, so that it shall be considered by the members of the several classes, highly honorable and reputable to get a thorough knowledge of the studies to which they are devoting their attention. A great object will then be attained towards laying the foundation of this mental archetype of the future man. Variety is the spice of the teacher's success. A system should be adopted in every species of recitation, that will secure the faithful preparation of every member of the class; and each scholar should be held responsible for entire preparation on his proposed recitation. The principle that scholars should either *know* or *not know*, cannot be too strongly inculcated.

Never pamper the more easy of apprehension at the expense of those of less active minds. The simultaneous answering of questions put to a class without discrimination, should not be practised, except in review, or when the recitation has nearly closed, where there is not time enough to put the questions to individual scholars in succession. Promptness and expedition should be the teacher's

motto. Students should be taught in the incipient stages of instruction, not only *what* to study, but *how* to study.

Visible illustrations are analogous to practical life. Learn things, and then the names of things. Proceed from concretion to abstraction. Every scholar should be taught to use his eyes as he is passing through the world. We acquire definite knowledge by comparison and observation. To a child who has never seen a river, show him a brook or a rivulet; inform him that a river is many times larger than a brook, and that rivers are of various sizes. If he has a vague idea of a lake, tell him it is a large pond, and contains many times more space. To give one a definite idea of the shape of the earth which he inhabits, show him a globe, and give it a rotary motion. He will then easily comprehend what is meant by the revolution of the earth on its axis. The impressions communicated through the medium of the eye are lasting. I would, therefore, urge upon every teacher the importance of visible illustration in all the departments of teaching. In teaching the English alphabet, put a perfect form of the letter on the blackboard. Let it be imitated by writing, and carefully compared with the same letter printed in books.

"Teach one thing at a time," should be the teacher's maxim; analyze fully one principle before another is presented. Apply knowledge as fast as it is acquired. Convince a scholar of the value of useful knowledge, excite in him a desire to obtain it, furnish him the means of comprehending and unravelling difficulties, and he will soon learn to originate, treasure up, classify, and digest whatever he has acquired.—*Massachusetts Teacher—Report of Mr. D. H. Sanborn.*

Youths' Department.

THE COMING-IN OF SPRING.

The voice of Spring,—the voice of Spring,

I hear it from afar!

He comes with sunlight on his wing,

And ray of morning star.

His impulse thrills through rill and flood,

It throbs along the main,—

'Tis stirring in the waking wood,

And trembling o'er the plain.

The cuckoo's call from hill to hill,

Announces he is nigh;

The nightingale has found the rill

She loved to warble by;

The thrush to sing is all athirst,

But will not till he see

Some sign of him,—then out will burst

The treasured melody!

He comes, he comes! Behold, behold!

That glory in the east,

Of burning beams of glowing gold,

And light by light increased!

The heavy clouds have rolled away

That darkened sky and earth,

And blue and splendid breaks the day,

With universal mirth.

Already to the skies the lark

Mounts fast on dewy wings—

Already, round the heaven, hark,

His happy anthem rings—

Already, earth unto her heart

Inhales the genial heat—

Already see the flowers start—

To beautify his feet!

The violet is sweetening now

The air of hill and dell;

The snow-drops that from Winter's brow

As he retreated fell,

Have turned to flowers, and gem the bowers

Where late the wild storm whirled;

And warmer rays, with length'ning days,

Give verdure to the world.

The work is done;—but there is One

Who hath the task assigned,—

Who guides the serviceable sun,

And gathers up the wind,—

Who showers down the needful rain

He measures in his hand,—

And rears the tender-springing grain,

That life may fill the land.

The pleasant Spring, the joyous Spring!

His course is onward now;

He comes with sunlight on his wing,

And beauty on his brow;

His impulse thrills through rill and flood,

It throbs along the main—

'Tis stirring in the waking wood,

And trembling o'er the plain.

[CORNELIUS WEBB.]

ILLUSTRATIONS OF ASTRONOMY.

No. 3.—DISTANCE, MEASUREMENT, LIGHT AND HEAT OF THE PLANETS.

How infinite are the amplitudes of space! It has never been measured. Man, with all his inventive genius, can produce no instrument to encircle the universe. He can only contemplate its vast grandeur, its silent sublimity, and then in his insignificance, apply the tiny inventions of his own fancy—his unappreciable and intangible estimates of miles, degrees and circles, to approximate even in his own mind, to the magnificent distances of the planets from each other and their sister earth. To realise fully the extent of space in the celestial world above us is impossible. We can at once comprehend the extent of a mile, or 100 miles, and in a slight degree, 10,000, or 20,000 miles upon the earth's surface, but when the mind's eye is called upward to follow the astronomical explorer of millions, or hundreds of millions of miles, how futile are even its eagle efforts, how dimmed and faded its lustre, how weary its langour, and how child-like it turns to earth again, and by its terrestrial standards of vision seeks to gaze upon the universe.

In the science of Astronomy, therefore, we can only estimate space by the certain conventional and fixed distances. As these should be accurately known, we give a list and definition of those used in popular and scientific astronomy.

Degrees, Minutes, and Seconds explained.—In astronomy, the distances and magnitude of bodies are often given in *degrees*, *minutes*, and *seconds*. It will be necessary, therefore, to show what these mean.

"A *circle* is a *plane figure*, comprehended by a single curve line, called its *circumference*, every part of which is equally distant from the point within called its *centre*." A circle is represented on Map 3, at the right of Fig. 1.

A *quadrant* is the fourth part of a circle.

A *sextant* is the sixth part of a circle.

A *sign* is the twelfth part of a circle.

A *degree* is the thirtieth part of a sign, or one three hundred and sixtieth part of a circle.

A *minute* is a sixtieth part of a degree; and

A *second* is the sixtieth part of a minute.

On the map the circle is divided off into parts of ten degrees each, and numbered in figures every thirty degrees, or oftener. It will be seen that one-fourth of a circle contains just *three signs*, or *ninety degrees*; and half a circle *six signs*, or *one hundred and eighty degrees*.

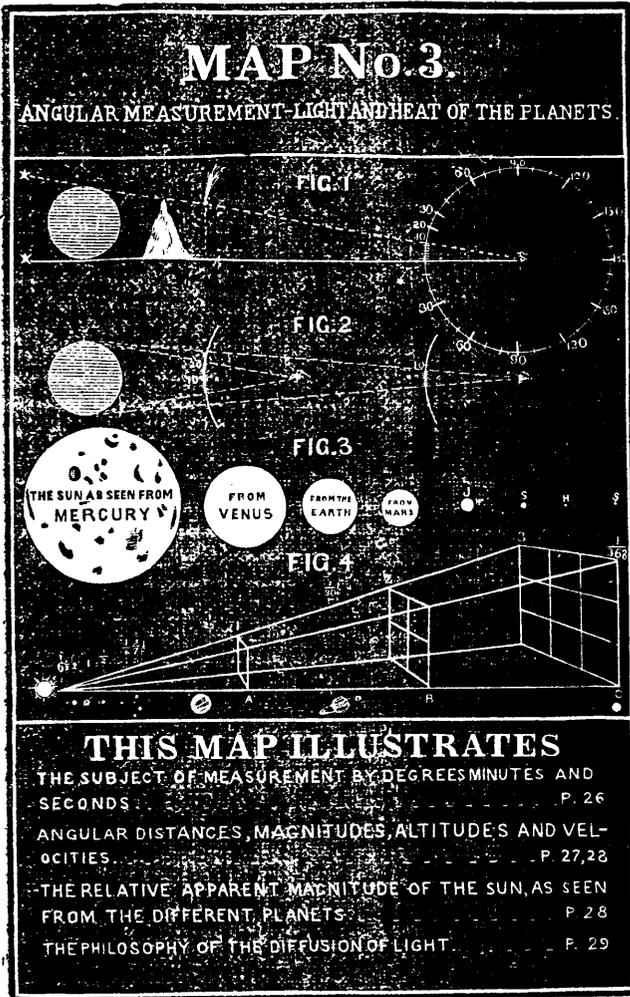
All circles, whether great and small, have the same number of degrees, namely, three hundred and sixty. But one hundred and eighty marks the greatest possible angle, as a pair of compasses can be opened no farther than to bring the legs in a straight line. These degrees, &c., are used to represent the angle which the two lines form, coming from different points, and meeting at the eye in the centre.

In the figure, the lines passing from the stars on the left to the eye, are found by the measurement on the circle to be ten degrees apart. If the dotted line was perpendicular to the lower or plain one, they would be ninety degrees apart, &c.

Degrees, minutes, and seconds are denoted by certain characters, as follows: ° denotes degrees, ' denotes minutes, and " denotes seconds. Thus, 10° 15' 20", is read ten degrees, fifteen minutes, and twenty seconds.

Measurement by degrees, minutes, and seconds, is called *Angular Measurement*.

Angular distances, magnitudes, &c.—In Fig. 1, the observer is represented as seeing two stars on the left side of the map. By looking at the graduated or divided circle, it will be seen that the angle which these two stars make at the eye is 10°. The stars are therefore said to be 10° apart. If a globe filled the same angle, or number of degrees, as shown on the map, we should say it was 10° in diameter. If the space between the foot of a mountain and its top filled the same angle, we should say it was 10° high; and if a comet passed through the same angle in one hour, we should say its velocity was 10° an hour.



Let the reader imagine himself as approaching the sun till it has four times its present apparent diameter, and his spots stand out in full view to the naked eye; and then let him recede from the sun, pass the earth and the orbits of Jupiter and Saturn, and retire away into space, till the sun appears but a glimmering star, and he will have some faint conception of the almost inconceivable distances of the solar bodies.

Philosophy of the diffusion of Light.—Light always moves in straight lines, unless turned out of its course by reflection or refraction. This is represented by Fig. 4 on the map; where the light is seen passing to the right, from the sun on the left. From this law it follows that the squares A B and C in the diagram would receive equal quantities of light; but as B has four times, and C nine times the surface of A, a single square of B equal to A, would receive only one-fourth as much light as A; and a square of C, equal to A, would receive only one-ninth as much. This difference in the amount of light received is caused by the unequal distances of the several squares from the miniature sun on the left. The distances are marked on the upper line of light by the figures 1, 2, 3.

The rule for determining the relative amount of light received by several bodies, respectively, placed at unequal distances from their luminary, is, that *their light is inversely, as the squares of their distances.* This rule, also, is illustrated by the figure. The square of 1 is 1; the square of 2 is 4; and the square of 3 is 9. Hence 1, $\frac{1}{4}$, and $\frac{1}{9}$, will represent their relative light, as already shown. The checks are designed to illustrate this rule.

Light and Heat of the several Planets.—By applying the foregoing rule to the planets, at their respective distances from the sun, we are enabled to ascertain the relative amount of light received by each; and on the supposition that their heat is proportionate to their light, we can easily determine their average temperature. At the bottom of the map the planets are placed at their relative distances from the sun, commencing with Mercury on the left, and extending to Herschel on the right. Immediately over each planet respectively, and near the upper line of the diagram, is marked the proportionate light and heat of each, the earth being one. They are as follows:

Mercury	-----	6 $\frac{1}{2}$	Vesta	-----	$\frac{1}{8}$	Jupiter	-----	$\frac{1}{7}$
Venus	-----	2	Astae	-----	$\frac{1}{7}$	Saturn	-----	$\frac{1}{8}$
Earth	-----	1	Juno	-----	$\frac{1}{7}$	Herschel	---	$\frac{3}{8}$
Mars	-----	$\frac{1}{2}$	Ceres & Pallas	---	$\frac{1}{8}$	Neptune	---	$\frac{1}{8}$

It appears, therefore, that Mercury has 6 $\frac{1}{2}$ times as much light as our globe; Herschel only $\frac{3}{8}$, and Neptune only $\frac{1}{8}$ th part as much. Now if the average temperature of the earth is 50 degrees the average temperature of Mercury would be 325 degrees; and as water boils at 212, the temperature of Mercury must be 113 degrees above that of boiling water. Venus would have an average temperature of 100 degrees, which would be twice that of the earth. On the other hand, Jupiter, Saturn, Herschel, and Neptune seem doomed to the rigors of perpetual winter. Think of a region 90, or 368, or 900 times colder than the average temperature of our globe!

“Who there inhabit must have other powers
Juices, and veins, and sense, and life, than ours:
One moment’s cold, like theirs, would pierce the bone,
Freeze the heart’s blood, and turn us all to stone!”

It is not certain, however, that the heat is proportionate to the light received by the respective planets, as various local causes may conspire to modify either extreme of the high or low temperatures. For instance, Mercury may have an atmosphere that arrests the light, and screens the body of the planet from the insupportable rays of the sun; while the atmospheres of Saturn, Herschel, &c., may act as a refracting medium to gather the light for a great distance around them, and concentrate it upon their otherwise cold and dark bosoms.

EARLY COLLEGIATE EDUCATION.—The Rev. Principal Lee, in his usual inaugural address to the students of the Edinburgh University, in regard to the prosecution of their studies, said that all the eminent men of the age with whom he was personally acquainted, and who had risen to distinction, had gone to college at an early period,—Brougham at twelve, Dr. Chalmers at eleven, and Lord Campbell at eleven years and a half.

All circles, whether large or small, have the same number of degrees; but the angle which an object makes at the eye will be great or small, according as it is near to or distant from the observer. This is illustrated by Fig. 2. On the left is the object. To the observer in the centre the globe is 20° in diameter; but to the one on the right its diameter is but 10°. To a third observer, at twice the distance of the last, it would appear but 5° in diameter, &c. This shows why objects grow smaller in appearance as we recede from them, and larger as we advance towards them. Their apparent magnitude is increased or diminished in proportion to the distance from which they are viewed.

The Sun as seen from the different Planets.—By Map 2, on the 20th page of this Journal, it will be seen that the Sun is about twice as near to Mercury as he is to Venus. Of course then, according to the principle illustrated in Fig. 2, his apparent diameter must be twice as great when viewed from Mercury as when viewed from Venus. From the Earth it is still smaller, and so on till we view him from the distant orbit of Neptune, from which he would appear but a small glimmering point in the heavens. From the fixed star Sirius, he would appear smaller than Sirius appears to us.

The relative apparent magnitude of the Sun, as seen from the different planets, is represented by Fig. 3. His angular diameter would be,

From Mercury	- 82 $\frac{1}{2}$ '	From Astraea	- 12'	From Saturn	- 3 $\frac{1}{2}$ '
“ Venus	- 44 $\frac{1}{4}$ '	“ Juno	- 12'	“ Herschel	1 $\frac{3}{4}$ '
“ Earth	- 32'	“ Ceres	- 11 $\frac{1}{2}$ '	“ Neptune	50"
“ Mars	- 21'	“ Pallas	- 11 $\frac{1}{2}$ '		
“ Vesta	- 13 $\frac{1}{2}$ '	“ Jupiter	6'		

From Mercury it is supposed that the spots on the Sun would be visible to the naked eye, as seen on the map; and from Neptune the Sun himself would appear but as a large and brilliant star.

Miscellaneous.

THE SEA.

Beautiful, sublime, and glorious ;
Mild, majestic, foaming, free ;
Over time itself victorious,
Image of eternity.

Sun and moon, and stars shine o'er thee,
See thy surface ebb and flow ;
Yet attempts not to explore thee,
In thy soundless depths below.

Whether morning's splendours steep thee
With the rainbow's glorious grace,
Tempest rouse, or navies sweep thee,
'Tis but for a moment's space.

Earth,—her valleys, and her mountains,
Mortal man's behests obey,
Thy unfathomable fountains,
Scoff his search and scorn his way.

Such art thou—stupendous Ocean ?
But if overwhelmed by thee,
Can we think without emotion,
What must thy Creator be ?

TRINITY COLLEGE DUBLIN—HISTORICAL
MEMORANDA.

On the occasion of the recent elections of a new Chancellor, Vice-Chancellor, and Provost, of this distinguished university, founded by Queen Elizabeth in 1519, we have taken the pains to compile some particulars regarding these offices. The new officers are :—Chancellor, the Right Honorable Lord John George Beresford, D.D., LL.D., Archbishop of Armagh, vice the King of Hanover, deceased—Vice Chancellor, the Right Honorable Francis Blackburn, LL.D., Lord Chief Justice of the Queen's Bench, vice Archbishop Beresford—Provost, the Rev. Richard Macdonnell, D.D., Smith's Professor of Oratory, vice the Rev. Franc Sadlier, D.D., deceased.

The last election to the High office of Chancellor was held on the 15th day of July, 1805, when his Majesty the King of Hanover (then Duke of Cumberland, LL.D.) was elected.

In the 34th of Elizabeth the "Charta, sine litteræ patentis," founding "the College of the Holy and undivided Trinity of Queen Elizabeth, near Dublin," appoints the first Chancellor of the University, and provides for the election of his successors in the following terms :—

"Nam Cancellarii dignitatem honoratissimo Consiliario nostro Gulielmo Cecillio Domino Baroni de Burghley, totius Angliæ Theaurario, Delegatim approbamus, et, ut posthac idoneam hujus Collegii Cancellario Præpositus et major pars Sociorum elegant, ordinamus."

The Provost and Senior Fellows, consequently, are—anomalous though it be—the electors. The office is tenable for life, and the Chancellor is sworn (if he be resident of Ireland) generally in the presence of two of the Senior Fellows, deputed for that purpose, before the Lord Chancellor, or Lord Keeper of the Great Seal of England, or before the Lord Chancellor of Ireland.

The office is not a mere sinecure ; we find that many important duties may devolve upon its holder. In the 13th Car. 1. we find he is constituted first of the visitors of the College, who form the Court of Ultimate Appeal, with very extensive jurisdiction, to use the words of the last-mentioned statute—"Omnes lite, actiones et controversias, quas Præpositus et major pars sociorum non possint componere, dirimant, et definiant et quod omnia graviora delicta ab ipso Præposito et sociis non emendata animadvertant."

The Chancellor appoints the Vice-Chancellor (who was previous to the 13th Car. 1. elected by the Provost and Senior Fellows)—"Queen (i. e. Procancellarius,) uti sar est, a Cancellario Academicæ, cujus vicem gerit, sepe eligi volumus." And by a subsequent section of the same act, in the event of a disagreement on the co-option of a Senior Fellow, the Chancellor may appoint a fit and proper person to the vacancy."

By virtue of the letters patent, or "Grant for regulating the Observatory on the lands of Dunsink" (32 George III., AD. 1792,) the Chancellor elects the Astronomer Royal (on Provost Andrews' foundation,) in default of appointment by the Provost and Senior Fellows within six months after the occurrence of a vacancy, and by the "Act for establishing in Ireland a complete School of Physic" (25 Geo. III., cap. 42, A.D. 1785,) the application of the

surplus funds arising from Sir Patrick Dun's estates is subject to his approbation.

In the English universities the election of the Chancellors, as of all other University officers, is vested in convocation, consisting of the whole body of doctors and masters. In the Irish University the right of this election is vested in the Provost and seven senior Fellows of Trinity College. The practical difference of such opposite modes of proceeding is obvious. An election by the whole body of the higher graduates of a university may fairly be said to speak the voice of the classes it has educated. A nomination by seven gentlemen who have had the good fortune to live the longest or stick closest to their fellowships can hardly be said, except by accidental agreement, to give utterance to that opinion. The Provost and senior fellows are at the head of Trinity College—but they are not the heads of the Irish University. In the universities of Oxford and Cambridge, in each of which there are many colleges, the separate existence of the university is plain. In Dublin, however, contrary to the expressed intention of the founders, the University to this day consists of but one college : nevertheless the university and the college are perfectly distinct bodies. We have had the curiosity to look into the statutes and regulations, and in these the existence of a convocation, composed of the higher graduates, and representing the University, is unequivocally and distinctly recognized. In point of fact that convocation does not assemble twice a year under the presidency of the Chancellor or his representative, and it is by the Chancellor or his representative, or it is by the Chancellor as the head of that body, and upon a vote of convocation, that every degree is actually conferred.

The Primate of the Irish branch of the Church of England has nominally filled the place of Vice-Chancellor, but has in truth acted as Chancellor in the name of the King of Hanover. There is an obvious fitness in now conferring upon him the name of the office the functions of which he has in reality discharged.

In connexion with the recent election, the Board of Trinity College, offer a prize of £10 for the best ode, in Latin or English, in commemoration of the election of the new Chancellor to the University.

The office of Provost or President of Trinity College is in the gift of the Crown, and is worth £4,500 sterling, per annum, with other perquisites.

The new Provost, Dr. Macdonnell, entered the University over which he now presides in 1800, and at the early age of thirteen, obtained the head place. His College course was throughout distinguished, including the head scholarship in 1803, and Bishop Law's Mathematical Premium in 1808, at his first sitting for it, and on distinguished answering, though amongst his competitors were several who afterwards succeeded in becoming fellows. By a curious coincidence, he was elected on his birth day, and at the age of twenty-one ; being one of the few instances of such a distinction having been obtained so early. In 1820 he was chosen Professor of Mathematics, a post which he occupied for six or seven years.

In 1828, at a time when comprehensive views were not too frequently received, he published a letter advocating the necessity of many changes in the academic system of studies. These he warmly supported, as demanded by the extraordinary advance of science in the last half century, which made old institutions in many respects unfitted for the requirements of modern knowledge. The suggestions then offered were finally adopted, and formed the basis of those great changes in the College, commencing in 1835, which have raised its character so high. The constant development of science, and the creation of new fields of study and research, make it of great importance that there should be no unwillingness in the heads of the University to meet the requirements of the age. He discharged the duties of Senior Bursar for eight or nine years, in which office his active and business-like habits were of the highest benefit in systematizing the management of the College property, and made him familiar with its nature and position.

It is understood that his political opinions have never been of an extreme nature. While a warm supporter of the Established Church of England, he advocated Catholic emancipation, and in 1813 signed, *alone* amongst the Fellows, the petition in its favour. Of the system of mixed education adopted in the National Schools he has been from the first a consistent advocate.

M. GUIZOT ON WILLIAM THE CONQUEROR.

The following is the speech of M. Guizot on the occasion of the inauguration, very lately, of an equestrian statue of William the Conqueror, at his native town of Falaise, in the department of Calvadies, in France. The statue is a fine piece of sculpture, by a Parisian artist, which was lately exhibited in the Champse Elysee, in Paris. The extract will not disappoint the expectations of those readers who may be invited to its perusal by the fame of its distinguished author:—

You present, gentlemen, to-day, a rare example—the example of a long and faithful memory after the lapse of ages. Nearly eight centuries have passed since King William died neglected in Normandy, which he had rendered so illustrious. It was with difficulty that there were found a few servants at Rouen—the scene of his death—to watch his remains. A few feet of earth were hardly obtained at Caen wherein to deposit his remains. On the present occasion you repair that indifference of his cotemporaries by your persevering care; and, owing to the talent of an eminent artist, King William is again beheld in his native town. Falaise repays him, after eight centuries, the glory which is received from him. It is a glorious deed to render justice to a great man. Great men, however, must not be flattered neither after their death nor yet during their life. Their errors, their faults, their vices, their crimes, when they have committed any, ought not to be kept a secret, but ought rather to be judged with severity. It is the right, as it becomes the duty, of impartial history. But this just severity once exercised, the evil once recognized and treated as it deserves, a truly great man still remains—great in the midst of all the imperfections his history discloses; and then it is our duty to admire and pay signal honor to his memory, inasmuch as great men are the glory of a nation, even where their despotism has been rude and dearly purchased.

William was indeed a great man; and if the greatness of princes be estimated, as it ought to be, by the difficulties of their deeds and the importance of their results, there are few who have been superior to him. You will not have forgotten, gentlemen, a deed which was accomplished in our time—the expedition of 1830 to Algiers—the attempt to embark and transport to the other shore of the Mediterranean an army of 30,000 men to obtain from a barbarian the satisfaction due to us. What immense preparations were then made! What mighty efforts, what powerful means were employed by the aid of our advanced state of civilization! And all that was deemed absolutely necessary, because the undertaking was difficult. You have now the proof that none of these precautions were unnecessary, because the undertaking was difficult. You have now the proof that none of these precautions were unnecessary for a view to their success; and the success of that enterprise has become the glory of its leaders.

In the 11th century, scarcely issuing from a barbarous condition, without any of the resources now furnished by civilization and science, Duke William assembled together, embarked, conveyed to the other side of the Manches, and landed on the enemy's territory, more than 30,000 men: and scarcely had he landed when he won battles, and conquered for himself a kingdom. So much for the difficulty of the enterprise. Now for the greatness of the results. William not only traversed the sea in small and fragile barques, with a mighty army—not only did he conquer a kingdom—he did still more; he founded a State—he strongly and solidly established his power on a foreign soil—his race and a new language and new institutions. And his work has lasted for ages, and it still endures. And it is in the tongue that King William spoke that the English Parliament still addresses its noble Queen, and in it she replies.

We have seen gentlemen, conquests more vast, more dazzling, than those of King William. They disappeared as rapidly as they were made. The phenomenon is indeed rare of invasion founding a State; yet William accomplished such a deed. William was in harmony with the spirit and the permanent interests of his age: he was as deeply imbued with a conservative spirit as he was gifted with the genius of a conqueror.

We are right in rendering him this justice, as his glory has cost us dearly. It was the origin of that national struggle, which lasted more than three centuries, between France and England. It was William who, by establishing between two nations partial and precarious ties, began between them that epoch of terrible hostility,

and all the wars which lasted until they terminated in a complete separation of the two countries. We were the conquerors in that mighty struggle. We successively won back all the parts of our territory, and ended gloriously by securing our national independence. We definitively drove the Norman invaders to the soil conquered by them, and whither we had sent them. The glorious creature—without parallel in the history of the world—with a nature half angelic, half heroic—Joan of Arc, forever destroyed what the successors of William the Conqueror labored to effect in France; and it was on the same spot of earth, in this very city of Rouen, (where King William met his death,) that the Virgin Warrior sealed with her martyrdom the deliverance of her country.

Yet I care not to dwell on those glorious but saddening memoirs of the past. I rather love to contemplate ourselves and the history of our own days. In our times, also, ships without number crowd our coasts, and convey thousands upon thousands of voyagers to the shores of England. But is it for another war that they thus depart? No, no. It is benign peace that beckons and guides them to a foreign land and leads them back again. Their desire is not for chivalrous adventure, nor is their ambition that of conquest. They crowd thither to offer or bring back the pledges of reciprocal prosperity. The intercourse between the two nations is now as pacific as it is frequent and animated. A Crystal Palace, where they congregate in thousands—an invisible thread—a flash of lightning shooting beneath the wave, which conveys from one to the other the message of their mutual wants and their mutual services—such, gentlemen, are the bonds which now replace those that William the Conqueror wished to establish.

Which of the two periods, gentlemen, is the happier? Which spectacle is the nobler, the more glorious? In the midst of the troubles and disquietudes which weigh upon us in our present agitated and precarious condition, we yet have a right to be proud of, and have full hope in, our own age, provided our hope and our pride do not impel us into the pride of madness. We may justly speak of the benefits and the marvels of our civilization, provided that our civilization be not itself like a crystal palace which all men admire, but which all at once disappears, and that it cannot be said of it, in the language of the great poet, "that Normandy has given to France with its brilliancy the brittleness of glass."

I wish not, gentlemen, to throw a gloom over this festivity by words of sadness; but you will pardon me the expression of a sentiment which is certainly that of all men of sense and of honor. When men who traverse the wide ocean are overtaken by the tempest, it is not sufficient to have a noble ship, well equipped, and well furnished with an intelligent, brave, and hardy crew; that crew must be united, and the whole ship must have stout anchors—for on these the salvation of all depends. Let us, gentlemen, be firmly united—let us know how to possess ourselves of the strong anchors of society—let us trust to them together. Yes! Heaven will deign to grant us salvation, if we act so as to deserve it.

ENCOURAGEMENT FOR MECHANICS.—GOVERNORS OF STATES.—We believe there have been one or two instances, but we cannot now remember them, where two brothers have been Governors of States at one and the same time, but there is no instance on record where brothers have been so far apart, and under such peculiar circumstances, as is now the case with the Biglers of Pennsylvania. William Bigler is the Governor elect of Pennsylvania, and his brother John Bigler is the Governor of the State of California. One will have charge of the keystone of the arch, the other over the Eureka of the confederacy. One will govern on the Pacific, the other on the Atlantic. One will be chief magistrate of the State of vast mineral fields of iron, copper and lead; the other, chief magistrate of untold deposits of gold, silver, platina, and mountains of cinnebar.

"THE EDUCATION OF OUR CHILDREN is never out of my mind. Train them to virtue, habituate them to industry, activity and spirit. Make them consider every vice as shameful and unmanly. Fire them with ambition to be useful. Make them disdain to be destitute of any useful knowledge."—John Adams to his Wife.

The intellectual superiority of one man above another consists in his power of judging of the future from the past.—Stewart's Moral Philosophy p. ii., ch. ii., Sec. 4, Div. ii.

JOURNAL OF EDUCATION



TORONTO, MARCH, 1852.

REV. A. LILLIE'S TWO LECTURES ON THE GROWTH AND PROSPECTS OF CANADA.—We are happy to find that our own estimate of the great value of these Lectures when soliciting the respected author to prepare them for publication in the *Journal of Education*, is fully justified by the reception with which they have met from other quarters. Not only have they been favourably noticed and quoted by several Upper Canada newspapers, but they have been republished entire by two newspapers in Lower Canada. Mr. J. G. HODGINS, conceiving that a pamphlet edition of them might be useful, applied to parties likely to take some copies in that form. Mr. THOMAS MACLEAR, Bookseller in Toronto, proposed to take 1,000 copies; and F. WIDDER, Esq., in addition to supplying some corrections and additional statistics, requested 1,500 copies for the use of the Canada Company in England. Since then, Wm. MATTHIE, Esq., of Brockville, has written to Mr. LILLIE, requesting permission to reprint an edition of 1,000 copies for "gratuitous circulation in England, Ireland, and Scotland." Permission has, of course, been given; and Mr. LILLIE has collected and incorporated in his Lectures for the pamphlet edition a number of additional statistics. There are no copies of the pamphlet edition of the Lectures for sale in Canada, but those at the disposal of Mr. MACLEAR; and we hope he will be duly rewarded by the friends of Canadian progress for the spirited manner in which he has undertaken to promote the circulation of so useful a publication.

We know not of a more effective antidote to grumbling and defamation against Canadian institutions and progress, than Mr. LILLIE'S Lectures. Let assailants of Canada answer Mr. LILLIE'S facts and statistics if they can. Among the valuable additions of statistics which Mr. LILLIE has made to his Lectures, is a comparison between the progress of Rochester and Buffalo in the State of New York, and Toronto and Hamilton in Canada. Rochester possessing great water privileges, and Buffalo being the terminus of Canal navigation on the one side, and of western lake navigation on the other, and the great depot of travel and merchandise to and from the Western States, have peculiar advantages over Toronto and Hamilton; and we have often been pointed to Rochester and Buffalo, as exhibiting a growth of population to which nothing in Canada could be compared. Mr. LILLIE has made the comparison, including the famed City of New Orleans, and the results are as follow:

"New-Orleans had in 1810, a population of 17,248; in 1830—46,310; in 1850, 119,285. That of Rochester, was in 1820, 1,502; in 1830, 9,269; in 1850, 36,561. Buffalo contained in 1810, 1,508; in 1830, 8,653; in 1850, 40,266 (Am. Alm. 1852, p. 200). Hence New-Orleans numbered in 1850, somewhat more than two and a half times what it numbered in 1830; Rochester, nearly four times; and Buffalo, about four and two-third times; while Toronto contained, in 1850, all but nine times its population in 1830; and Hamilton about four and a half times what it numbered in 1836."

OFFICIAL ANSWERS TO QUESTIONS PROPOSED BY LOCAL SCHOOL AUTHORITIES.

[Continued from page 47.]

NUMBER 17.

A local Superintendent proposes several questions as to the respective powers of school meetings, trustees and others in a school section, the nature of which will be sufficiently apparent from the following answers returned to them:

"1. An annual or special school section has authority to say whether a school shall be supported by rate bill at a certain amount per quarter; but such meeting has no authority to say whether a child attending one week or one month shall pay for the whole quarter. The last part of the 8th clause of the 12th section of the School Act makes it the duty of the trustees to adopt a monthly, quarterly, or half yearly rate bill, as they may judge best. Under the resolution, a copy of which you enclose, the trustees can, if they think proper, impose a rate bill of one shilling and three pence per month, (which is at the rate of three shillings and nine pence per quarter) and raise whatever balance may be required to make up the teacher's salary, &c., by assessment, as authorised by the latter part of the 7th clause of the 12th section of the Act.

"2. To your second question, I answer that trustees have no authority to levy a rate bill for less than one month.

"3. It is not lawful for any school meeting to adopt a resolution against all school tax, as the latter part of the 7th clause of the 12th section expressly authorises the trustees to levy a tax on property, if necessary to make up the balance of a teacher's salary and other expenses of their school.

"4. If a majority of a special school meeting called for that purpose, does not resolve upon any method of providing the teacher's salary, then the trustees have authority to provide for the whole balance of the teacher's salary, over and above the amount of the apportionment from the school fund, by assessing the property of the school section, as authorised by the latter part of the 7th clause of the 12th section of the Act. Thus adopting no resolution at such meeting as to the mode of providing for the teacher's salary, is equivalent to resolving in favour of a *free school*; for, in such circumstances, the Trustees have no authority to impose a rate bill on parents sending children to the school; they must raise whatever balance they require under the authority of the clause last referred to.

"5. The trustees have authority, under the 12th clause of the 12th section of the Act, to call as many special school meetings as they please, and for any school purpose whatever.

"6. No other parties than the trustees of a school section have authority to call a legal meeting of the voters of such section.

"7. Each annual school meeting must be held the hour of the day, as well as on the day, specified by law. If any annual school meeting under your jurisdiction, was held at 6 o'clock, p.m., instead of at 10, a.m., of the day specified by law, the proceedings of such meetings are null; but according to the 5th section of the Act, the old trustee continues in office until his successor is elected, as authorised in the proviso of the 9th section.

"8. A trustee can be sued by no other than the majority of his colleagues for any neglect of duty. See 8th section of the Act. Therefore, if the majority of voters at a school meeting adopt resolutions according to which the trustees are of opinion they cannot employ a teacher and justly guarantee his salary,—(such, for example, as a rate of two dollars a quarter for pupils, or any rate bill so high as to prevent the attendance of the pupils) the trustees can, if they think proper, decline employing a teacher at all, and let the responsibility of having no school, and of losing the school fund (including the local assessment, part of it as well as the legislative school grant) be upon those who propose and support such unreasonable resolutions.

"I thank you for the energetic manner in which you co-operate in promoting the circulation of the *Journal of Education*—a publication from which I derive not a farthing advantage more than yourself, unless it be an advantage to be responsible for all expenses connected with its publication, besides the labour of editing it."

NUMBER 18.

In a school section where a *free school* was established, children from neighbouring sections (in which the schools were not free)

were sent to the cheap school—crowding that school and depriving trustees of neighbouring sections of a portion of the ordinary means of supporting their own schools. The trustees of the *free* school section rather favoured this proceeding, and thought they could collect *rate bills* for the attendance of the non-resident children. A representation having been made to the Chief Superintendent of Schools on the subject, the following is the answer returned:

"In reference to the question you have proposed, I remark that the trustees of a school section have no legal authority to admit to their school any children not resident in their section.

"The 11th clause of the 12th section of the Act has reference to the collection of rates on the property of non-residents, but has no reference to the assumed admission of non-resident children to the School. The school of each school section is for the children of school age in that section, and for no others; otherwise the consequences would be what you justly state in your letter. In some instances children have been permitted to go to the school of a section in which they did not reside, but not when it has been objected to by any party residing in the section, either to or from which such children have been sent."

NUMBER 19.

The nature of the questions proposed by a party concerned, relative to certain powers of school meetings and Trustees, is sufficiently indicated by the following answers returned to them:

"In reply to your questions, I remark that no school section meeting has authority to tax any man according to the number of his children of school, or of any age, as you may see by what I have stated at some length on this subject in the *Journal of Education* for December, p. 183.

"A school meeting has a right to vote that a rate bill of 7½d. per month shall be paid for each pupil attending the school.

"The Trustees, therefore, of section to which you refer, have a right, and it is their duty, to levy the rate bill of 7½d. per month for each pupil attending the school; but they have no right, nor can they collect by law the proposed rate of 5s. for each child resident in the school section between the ages of 5 and 16 years, whether such child attends the school or not. But if the school fund apportionment for the year, and the monthly rate bill of 7½d. per pupil, are not sufficient to make up the salary which the trustees may think proper to pay the teacher and defray the other expenses of the school, the trustees have authority, by the latter part of the 7th clause of the 12th section of the school act, to assess the property of the school section for the balance they may require for such purposes."

(TO BE CONTINUED.)

[OFFICIAL.]

Circular to Wardens of Counties on the omission of County Clerks and Local Superintendents of Schools to transmit certain information required by law. *

SIR:—I have the honor to call the attention of the Municipal Council, of which you are Warden, to several matters relating to Common Schools:—

1. The 1st clause of the 35th section of the School Act makes it my duty to apportion on or before the first day of May, the moneys which have been granted by the Legislature for the support of Common Schools in Upper Canada during the current year; and I should have been happy to transmit herewith a statement of this apportionment of such moneys, so far as your Council is officially interested, had the officers whom you have appointed, furnished me with the information required by law to enable me to do so. In order to apportion the Legislative School Grant to any Municipality, for the current year, as required by law, I must have from such Municipality its audited financial school accounts and its school reports for last year. But I have not yet received the former from one County Council in Upper Canada; and I transmit you the names of the Townships within your jurisdiction from which the required school reports have not been received. As I am depending upon the information contained in the accounts and reports referred

to, for the data and grounds on which to prepare and notify the current year's school apportionment, it is impossible for me to perform this part of my duties at the time so appropriately fixed by law, unless each County Council, and the officers appointed by it, will fulfil the conditions and perform the duties enjoined upon them by law at the time and in the manner prescribed in the statute.

3. As to the Auditor's report of the School Accounts of the County and Sub-treasurers, a certified copy of the abstract of which the 5th clause of the 27th section of the Act requires the County Clerk to transmit to this Department, on or before the first day of March, I have to remark, that, in a circular dated as early as 31st July, 1850, I called the attention of the Council to the provisions of the law in regard to the mode of securing and paying the local School Fund, and suggested the manner in which it could be systematized and simplified; and in a circular from this Department, dated 4th March, 1851, the auditing of the accounts of the School Fund and reporting other information on school matters, was specially brought before the Council. But I regret to say that from no County has one such audited abstract of accounts for 1851, as required by the clause of the Act referred to, been yet received by this Department. This has arisen, as I have been informed by some County Clerks, (who have readily furnished me with such information as they possessed on the subject) from the delay on the part of Sub-treasurers to send in their accounts, or from the absence of that responsibility and security on the part of those officers which the law requires each County Council to see should be given. I hope this matter will engage the prompt and effective attention of your Council.

3. Another subject which I have to bring before the Council is the furnishing me with copies of its proceedings "relating to school assessments and educational matters," as required by the 3rd clause of the 27th section. Some County Clerks have annually performed this duty faithfully and well; but from others I have received no information whatever,—either of the appointment and post office, address of the local Superintendents and County Treasurer, or of the proceedings of your Council on educational matters. The attention of County Clerks was drawn to this matter also in the circular of the 4th of March, 1851—and some of them immediately either partially or wholly complied with the law, but have omitted to do so this year.

4. Accuracy and punctuality in the transaction of every kind of business connected with the interests of the several Municipalities throughout the country, is an important branch of public education, and an essential element in the intellectual and social advancement of the people. The establishment of County and Township Municipal Councils has tended and is largely contributing to educate the people in a correct appreciation and management of their own local affairs. The school system carries the principle of local self-government into each school section, as well as county and township; and a correct and systematic manner of working it out; of devising and accounting for all its financial operations; of reporting its state and progress, is a comprehensive and powerful agency of social training,—apart from the advantages conferred by the schools, and the information diffused by reports. And it is for each County Council, by the fulfilment of its own functions, by the appointment of suitable local school officers, and by seeing that each of them performs his duties enjoined by law, to aid in procuring a progress and "consummation so devoutly to be wished."

5. I will lose no time, after obtaining the necessary returns, in notifying the apportionment of the Legislative School Grant for the year; but as the aggregate amount of it is the same as that of last year, the variation in the amount apportioned to each Township, arising from the variation in the comparative increase of population in different municipalities, cannot be very great. On the basis of last year's apportionment, your County Council might therefore proceed forthwith, should it think proper, to levy the local assessment part of the School Fund for the year.

I have the honor to be,

Sir,

Your obedient Servant,

E. RYERSON.

EDUCATION OFFICE,

Toronto, 1st day of May, 1852.

DESCRIPTIVE CATALOGUE

OF THE

MAPS, SCHOOL BOOKS, CHARTS, &c., &c.

FOR SALE AT THE DEPOSITORY,

IN CONNECTION WITH THE EDUCATION OFFICE, TORONTO.

[Continued from the January Number, page 13.]

Table with columns: TITLE OF MAPS., SIZE OF MAP., NET CASH PRICE., EXPLANATORY REMARKS. Includes VIII. BLISS' OUTLINE MAPS. and IX. FRENCH EMBOSSED MAPS.

X. ATLASSES.

1. PHYSICAL, POLITICAL, AND ASTRONOMICAL.

The Physical Atlas of Natural Phenomena, reduced from the Edition in Imperial Folio, for the use of Colleges, Academies, and Families, by Alexander Keith Johnston, F.R.G.S., F.G.S. Geographer at Edinburgh. In Ordinary to Her Majesty, Honorary Member of the Geographical Society, Berlin. This Edition contains twenty-five Maps, including a Palaeontological and Geological Map of the British Islands, engraved in the highest style of Art, expressly for this edition, by Messrs. W. & A. K. Johnston, and carefully coloured under their superintendance; with 112 pages of descriptive letter-press, and a very copious index. List of Plates.—Geology.—1. Geological Structure of the Globe. 2. Mountain Chains of Europe and Asia. 3. Mountain Chains of America. 4. Illustration of the Glacier System of the Alps. (Mount Blanc.) 5. Phenomena of Volcanic Action. 5. Palaeontological and Geological Map of the British Islands. (A double sheet.) HYDROGRAPHY.—1. Physical Chart of the Atlantic Ocean. 2. Physical Chart of the Indian Ocean. 3. Physical Chart of the Pacific Ocean or Great Sea. 4. Tidal Chart of the British Seas. 5. The River Systems of Europe and Asia. 6. The River Systems of America. 7. Tidal Chart of the World. METEOROLOGY.—1. Humboldt's System of Isothermal Lines. 1. Geographical Distribution of the Currents of Air. 3. Hyetographic or Rain Map of the World. 4. Hyetographic or Rain Map of Europe. NATURAL HISTORY.—1. Geographical Distribution of Plants. 2. Geographical Distribution of the Cultivated Plants used as Food. 3. Geographical Distribution of Quadrupeds, Elefanta, Marsupialia and Pachydermata. 4. Geographical Distribution of Carnivora. 5. Geographical Distribution of Rodentia and Ruminantia. 6. Geographical Distribution of Birds. 7. Geographical Distribution of Reptiles. 8. Ethnographic Map of the World. 9. Ethnographic Map of Great Britain and Ireland. £2 12 6

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Educational Intelligence.

CANADA.

MONTHLY SUMMARY.

We have received an interesting account of the proceedings of a meeting of the inhabitants of L'Original, for the purpose of accepting from C. P. Treadwell, Esq., Sheriff of the United Counties of Prescott and Russell, a site for a grammar school-house, accompanied with a handsome donation in the shape of four town lots. Steps are being taken to erect a grammar school forthwith, and the warm thanks of the inhabitants have been accorded to Mr. Treadwell for his generous liberality. In acknowledging the receipt of some apparatus and school requisites from the Educational Depository, Toronto, the intelligent and active teacher, Mr. J. T. McColl, of Kilworth, who had ordered them at his own expense, thus writes: "I have introduced them into my school, and find that they are calculated to supply that which has long been felt to be a desideratum. They are interesting and instructive to juveniles and adults. The children seem highly delighted with the lessons from them. In order to make my school still more a school of knowledge, and consequently more interesting and attractive, I herewith enclose £2 additional for a set of National History Object Lessons." From the *Barrie Herald* we learn that at the recent Examination of Teachers, in the County of Simcoe, the Chairman of the Board, Mr. Gowan, Judge of the County Court, after an excellent address on the duties and responsibilities of the newly licensed teachers, presented two valuable works as prizes to the candidate most proficient in grammar and geography. Mr. Lanon, of Penetanguishene, was the successful competitor. The *Western Progress*, of the 26th February, contains an excellent article upon the erection of good school houses, in connection with the interesting notice of the new school house which has lately been erected in school section No. 7, Nissouri, and West Zorra. From the writer's description of the house and premises, both seem, as it regards internal arrangement, ventilation, and outward attractiveness to realise the character of a model Canadian common school. In conclusion, he remarks: "We call the particular attention of our readers not only to the excellent house and its excellent arrangements, but also to the spacious grounds that have been secured to it. It is the intention of the trustees to surround the whole with a high close board fence, to divide the rear part of it into two separate yards, one for boys and the other for girls, in which suitable buildings will be erected, and to level and plant the ground with trees and shrubs. Fortunately several magnificent trees are already growing on the premises, where they were planted by the hand of nature. They are still young and vigorous, but we trust and pray that, until they become venerable with age, they may be the silent but solemn witnesses of a policy in the successive boards of trustees, as enlightened and liberal as that which has been pursued by the present incumbents; and that under their shade many a youth may sport or repose, who, in after life, shall honour his country by his talents, and bless mankind by a character and course of virtue and benevolence, the foundation of which shall have been laid there." We are happy to observe that vigorous efforts are being made to erect school houses, during the ensuing spring and summer, in the towns of Port Hope, Belleville, Perth, Brantford, &c., &c. May we venture to hope, that the admirable example of the trustees just referred to will not be lost sight of. The *British American*, of the 2nd instant, contains an extended notice of the recent school examination in the town of Woodstock. Much local interest seems to have been excited in the examinations, and in the success of the common schools of the town. The corporation were invited, and the Court House—the scene of the examinations—was crowded on the two evenings devoted to the exercises of the occasion. Col. Whitehead presided. The proceedings were conducted under the superintendence of the Rev. Mr. Ball, to whom George Alexander, Esq., in the course of an interesting address, stated the town was indebted for the origin and arrangement of so pleasing an entertainment. We cannot but urge the example of Woodstock upon other towns in Upper Canada, where the public are too apt to regard the success of the public schools as unimportant. The inhabitants of Bowmanville are about raising means for the establishment of a female academy in their beautiful village. From the report of the trustees in the town of Belleville, published in a local paper, we learn that out of a school population of 1,175, 1,103 pupils attended the free schools during 1851! A most gratifying argument in favour of free schools generally. In consequence of this great increase in the attendance of pupils over former years, the trustees intend to enter into contracts for the erection of three new brick school houses, 60 feet by 36. Steps have also been taken to erect three ward school houses in the town of Brantford, for similar reasons. The annual Examination in Knox's College took place about the middle of this month. They are reported as having been thorough and most satisfactory. About 50 students had been in attendance. Victoria College is reported to be in a very prosperous condition. A

Proprietary School for young ladies has lately been established in Toronto under the patronage of Bishop Strachan. The Municipal Council of Peterboro' and Victoria have acted upon the principle of not appointing any person to the office of local Superintendent of schools who would not be eligible to hold a first class certificate. This at least should be the lowest standard of appointment to such important offices. The Municipal Council of the Counties of York, Ontario, and Peel, are also anxious to fix a high standard for the office of local Superintendent. In the Report of the Educational Committee (concurring in by the Council) great stress is laid on the importance of continuing the circuit, in opposition to the township system of local superintendence. The committee is of opinion, that in order to conduce to the uniform and simultaneous attainment of improvement, which it ought to be the main object of all general systems to promote, it is necessary to render the sphere of duty allotted to the respective superintendents, sufficiently extensive as to require the whole undivided assiduous attention and ability of the persons filling such situations to be devoted to the service. And, in case of small divisions, it is obvious that such salaries as could be afforded for such services, would by no means afford remuneration for the services of the nature contemplated by your committee, and the natural result is and must be, the assumption of the highly responsible situation of school superintendents by individuals, who, whatever may be their ability or zeal in the cause of education, must and naturally will, make the discharge of their duties in that behalf, subordinate to the more imperative demands of their professional or other regular avocations. We have received, by local papers or in writing, accounts of the examinations of the following schools. Want of space alone prevents us from noticing each of them in detail, viz.:—Union Central School, London, U. C., Mr. H. Hunter, Principal; Hastings County Grammar School, Mr. A. Burdon, Principal; the Schools in Sections No. 2, Mosa, teacher not named; No. 1, St. Thomas, Mr. and Mrs. Crane, teachers; No. 4, Toronto Township, Mr. Walsh, teacher; No. 4, York Township, Mr. Diamond, teacher; the school in Mr. Boyd's Settlement, Mr. Warren, teacher—to this school, M. McDonnell, Esq., generously presented two brass mounted globes; the School at Ingersoll, Mr. Izard, teacher.

Normal School Examination.—The examinations of the pupils of this interesting institution were concluded on Wednesday, the 14th inst. A considerable number of strangers were present, and took much interest in the questions upon various subjects of study, some very abstruse and difficult, and in the prompt replies of the pupils, who, although fewer in number than in former years, appeared to be of a better class. The talents and industry of Messrs. Robertson and Hind were amply proved in all the departments. The most interesting examination, perhaps, was that upon the proper method of instruction and of managing schools; the directions for the government of children were truly admirable, and appeared to be firmly impressed on the minds of all the pupils. In agricultural chemistry, we have the authority of Mr. Buckland in saying, the examination was exceedingly good, and history appeared to be a favourite study. We were glad to learn that the history of Canada formed a very important department of this branch. After the conclusion of the examinations, the Rev. Dr. Ryerson, Chief Superintendent of Schools, gave a short sketch of the events of the Session. He said that the Institution had lost its former buildings from the coming of the Government to Toronto—and its new edifice not being finished, there had been a want of accommodation, which had prevented him from endeavouring to increase the attendance of pupils. There was, in consequence a considerable reduction from former years. Ninety-three had applied for admission; thirteen had been refused, and eighty had been entered; but of these thirty-nine had been compelled to leave for various causes, and only forty-one were now present. The system they had formerly pursued of holding two sessions during the year, of five months each, had been abandoned, and one session of nine months introduced. The severe labour during this long time, had, however, a hurtful effect upon health, and nearly twenty pupils were obliged to leave in consequence, (with the intention of returning, however,) and it was now determined to revert to the old plan. Some of the scholars who entered were found mentally incapacitated for the studies, they were recommended to retire. Others were compelled to leave from want of pecuniary means. Doctor Ryerson then proceeded to mention the progress of the pupils in agricultural chemistry, under Mr. H. Y. Hind; in writing under Mr. Stacy; and in drawing under Mr. William Hind, a brother of the former gentleman, who has recently arrived from England, with high testimonials from the Principals of the Government School of Art. A trial of four months had been given to this latter branch, and the proofs of progress which were placed around the walls, were very satisfactory indeed. They were all drawn from actual objects, and were not mere copies. Dr. Ryerson then proceeded to speak of the demand for qualified teachers, in consequence of the strictness of the County Boards of Examination, and the public money not being given to a school taught by any person not passed through their hands. The pupils of the Normal School were very much in demand; salaries of £75 to £100, were often given to them, and

occasionally even more. He also mentioned that the Inspector General had been so much impressed by the excellence of the education imparted, that he had resolved to employ a particular number of the pupils of the Institution in the Customs' department. After some other remarks, Dr. Ryerson called upon his Lordship Chief-Justice Robinson to present the prizes given by the Governor-General to two pupils, the most proficient in Agricultural Chemistry. The fortunate competitors, S. P. Robins, of Northumberland, and Thomas McNaughton, of Durham, were called forward, and his Lordship made a very appropriate address, congratulating them upon their success in their studies, reminding them of the responsibility which their abilities imposed upon them, and of the duties which lay before them. He also referred to the improved condition of the teacher in the Province at present, as compared with former days, and of the advantage which the government grants for education conferred upon the people. The proceedings closed with a benediction by the Rev. John Jennings. The following list contained the number of marks each student obtained in the examination for His Excellency's Prize:—

1. S. P. Robins, of the County of Northumberland, 266, 1st Prize.*
2. Thos. McNaughton, of the County of Durham, 199, 2nd do.
3. Alexander Lester, of the County of Lanark, ... 197.
4. Alexander Martin, of the County of Lennox, .. 192.
5. Catharine Johnston, of the County of York, ... 189.
6. Samuel Ross, of the County of Simcoe, 182.
7. William Tilly, of the County of Simcoe, 173.
8. Benjamin F. Fitch, of the County of Norfolk, .. 163.
9. Elijah Procuiner, of the County of Norfolk, ... 152.
10. David Halliday, of the County of Renfrew, ... 138.
11. E. R. Morden, of the County of Hastings, 126.

—[The Globe.

THE EASTERN PROVINCES.

New School Law for Nova Scotia.—From the *Journal of Education* for Nova Scotia, we learn that a new school law for that province has been submitted to the Legislature, at the instance of the active Superintendent, J. W. Dawson, Esq., embracing the provisions of the present law, with some large and important additions, designed "principally to meet these great deficiencies in our present system—want of training for teachers—small school attendance—insufficient salaries of teachers—and want of system in the management of individual school districts. It is proposed to remedy these evils—1st, by a Provincial Normal School; 2ndly, by the introduction of county assessments to a limited extent; 3rdly, by making the schools free; 4thly, by introducing greater system and order into the appointment and proceedings of trustees of schools; 5thly, by a general and annual inspection of the schools." In the proceedings of the House, we find the following: "Hon. Provincial Secretary rose to introduce a bill for regulating the support of schools, and explained that it had been prepared principally by the Superintendent of Education. Mr. Fraser asked whether the bill was a Government measure. Hon. Provincial Secretary said that we had generally kept education apart from politics, and perhaps it was desirable to continue so, but the Government had no objection to hold themselves responsible for the fate of the bill. Mr. Marshall.—The only objection to that would be the danger of it being lost." (Laughter.)

New School Law for New Brunswick.—From the *Reporter* we learn that an act to regulate the "Parish Schools" of New Brunswick has passed the Legislature. Some of its features and offices are derived from ours. It creates the office of "Chief Superintendent of Schools" as in Upper Canada. Two gentlemen are spoken of as candidates for the office: the Rev. James Porter and M. d'Avray, Esq.

New School Law for Prince Edward Island.—It is a singular and pleasing coincidence to find that each of our sister colonies are now endeavouring, by legislative enactment, to promote the educational interests of its inhabitants. From a recent speech of Sir A. Bannerman, on opening the Parliament of Prince Edward Island, we find that a comprehensive system of education is in contemplation for introduction into that province. His Excellency remarks:—"During my visit in the country, I ascertained with regret, that there is a lamentable want of education, and, until lately, great apathy seems to have prevailed on this most important question; while in this town I am happy to find many benevolent individuals taking a warm interest in the rising generation and the cause of education. It becomes, therefore, the duty of the Legislature to put their shoulders to the wheel, and in addition to the provisions they make for the academy in Charlottetown and district schoolmasters, to take care that the inestimable blessing of education be extended to every corner of this colony. The necessity for a more efficient system is a subject which has for some time occupied the anxious attention of the Government, and a measure will soon be submitted for your consideration, which, I am sure, will meet with from you that impartial deliberation and favour which its great importance demands."

BRITISH AND FOREIGN.

MONTHLY SUMMARY.

A commission has been granted by the new government to inquire into the working of the National Educational System in Ireland..... The Most Rev. Archbishop D. Murray, of Dublin, one of the warmest promoters of National Education and a member of the Irish Board, died recently at his residence, aged 83. His appearance was most venerable and apostolic..... The Rev. Thomas De Vere Coneys, Professor of the Irish language in the Dublin University, died recently at his chambers in Trinity College..... The Rev. Dr. Duncan Mearns, Professor of Divinity in King's College and University, died in Old Aberdeen, in the beginning of March. He was appointed Professor in 1815..... It is understood that the English government have signified to the Court of Rome that no charter will be granted to the 'Catholic University,' and that its degrees will not be recognized by the state. The Queen's Colleges will be maintained..... A bill has been brought into parliament by the Lord Advocate of Scotland, to alter the terms of admission to the *secular chairs* in the Universities of Scotland. The professors, by the provision of the bill, will not be required to subscribe to the Confession of Faith..... The town councils of Cupar and Kirkcaldy have followed the example of Edinburgh in petitioning parliament in favour of the Bill standing for the second reading on Monday, the 29th March, for the removal of tests in the Scotch Universities..... The first "Ragged School" in Great Britain was established in Aberdeen, in 1841, and its utility going so far beyond the expectations of the founders, they have changed the name to "Industrial School." Schools of this sort are now found all over the kingdom..... A scheme has just been propounded for converting the Leamington College, now a proprietary establishment, into a public school, upon a similar principle to those of Harrow, Eton, Rugby, and Winchester. One gentleman has already made a testamentary disposition of £500 in support of the new foundation; and the Lord Bishop of Worcester, has signified his willingness to accept the Visitorship of the new institution.

Maynooth College.—The sixth annual report to her Majesty of the visitors to Maynooth College, has been printed. The visitation was held on the 2nd of December last. The names of the superiors, professors, and students were called over by the senior dean; 13 superiors and professors answered to their names, one professorship having become recently vacant; 516 students were found to be in attendance. The president said he had no complaint to make. The students had attended to their studies with assiduity and success, and their moral conduct was irreproachable. In fact, there had been no deviation from rule or discipline in the college since the last visitation, which called for anything severer than admonition. The oath of allegiance had been taken by the students, and those who had entered since would take the oath at the next quarter sessions. No alteration had been made in the course of studies, nor any material alteration in the college dietary. The new buildings were in an unfinished state for habitation. The grounds had been levelled and drained. The visitors state:—"In conclusion, we consider the general result of our visitation to be satisfactory."

Extract from the Earl of Derby's Speech upon Education.—I believe, and rejoice to believe, that the feelings of the community at large, the feelings of all classes, high and low, rich and poor, have come to this conclusion, that the greater the amount of education which you are able to give, and the more widely you can spread that education throughout the masses of the country, the greater chance there is for the tranquility and happiness and well-being of the nation. But when I use the term "education,"—do not let me be misunderstood; I do not mean by education, the greatest development of the mental faculties, the mere acquisition of temporal knowledge, and mere instruction—useful as no doubt that may be—which may enable the man to improve his condition in life, may give him fresh tastes, and give him also, by this means, the opportunity of gratifying those new tastes and habits. Valuable as such instruction may be, when I speak of education I speak of this, and this only—education involving the culture of the mind, the culture of the soul, and the laying of the basis and the foundation of all knowledge upon a knowledge of the Scriptures and of revealed religion. I desire to look upon all those who are engaged in the work of spreading education, even though they be of a different opinion to that to which I am sincerely attached, rather as fellow-labourers than as rivals, in the warfare against vice and irreligion. I will say nothing which can be offensive to any of those who differ with me in opinion, or who belong to other communities; but I must say that, for the promotion of Education and of religious knowledge, I will rest mainly on the exertions of the clergy of the United Kingdoms.

Extract from Lord John Russell's Speech on Education.—In connection with the foregoing extract from the present Premier's speech on Education in England, it may be interesting to give the views of the ex-

Premier on the same vitally important interest as embodied in his reply to a deputation from the National Public School Association, just before his retirement from power:—I have very long felt that the state of education in this country is not such as we can be proud of; indeed it is such as we ought almost to be ashamed of. The government of Lord Melbourne proposed what they thought might be attempted as an improvement upon the existing system of education, and their proposal was only carried in the House of Commons, in committee of the whole house, by a majority of two. Sir James Graham, under the government of Sir R. Peel, proposed a scheme of education, which was founded upon much consideration, and in which he made large concessions to different objectors, but he was at last obliged to abandon the scheme altogether. My own opinion is that the question is advancing to a solution; but that it is not at present in such a state as to be ripe for the government to undertake it. When there were only Sunday Schools existing in the country for the poorer classes, the British and Foreign School Society attempted a more general system of daily schools. They made it necessary by their scheme that instruction in the Bible should be given. They refused any creed or Catechism, or anything that would exclude those who would agree to the reading of the Bible. That system inevitably and obviously included religious instruction. When the National School Society was set up, they required not only that the Bible should be read, but that instruction should be given in the Liturgy and Catechism of the Church of England. That system of course included religious instruction. There have been a great many schools established by the Wesleyans. They require that the whole of the Bible should be used in those schools. These facts show that in all these different bodies, and I believe I may add among the Congregationalists and other religious bodies as well—the tendency of the societies has been to combine religious with secular instruction, and the funds they have collected have been employed for that purpose. I think that at present the general opinion of the country is for a combination of religious with secular instruction. I have, perhaps, some prejudice on this subject. I have for a very long period belonged to the British and Foreign School Society, and I have very much adopted their views upon this question. That may be a prejudice on my part. Mr. Fox says, and truly, that there is a great resemblance between this scheme and that adopted by the government and enforced in Ireland, and enforced too very successfully; but I think it hardly follows that, though that is the best scheme for Ireland, it would be the best scheme for this country. One thing I may observe, I have seen with great satisfaction in the case of Manchester. I believe that a great majority of those, who, in Manchester, pay the rates, are willing to concur in paying an additional rate for the promotion of education, and I think that a very encouraging circumstance. Men do not generally say they would rather pay more rates than they now pay, and their being willing to pay a rate for education proves the estimation in which education is held, and the great benefits to be derived from it. I wish only further to say that I hope you will go on with your scheme. I must certainly say, I do not share the opinions of those who think there is any hostility between secular and religious instruction. I am convinced that secular instruction, so far from being hostile to religion, will prepare the minds of those so instructed for the reception of religious instruction, will make them better capable of understanding that which the ministers of religion teach them, and that there cannot fail to be in good secular instruction, give it as you may, the inculcation of great truths—love to God, admiration of the creation of the world, love to their neighbours, and those general doctrines, which, though not the Christian religion itself, prepare the minds of those instructed for the reception of the truths of Christianity.

Education in Italy.—118 elementary schools of the first grade for boys, and 25 for girls, are supported by the Sardinian Government; 4,242 schools of a second grade for boys, and 1,259 for girls. There are also 531 male private schools, and 632 for girls. The amount expended in support of these schools exceed \$330,000 a year, and the number of pupils is stated to be 200,000. There are 104 institutions of a higher grade, with 900 teachers and 12,000 pupils. In the Universities there are 3,000 students, for the support of which the Government gives \$124,000 annually, and the same sum to the schools.

University of Athens.—An American gentleman, Mr. H. M. Baird, at present attending this University, in a recent letter to the N. Y. Commercial Advertiser, writes as follows:—The University commenced its sessions nominally in the latter part of September; but the weather has been so warm (warmer than in August in New York) that the course has but lately begun. The lectures are delivered constantly from 8 a.m. to 7 p.m., and generally three will be delivered at the same time. I, however, shall attend but three lectures daily at the utmost. At eight in the morning I attend a lecture by Prof. Venethylus until nine. He translates on two days of the week Demosthenes's oration against Leptines, and on two others Æschylus's play of Agamemnon, into modern Greek. From nine to ten I hear Prof. Asopius on the Odyssey, the Greek poets, &c. Then I

study until eleven, when a student and myself for an hour translate alternately from English to Greek, and vice versa. This is a very instructive exercise. Then I study, either committing to memory words from a vocabulary, translating, or studying the grammar, until five o'clock, when I hear Prof. Manousis, a very good historian, on universal history; and at 6 Prof. Paparagopoulos on Greek history.

General Assembly's Education Scheme.—The importance of this Scheme, we are convinced, will commend it to the liberality of all the friends of the Church of Scotland. There are at present on the Assembly's scheme 119 schools in the Highlands and Islands, attended by about 7,500 children; and 45 schools in various other parts of Scotland, attended by about 4,500 children. In addition to these, there are 13 female Schools, attended by upwards of 700 children. Besides the children who are attending these schools on the week day, there are upwards of 2,000 who attend the Sunday schools taught by the Assembly's teachers; and there are 1,000 children attending the model schools attached to the two normal institutions in Edinburgh and Glasgow; so that in all, nearly 15,000 children were reported as attending during the last half year, and during the whole year fully 16,000 had been receiving instruction at the schools supported by the General Assembly's Education Scheme. At the two normal institutions, for the better training of teachers, during the year ending May last, 50 young men, selected by comparative trial, from all parts of Scotland, had been admitted, and maintained and instructed gratis; and not fewer than 109 others, young men and young women, on payment of very moderate fees, had been receiving instruction at these seminaries to qualify them as teachers in elementary schools.—[Edinburgh Advertiser.]

University of France.—The *Moniteur* of yesterday contained the first of a series of long expected decrees on the University of France. It is through this institution that the Minister of Public Instruction is brought into ultimate communication with the whole rising generation of France, regulates the internal economy of every academy in the country, dictates the branches which shall be studied and the particular authors who shall furnish the text books, and appoints and revokes the professors, rectors and pedagogues. I will give the heads of the decree, the importance of which you will not fail to perceive. The president will hereafter appoint and revoke the members of the superior council of education, the inspectors general, all rectors and professors, the members of the bureau of longitude, of the observatories of Paris and Marseilles, and the administrators of all public libraries. The functionaries of the inferior degree, including the schoolmasters throughout the whole country, will be appointed and revoked by the Minister of Public Instruction. Then follows a decree reconstructing the Council of Public Instruction. Theirs, Cuvier, Dubois, Cousin, Flourens, Dupin and Orfila are dismissed, and others appointed in their places, among whom are MM. Troplong, Baroche, Michel Chevalier, de Paxtalis, Delangle and Uisard. M. Dumas, the chemist, is appointed vice-president. A list of nominations of inspectors-general, is given in the third decree, and their salaries are fixed in the fourth.—[Corr. N. Y. Com. Adv.]

UNITED STATES.

MONTHLY SUMMARY.

The reforms which have been urged in the Government of this ancient College, which belongs to the State of Massachusetts, seem to have resulted in quite a unanimous desire on the part of the Unitarians that their Divinity School should be severed from the College. A memorial to this effect from the President and Fellows of the College was submitted to a Committee of the Board of overseers who have recommended its excision. . . . Samuel Olney, teacher in one of the public schools in North Providence, was fined ten dollars and costs on Saturday, for severely flogging Charles E. Peckham, aged about eleven years. . . . In the Texas House of Representatives a bill, appropriating a million of dollars for the establishment of a system of common schools, out of the five millions to be first received from the United States, and also appropriating for the same purpose a tenth of any money which may hereafter arise from the sale of the public domain, together with the ten per cent. of the annual revenues set apart by the Constitution for the establishment and support of common schools, was passed.

A Free University.—A proposition is on foot in New York to establish an institution at Albany, to be called the National University, the leading features of which, as appears by the bill now before the Legislature for the purpose, are the following: 1st. One pupil from each of the Assembly districts of the State, to be educated at public expense, in the University to be established at Albany, by the foundation of at least fifteen professorships, to be approved by the Regents. The pupils to be not less than sixteen, nor more than twenty-five years of age; to be for the two years next previous residents of the District, and to be paid their actual travelling expenses once a year, not exceeding two cents per mile. 2nd. \$200 annually to be appropriated for each pupil, to wit: \$80 for his tuition and \$120

for his personal support, making \$25,600 annually for two years. The pupil to be also entitled to remain in this University for a further term of two years, without charge for tuition, or expense to the State. 3rd. The State pupils to be selected *according to merit*, after full, open, public competition in their respective districts—for which purpose two examiners are to be annually chosen by the supervisors in each Assembly district, each supervisor voting for one; and the two highest to be elected.

Report of the Superintendent of Common Schools in the State of New York.—We published the annual report of the Hon. Christopher Morgan yesterday, designing to connect some remark and a synopsis of it with the brief summary of the Rev. Dr. Ryerson's report of Common Schools in Upper Canada, but the arrival of the foreign news frustrated the intention. Mr. Morgan's report, however, is important and suggestive enough for a separate article, both for its theme and the mode of treating it. Very ably indeed did the late superintendent of common schools* discharge the onerous and responsible duties of that office, in addition to the other branch of official labour imposed upon him. The cause of education ever found in him a zealous and steadfast friend; and his successor, of whose capabilities for the important post we have a high opinion, nor less of his devotion to its duties, will find a field well prepared to yield a full harvest to reward his labours. Aside from political preferences, Mr. Morgan's retirement will be regretted by all who have watched his earnest devotion and assiduous labour in the cause of common school education, and assuredly all will bear testimony to his unflinching urbanity of intercourse. This much it seemed only just to say of one who, after long and faithful service to the state, has now retired into private life. To the preparation of the report before us, which may be regarded as his closing official act, he appears to have applied himself with much care. After glancing briefly at the difficulties attending the operation of a free school act of 1849, amounting at one time almost to a suspension of the system, the principle of which the people had approved by a large majority, the superintendent describes the present actual condition of the schools. On the 1st day of July, 1851, there was 11,479 school districts within the state, 2792 of which are "joint districts," comprehending portions of two or more towns. Reports have been received from 1,080 of those districts, and with but few exceptions the accounts are eminently gratifying and encouraging. The whole number of children between the ages of five and sixteen, residing in the state on the 31st of December 1850 was 754,047, of whom 726,291 had been under instruction for a shorter or longer period during the year—a *much more pleasing condition of things than that yesterday mentioned as prevalent in the province of Upper Canada.* In addition to these common schools, however, there were 2,277 private schools, having an attendance of 45,840 pupils. The number of schools for coloured children was 105, in which 5305 children were taught during the year. The number of volumes in the district libraries was 1,508,077, being an increase during the year of 57,127. A glance at the annual cost to the people of this state of the gratuitous education of its children, cannot but excite admiration of their patriotism, for that alone could prompt such generosity. The aggregate amount of expenditure for school purposes during the year is one million eight hundred and eighty-four thousand, eight hundred and twenty-six dollars. The expenditure for teachers' salaries was \$1,350,345: for district libraries \$39,104; for school house sites, building school houses and school house repairs and furniture, \$455,176. A state that thus liberally provides a free education for its eight hundred thousand children may expect the blessings of Heaven as well as the benedictions of men, and while such a wise and noble policy is pursued, every succeeding generation will be farther removed from submission to despotism on the one hand, or indulgence in anarchy on the other. Having disposed of these statistics, the superintendent enters upon an earnest discussion of such legislative measures as he deems yet necessary for the perfection of the system by making education absolutely free, without the imposition of any rate bill. He also presses upon the Legislature the restoration of county superintendents. There does not seem to us to be any room for reasonable doubt of the propriety of re-establishing this valuable and efficient class of officers, while in Mr. Morgan's report the most unanswerable arguments are adduced in support of it. We trust the present Legislature will favourably regard the recommendation, and enact a law during the session for the reappointment of county superintendents. But more than this is required in order to perfect the arrangements of the department for procuring and disseminating statistical and general information respecting the common schools, and we most cordially concur in Mr. Morgan's suggestion in favour of separating the office of state superintendent of common schools from that of Secretary of State. Either office will sufficiently engross the attention of one man, and the importance and the labor of each are augmented every year.—[N. Y. Commercial Advertiser.

* The Hon. Henry S. Randall, having been recently elected Secretary of the State of New-York, succeeds Mr. C. Morgan, as State Superintendent of Common Schools, &c. &c.

Education in Iowa.—In Iowa there are five hundred and eighty-one public schools, taught by about the same number of teachers, of whom nearly half are females. In each township of the State, one square mile of land has been set apart to remain forever devoted to the support of public schools. The number of acres thus reserved in the whole State, is about one million, which, with other land devoted to the same purpose, are now worth two and a half millions of dollars, increasing in value at the rate of at least ten per cent every year.

Education in Wisconsin.—By the enactment of a code of Free Common School Laws, Wisconsin has laid the foundation of a system of public schools designed to secure to all her children the means of elementary instruction. For a State which has so recently become the abode of civilized man, this is a good beginning. But this is not all she has done for education. Already she boasts of her State University, for the endowment of which she has made magnificent provision. This institution is located at Madison, the capital of the State, and, though founded but two years since, the number of students in the regular college classes is now between twenty and thirty, while in the grammar and Normal Schools, many others are preparing for an early admission. The Chancellor of the Board of Regents is Rev. John H. Lathrop, LL. D. There are collegiate institutes at Janesville, Racine, Renasha, Milwaukee and Appleton. Beloit College, located in the thriving town of Beloit, is principally endowed by donations from New England States, and its friends entertain the hope that, in time, it may become the "Yale" of the West. The number of students at present is about thirty. In the Preparatory and Normal Departments connected with it, there are eighty students. Thus the foundation of her system has been laid, and her enterprise we doubt not, will, in due time, rear a superstructure which will increase and secure her prosperity and raise her to an enviable rank in the scale of intelligence and civilization.

Literary and Scientific Intelligence.

MONTHLY SUMMARY.

With the view of increasing the efficiency of the English schools of design, new "Department of Practical Art," intended to have the superintendence over the various schools of design, and to be connected with other self-supporting institutions which aim to advance education in art, has recently been organized at the Board of Trade. . . . John Slattery, a young Limerick boy, who has displayed proofs of great artistic talent, and has received the first prize of the Dublin School of Art, is about to be sent to the continent, to pursue his studies further, at the expense of a few gentlemen, who take a kind interest in him. . . . The Americans are about to do honour to the memory of the late J. Fennimore Cooper, the celebrated novelist, by the erection of a statue. . . . The Emperor of Austria has ordered a monument of Metastasia to be erected in Vienna, where the poet passed the greater part of his life, and composed all his works. . . . The fossil remains of an elephant have recently been found in the excavations on Burlington Heights, near Hamilton. . . . The curator of Archbishop Tenison's library has discovered among the books under his care a manuscript copy of St. John's Gospel, in the Ethiopic character. It is supposed to be of the twelfth or thirteenth century, and is said to vary from the received version. . . . It is said that the Duke of Wellington has consigned the publication of his papers to Lord Mahon. . . . Mr. Macaulay has delayed the publication of the third and fourth volumes of his History of England, in consequence of his having obtained some new information relating to King William the Third. . . . The copyright treaty between France and Great Britain, securing works of art and literature to the authors, was signed at Paris, January 18th. . . . The Roman Government have sanctioned the introduction of postage stamps for the prepayment of postage on letters. The stamp is about the size of the English postage stamp, and on it is the representation of the tiara and keys, the badge of papal dignity and power. . . . The cyphers 1 2 3 4 5 6 7 8 9 which we use, began to be used in Europe for the first time in 1240, in the Alphonsine Tables, drawn up by order of Alfonso, son of Ferdinand, King of Castile, who employed for that purpose Isaac Hazan, a Jew, chanter of the Synagogue of Toledo and Aben Ragel, an Arabian. The Arabs derived them from the Indians in 900. The other Orientals had them from the Spaniards in a very short time. The first Greek who had used them is Ilandas, in a work which he dedicated to Michael Paleologus in 1270. Thus the Greeks had them not from the Arabs but from the Latins. The first time that these cyphers were seen in Paris was in 1256, in the Sphere of Jean de Serbois, buried in the Mathurins. . . . Mr. Hamilton, of New York, has written a letter to Kossuth, in which he remarks that "the time has come when certain developments must be made public," and asserts that the famous proclamation of neutrality, issued by Washington, with the farewell address, and most of Washington's important papers, were written by the great American Statesman, Alexander Hamilton. He refers to his father's confidential correspondence to prove what he asserts.

Editorial Notices, &c.

THE PRINCIPLES OF CHEMISTRY,

Illustrated by simple experiments, by Dr. Julius Adolph Stockhardt, translated from the German, by C. H. Peirce, M.D., with an Introduction by E. N. Horsford, Professor of Chemistry, in the University of Cambridge, (Mass.)—Cambridge, JOHN BART LETT; Toronto: DEPOSITORY, EDUCATION OFFICE.

There is no department of knowledge to which the present age is so deeply indebted for its rapid progress in arts, manufactures, and refinement, as to the Science of Chemistry, and yet there is no Science whose general principles are so little understood by the people. The principles of Chemistry, in one form or another, are involved in every operation of domestic economy, or daily industry. The study of the mere elements of Chemistry has, however, no place in our grammar school course, much less in that of our common schools; neither is it found to engage the attention of young persons during those many hours of idleness, which occur in winter evening's, and which might be most profitably and delightfully employed, in acquiring that practical information which the work before us is especially designed to give.

Chemistry has always been considered as a Science which involves the possession of expensive apparatus to enable the student to prosecute his enquiries. Professor Horsford says in his introduction to Dr. Stockhardt's book: "works designed to teach Chemistry by experiment are already in use, both here and abroad, but most of them take for granted the possession of expensive apparatus and a laboratory; scarcely any are designed to bring the practical study of the Science within the means of the more elementary schools;—and none are to be found suited to the winter evening firesides all over the country, where the younger and the more advanced of both sexes would delight in chemical experiments, did not the apparently necessary expense of apparatus forbid them. It is to meet the latter two wants as well as those of a general textbook, that the work of Professor Stockhardt, edited by my late assistant Dr. Peirce, is eminently suited."

In Dr. Stockhardt's principles of Chemistry nearly every statement of the relations which exist between different substances is illustrated by experiment; the most important changes which occur in bodies subjected to chemical forces, are shown by diagrams, and whatever is susceptible of being described by drawings is truthfully and intelligibly delineated. The apparatus required to conduct the most important of the numerous experiments given in the text, are "a few tubes and flasks, a spirit lamp, some corks india rubber and reagent bottles."

Besides inorganic Chemistry, or the Chemistry of inert matter this work comprehends organic Chemistry, or the Chemistry of vegetables and animals. It also includes to a small extent, what may be termed, the Chemistry of manufactures; illustrating the principles of the manufactures of gas, soap, beer, vinegar &c., &c.

The copy of the work before us, (3rd American edition), forms an octavo volume containing 680 pages, printed in large type on good paper, and written in a singularly attractive style—a recommendation which translations do not usually possess.

We seriously commend Dr. Stockhardt's work to all who would desire to obtain, *without an instructor*, an acquaintance with the principles of Chemistry, which may truly be said to be THE science of the day.

LECTURE ON TEACHERS' MORALS AND MANNERS:

Delivered before the American Institute of Instruction, Keene, N. H. By H. R. Oliver. Boston, Ticknor & Co., 1851; Rochester, D.M. Dewey. 12mo., pp. 40.

An experienced teacher, to whom we handed this lecture for examination, has expressed the very great pleasure and satisfaction he experienced in reading it. Its counsels are most valuable, and are given in an agreeable and kindly spirit. The gentle yet marked tone of criticism on certain sins of omission, arising "out of our notions of independence," is very amusing indeed, coming as it does from a New Englander, and addressed to an exclusively American audience. The remarks would have some point addressed even to Anglo Americans.

AN ESSAY ON EDUCATION:

Delivered before the Teachers' Institute, Markham. By James Whyte. 18mo., pp. 23. Toronto, T. H. Bentley, 1852.

One striking peculiarity of this Essay is, that the name of Canada does not occur once in its pages. Every country in Europe, and some of the States in America are referred to, but our own is entirely omitted!

HEAT AND VENTILATION:

General Observations on the Atmosphere and its Abuses, as connected with the common mode of Heating Buildings; together with Practical Suggestions on the subject. 8vo., pp. 59. Rochester, D. M. Dewey, 1852.

Thoroughly impressed with the great importance, and, at the same time, with the great neglect of proper ventilation in public and private buildings, the author discusses his subject *con amore*. The anecdotes and illustrations of the injurious effects of a defective system of ventilation, are most interesting, as well as full of counsel and warning. We have from time to time endeavoured in these pages to impress upon school trustees and others, the absolute necessity—arising from a tendency in youth to contract fatal diseases in close, ill-ventilated school-rooms—of providing especially, in the construction of school-houses, proper facilities for the escape of impure, and the constant admission of pure air. The perusal of this excellent pamphlet could not fail to influence trustees on this point.

ACADIA COLLEGE. THE INAUGURAL ADDRESS:

Delivered by the President; and his Introductory Lecture to the Theological Course; with an Appendix. Halifax, N. S. Bowes and Son, 1851.

We have to thank the Rev. Dr. Cramp, the President of Acadia College, who is well known in Canada as a warm friend to education, for a copy of this pamphlet. The Rev. Dr. seems to have entered upon his duties in Acadia College with much energy and ability. His Inaugural Address, though brief, is practical; while the chief excellence and force of the writer is embodied in the introductory Lecture. Great care and industry are evident in its preparation.

A DICTIONARY OF THE GERMAN AND ENGLISH LANGUAGES:

Abridged from the author's large work for the use of Learners. By G. J. Allen, A. M., Professor of the German Language and Literature in the University of the City of New York. In two parts. I. German and English; II. English and German. 12mo., pp. 549 + 293 = 842. New York, D. Appleton & Co.; Rochester, D.M. Dewey, 1852.

This is a most valuable work. It is compiled from the works of Hilpert, Flugel, Greib, Heyse, and others. It indicates the accentuation of every word, and contains several hundred German synonyms, together with a classification and alphabetical list of the irregular verbs, and a dictionary of German abbreviations. The work is strongly and neatly bound.

THE BOARD OF PUBLIC INSTRUCTION for the United

Counties of YORK, ONTARIO and PEELE, hereby give Notice, that an examination of Candidates to fill the office of COMMON SCHOOL TEACHERS, will take place at the times and places hereinafter mentioned, viz:—

AT THE COURT HOUSE, City of Toronto, on **TUESDAY, May 11th**, at 9 a.m. Revds. John Jennings, H. J. Grasett, John Barclay, John Roof, Dr. Hayes; R. Cathcart, J. McMurrich, and J. B. Boyle, Esquires.

AT DUFFIN'S CREEK, on the same day and hour. Examining Committee: The Rev. Messrs. Waddell, R. H. Thornton; Dr. Foote; W. B. Warren, and E. Annis, Esquires.

AT BRAMPTON, Chinguacousy, on the same day and hour. Examining Committee: The Revds. J. Pringle, H. B. Osler, R. J. Macgeorge, J. Campbell; T. Studdart, Esquire; Dr. Crumie.

AT NEWMARKET, on the same day and hour. Examining Committee: Thomas Nixon, Joseph Hartman, and R. H. Smith, Esquires.

AT RICHMOND HILL, on the same day and hour. Examining Committee: The Revs. J. Dick, J. Boyd; D. Higgins, Amos Wright, and T. Harris, Esquires.

All Teachers presenting themselves for Examination, will be required to select the particular Class in which they propose to pass; and previous to being admitted for Examination, must furnish to the Examining Committee satisfactory proof of good moral character, such proof to consist of the Certificate of the Clergyman whose ministrations the Candidate has attended, and in cases where the party has taught a Common School, the Certificates of the Trustees of said School, and of the Local Superintendent. Each Candidate will be expected to attend the Examination in his own School Circuit, if possible.

It was resolved by the Board, at its last meeting, That there shall be only one Examination of Teachers during the present year, after the one in May, which shall be held on the 21st December.

The Board will meet at the Court House, Toronto, on Tuesday, the first of June, at 2 p. m., for the purpose of receiving the reports of the several Examining Committees, licensing Teachers, and for other Business.

By order of the Board,

JOHN JENNINGS,
CHAIRMAN.

City of Toronto, April 11, 1852.

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All communications to be addressed to Mr. J. GEORGE HODGINS,
Education Office, Toronto.