Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- ☐ Coloured covers/ Couverture de couleur
- ☐ Covers damaged/ Couverture endommagée
- ☐ Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- ☐ Cover title missing/ Le titre de couverture manque
- ☐ Coloured maps/ Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- ☑ Bound with other material/ Relié avec d'autres documents
- ☑ Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- ☐ Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

- ☐ Coloured pages/ Pages de couleur
- ☐ Pages damaged/ Pages endommagées
- ☐ Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- ☑ Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- ☐ Pages detached/ Pages détachées
- ☑ Showthrough/ Transparence
- ☑ Quality of print varies/ Qualité inégale de l'impression
- ☑ Continuous pagination/ Pagination continue
- ☐ Includes index(es)/ Comprend un (des) index

Title on header taken from:/ Le titre de l'en-tête provient:

- ☐ Title page of issue/ Page de titre de la livraison
- ☐ Caption of issue/ Titre de départ de la livraison
- ☐ Masthead/ Générique (périodiques) de la livraison

☐ Additional comments:/ Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
☐	☐	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐

THE

JOURNAL OF EDUCATION

Devoted to Education, Literature, Science, and the Arts.

Volume XX. Quebec, Province of Quebec, September, 1876. No. 9.

TABLE OF CONTENTS.

Professor Huxley on the Teaching of Science in Schools.

A lecture on "The Method of Teaching Sciences in Schools" was delivered on Saturday, the 10th June, by Professor Huxley, in the large Hall of the Watt Institution, Edinburgh, to the members of the Edinburgh branch of the Educational Institute of Scotland. The attendance, as might be expected from the reputation of the lecturer, was very large, and on the platform were Mr. Maurice Paterson, Principal of the Free Church Training College, Professor Hodgson, Dr. Donaldson, Dr. Ogilvie, Dr. James Bryce, Dr. J. Pryde, Dr. Lees, Dr. Graham, Dr. Ross, and a large number of the most distinguished teachers connected with the schools in and around Edinburgh. Mr. Paterson having been voted into the chair, Professor Huxley, who was received with applause, rose, and delivered the following address:—

The system of teaching science, like all wholesome things, had grown out of practical necessities. In almost all cases a science was the outcome of an art. People had begun to feel the necessity of systematising the rules of the art, and for building on them to the furthest extent, and these rules of the art had become what they now called science. This was eminently the case with the science the teaching of which first became properly organised—he meant the science of anatomy. The necessity for a knowledge of that science grew out of medecine. It became needful that men should understand the structure of the human body, not merely as a matter of curiosity, and that they should have such a knowledge as thoroughly as they possessed an acquaintance with the ordinary affairs of life. It was found that, in order to acquire that knowledge of anatomy, they could not trust merely to the oral instruction of the teacher, excellent and useful as that might be. They could not trust to that kind of teaching supplemented by books, and even aided by diagrams, and showing the things upon the lecturer's table. But, in order to have knowledge which could be depended upon, it must be acquired by the person taught going over the matter which he had to know himself, and learning at first hand, so that from that time forth his knowledge would be as good as that possessed by his teacher. Now, in order to acquire such knowledge, dissecting rooms and anatomical laboratories were established, in which the student went to work for himself, verifying all that he had been told, and basing his knowledge of the structure of the human body upon the actual inspection and observation of the facts. He could almost remember the time when the teaching of anatomy was in a very imperfect state, but in the present day no anatomical school would be thought worthy of the name if it did not, in addition to the teaching of the professor and the handbook, provide the means by wich the student could work practically. As other sciences had grown and acquired a practical importance, and had become more or less the foundation of professions where exact knowledge became of great practical value, they had found themselves constrained to follow the example set in the case of anatomy. Chemists were among the first to do so. No one would now dream of teaching chemistry as taught in every university in this kingdom within the memory of living man, without any suggestion of practical instruction. What had taken place in chemistry had taken place in physics, natural philosophy, botany, physiology, in short, in every branch of

science—he was now speaking simply of the physical science that was seriously cultivated. In France and Germany, especially in the latter country, the laboratories for practical teaching had now attained marvellous magnitude and astonishing completeness of equipment. Even in this country, slow as we are, great changes had been carried out. Within the last few years both of our great Universities had established laboratories for practical teaching, and it was being done where it could be carried out in the Universities of Scotland. Our great University of Edinburg, one of the most important educational institutions of the three kingdoms, in regard to science was simply not doing all she might do in this matter for lack of material aids. The University buildings were absolutely inadequate for the purpose, and the sooner Scotchmen understood this to be the case the better it would be, because the teaching of the University at present was seriously impeded for the want of the practical appliances to which he referred. He did not mean to say, that although such complete appliances were absolutely necessary to the effectual teaching of the sciences, anything that fell short of this might not be exceedingly useful, but the value of the teaching would be diminished exactly in proportion as the practical element was omitted. Because, what did scientific teaching mean? It was not merely instruction. It was in a great measure that. It was the acquainting of the mind with the laws which governed the phenomena of nature, and he needed not to enlarge upon the well-worn topic of the value of such knowledge. But there was about scientific teaching a value as an educational discipline of a particular kind. The first element of value of scientific teaching arose from the fact of its cultivating the power of observation, which he thought was the most difficult to cultivate, or at any rate the least cultivated, and at the same time probably the most valuable of the faculties that man possessed. It was astonishing how difficult a thing it was to say exactly what was to be observed in anything, and to state what one had observed without putting in anything more or leaving out something. He should say that upon the whole it was the very rarest of all human qualifications, and the lack of it was at the bottom of half the miseries of human life. Any of them who had lived thirty years in the world could not have failed to see that half the evils of society, the malice, hatred, and uncharitableness of this world, arose not exactly from bad intention; He did not think human nature was altogether of so malicious a character as is was represented. But it was because people allowed their statements of actual occurences to contain hypotheses in addition to the objective matter of fact. He would not give illustrations; they were to be found in daily experience. He knew of no educational discipline—he would not speak of moral discipline—which was of so great value in relation to this apparently fundamental difficulty of human nature as scientific discipline, for the source of all our mistakes in science was to be found in this unlucky habit of not being able to see what was before us, and putting into our statements more than was really in the facts. But, besides knowing, besides being able to use the mind, there were other faculties, powers, tendencies, and instincts in man's nature. He could imagine a person with endless knowledge and with great facility and dexterity in using it, yet being a man devoid of culture in the highest sense of the word. Mere knowledge was no very great thing, and mere dexterity in using it was no very great thing, looked at in relation to a man's own nature. What he meant by culture was something higher than this: it meant the disposition of the mind, a certain understanding of one's relations to that which is not of one's self, a certain confidence in the order of things; and no other study could give this particular form and disposition of the mind which alone deserved the name of culture so well as scientific training. They might say that he submitted this because it was his especial business and training; and very likely that might weigh very much with him, but yet that could not be the whole explanation of the case. He had seen the announcement a day or two previously of the death of the greatest woman of our times—certainly the person of the largest ability, so far as his knowledge went, and eminently an artist, who had exhibited in very different shapes the highest powers of the genius of the artist—he referred to George Sand. She died at the age of seventy, and in the year 1861 she published, when she was in the ripeness and maturity of her powers, one of the most remarkable of her books. In that work occured a passage in which she gave her view of the function of science in this world in relation to the highest culture. She said—"The man who reflects knows well that he is weak, that he is always liable to exhaust himself by an excess of the powers with which he is endowed. It is in forgetting his own miseries that he finds a renewal or preservation of his faculties, but this salutary forgetfulness is to be found neither in idleness nor in intoxication of the emotions; it is to be found only in the study of the great book of the universe. You will see that as you grow older." As he had said, all these results of scientific training could only be expected of perfect and complete scientific training; but he would again repeat that he did not wish to throw a shadow of reflection upon less amounts of scientific training. A great deal of information might be got by listening to lectures and by an intelligent reading of books, which was endlessly better than ignorance. He would now approach the question of science in relation to schools. Having formed an ideal, and knowing what was essential to the sound teaching of science, they had to consider how far was it desirable to introduce this teaching into the schools, how far was it possible to do it, and, if possible, what were the conditions and limitations under which it could be done. With respect to the advisableness of it, he did not think, looking at the question in the abstract, he needed to enlarge upon that. He did not think anybody could be found to seriously oppose the proposition that a boy or girl should not leave school absolutely unable to understand the commonest phenomena of nature, absolutely unable to comprehend the commonest complaints of our social life. Again, he did not think any one would seriously argue that it was not advisable, if possible, that young people should get something of that sort of discipline they had been talking of. It was not well that they should go through their whole educational course without understanding that there was some authority in the world beyond books and teachers—that there were such things as facts in the world, natural facts; and that it was possible in very simple and easy ways to ascertain things for themselves. He could not but think that if young people were constantly disciplined and trained in that habit of accurate observation, learning to mistrust their immediate impressions and warned against mixing hypotheses with observation of fact, they would be better prepared to do their duty in life when they left school, than they were now. There was an infinite curiosity in man, one of those faculties that he shared with his poorer relations in the lower world—a source of sorrow and one of his highest pleasures. Whether they approved or not of it, it was perfectly certain that it existed, and the mind of a child especially was given by nature to speculate and form hypotheses of everything that came within its reach; and if they did not give it the means to form a right, it would certainly form a wrong hypothesis,

such as they called superstitions and the like. It appeared to him that it was eminently desirable, as far as might be, that the speculative notions and inquiries of children should be satisfied, and that their speculative notions should be sound. Suppose that, in walking along the beautiful sands at Portobello, one of the children they were instructing picked up a shell and asked what that was. He supposed no one would have any doubt or difficulty in replying that the shell belonged to a sea animal, that the creature which had made it was dead, and that the shell had been thrown up on the beach. That was what the most unscientific mind could not be ignorant of. So far the child's curiosity was satisfied in a proper manner. But if the child further asked—How did all the sand come there? He was not sure that it might always get so satisfactory an answer to that question; but let them suppose that the person possessed some common sense, and replied that the sand had come by the washing and wearing of the coast, and had been thrown up by the tide. In this way the child got a remote notion of natural operations. But suppose from this object they turned round and looked at that beautiful view, which he was never tired of gazing at—Arthur Seat, Salisbury Crags, Calton Hill, and so forth, and the child being inquisitive asked how this came to be. The question might be answered in three ways—first, Don't ask foolish questions—second, I don't know—and third, God made it. Each of these answers, in the sense in which the child understood the thing, was a distinct harm to that child. The first answer was a mortal harm, because it tended to repress the spirit of inquiry and desire for instruction. The second answer was harmful, because it might give the child to suppose that this was so difficult a question that a person of the intelligence and authority of its teacher might not be expected to be able to answer it; and the third answer was harmful, because it led the child to suppose that Arthur Seat and Salisbury Crags and all the rest of it came into existence by some agency different from that by which the beach was produced and by which the shell was cast upon the beach. A teacher should have such instruction in elementary geology as to be able to say with perfect confidence—he did not mean to explain to the child in technical geological language the exact relation these masses of rock had to the different periods of the world's history—but that he might say that these rocks were records of very singular operations and agencies which once took place there. By active volcanoes, and flows of lava, and action of water, and various natural agencies, these had been sculptured and shaped into their present order. There could be no difficulty in getting ideas of that kind into a child's head, and in that way its knowledge was increased, its justifiable curiosity was satisfied, and, more important than that, the idea of the unity of the operations of nature, and the uniformity as a whole of all such operations, had struck yet another root into the child's mind. He ventured to take it as desirable that science should be taught in schools; and now came the question whether it was possible. What they called possibilities and impossibilities had frequently a relation to the condition of things that existed, ignoring the question whether these conditions could be altered or not. He knew it to be lamentably true that at present the school time of young people was very full—in fact, he thought it was very considerably overburdened. The world at present was going examination mad. He was glad to get that response from practical teachers. They were gradually ceasing to care for learning, the one thing they did care for was to pass examinations. But there was no reason why that should not be altered. There was no divine law which had settled that subjects of education should be what they were at present. If he were to discuss the value of these subjects as compared with science he would enter a very large field—one he had touched already elsewhere, and on which his notions were entirely unchanged. He did not care to discuss it at present, because, having occasion to watch the course of events very carefully during the last thirty years, he had begun to see in what direction the great tidal currents, if he might so say, of modern civilisation were setting. There was a time when he was very anxious about the introduction of scientific training into the schools, but he had ceased to be so. The tide had set thay way, it was flowing as fast as it could flow, and if those who opposed themselves to it did not get out of the way they would be swept out. Granting the advisableness and possibility of getting scientific instruction, they might proceed to consider what, out of the enormous diversity of things that would be included under that head, would do better to be selected, and what method of teaching, or rather what course of teaching, would do better to be adopted. Here he thought they were quite safe in following the guidance of nature and the guidance of history. If they paid any attention to the history of science, they would see that its progress had been perfectly well marked. People had begun by acquiring an exact knowledge of the common phenomena of things which did not require much previous knowledge, and they had gone on making that knowledge more accurate, and gradually building up science out of common observation. They could not draw the boundary, and say where common observation ended and where science began. The one was simply a perfection of the other. He took it that they must follow the course of history in attempting to teach science to the young. They must begin with the common and familiar properties of things, by degrees enlarge upon these as the faculties of the children became more comprehensible, and build upon that foundation the system of knowledge they called science. He did not know that any foundation of science could be laid better than that which might be based upon a glass of water. If it were his business to teach a class of young people, he would be disposed to begin with such a common thing as that, and exemplify by the help of it the nature of water and the contrast of the properties of the fluid with the solid. He thought he would be disposed to give a rough explanation why some things floated in it, and other things sank in it. He would be inclined to show the different states of that water, and compare it with other bodies in their different states. Then he would go on to water in nature, and there would be no difficulty whatever in explaining in an elementary way and sufficient for the purpose the nature of rivers, rain, snow, hail, the difference of ocean as compared with fresh water, and the great mechanical operations of water. He would speak of the power of water as a transferring agent, and the manner in which it carried away material and laid the foundation for new land—in fact, from that foundation, without having recourse to a single technical term or abstract idea, they might build up not only elementary conceptions of physics and chemistry, such as child's mind was prepared to accept, but build up very competent notions of elementary physical geography. As a child advanced in knowledge of arithmetic and powers of reasoning, then they might make the knowledge a little more exact, and extend it to a wider area, but he would accompany that with demonstrations of the facts so far as practicable, making the student observe the phenomena of nature for himself. In that way not only would he gain a large amount of instruction, but there would be cultivated the power of observation and reasoning, and, what was more impor-

tant, he would gain confidence in the use of the reasoning powers of his mind. After having acquired some good notions of elementary physics and chemistry, his impression was that the next best study was human physiology, be meant in an elementary shape. That might appear at first sight to be rather an anomalous proposition, but yet, when they came to think of it, they would find that it was not so. Of course, to be a physiologist in the highest sense of the word, to be a perfectly technical physiologist, was quite another matter. While it was so difficult to understand advanced physiology, it was not difficult to comprehend elementary physiology—and for one reason among the rest, that the subject of their inquiries was their own bodies, and they could always have it at hand. They could demonstrate and feel in themselves the living action going on. This could be done, especially if it were supplemented by practical instruction. He did not want in that place to touch upon the subject of sundry unhappy controversies, but he did not wish them to go away with the notion that he was altogether a lunatic. It had been said, and repeated for years, that he had recommended that the children in schools who were learning elementary physiology should be encouraged to see and to perform the very difficult and complex experiments by which the higher truths of physiology were demonstrated. He could speak with great charity about the person who had said this, because it could only arise from the grossest ignorance. He meant that no one who knew anything about the matter could tell a falsehood of this kind. It was too gross and too patent. If those who had circulated a statement of that kind understood what physiological experimenting meant, and what sort of appliances, knowledge, and dexterity were needed, the whole thing would be seen to be simply childish and absurd. The practical instruction which he had recommended was that sort of anatomical knowledge which could be gained without the slightest difficulty by the ordinary materials of the butcher's shop. By a sheep's heart, for the purpose of elementary physiology, they could explain the structure of the human heart, and so on with the other organs. He did not say that would do for the professed student of human physiology, but to give elementary instruction the materials were amply sufficient. He had thought it right to take this occasion of explaining exactly what he meant in that elementary book of his which had been so terribly travestied. He did not suppose any of them would have believed the contrary, but he hoped all would take it now upon his authority that that was exactly what he meant. The extent to which they would carry this teaching would depend upon the time which could be given to it. If the time was given to the teaching of science that was allowed to the teaching of classics—he did not say whether that was desirable or not—there was not the smallest doubt that the boy of eighteen could be turned out of school a man of science in the same sense that the boy of eighteen was turned out a scholar. He supposed that for many years to come they would only get a fractional part of the time which was devoted to teaching in general, but he would be quite content with not more than an hour a day, or about a sixth part of the time given to school instruction. If their instruction in science was to have a greater value than information afforded, to have the value of discipline, less time would not do. In conclusion, the Professor urged the emphatic necessity of the teacher of science knowing thoroughly what he taught, and referred to the deficiencies in this respect which were at present exhibited by the teachers in most of our schools.

On the motion of Professor Hodgson, a hearty vote of thanks was awarded to Professors Huxley; a similar compliment being paid to the Chairman, and to Professor Hodgson himself, by whose arrangement the lecture had been delivered.—*The Educational Times.*

The Cultivation of the Memory.

DAVID B. SCOTT.

Is there not danger that, in the multitude of radical advisers on the paramount question of school-training, the faculty of memory may be quite thrust aside? The daily and weekly press, secular as well as religious, seldom lose an opportunity of thrusting a lance into what is called the most mischievous error of the schools, "parroting." The educational press have occasionally joined in this outcry, without considering that there might possibly be danger in yielding the whole point involved, without earnest protest. For the point covers a great deal more than appears at first sight, and its abandonment may involve that of the training of one of the most useful faculties we possess.

Surely, it may safely enough be granted that the mere learning of verbal definitions, rules, selections of poetry and prose, pages of history, and the one parrot-like repetition of the same to the teacher, under the idea that this is schooling, is the most absurd folly. Any such idea of the teacher's business, embracing this and little or nothing besides, ought to show the utter unfitness of the person holding it to fill any position as a teacher of youth. But it may safely be questioned whether there are many persons of any experience in the business of teaching who hold such an idea, and base their practice upon it. At least the number can not be so large that it should occasion fear sufficient to warrant the attacks we so often read against the prevailing method of instruction. Within the limits of cities, towns, and well-organized school-districts, it is becoming more and more difficult to find any considerable quantity of school-room work that lies open to such an objection. The whole tendency has been quite otherwise for a number of years.

The complaints that have found utterance through the public press are explainable enough, on another theory than "parroting." The lessons to be learned at home are in many cases most excessive in amount. They are given out often by pages, but are not intended to be committed to memory word for word. Unfortunately sufficient care is not always taken by the teacher to show what portions of the lesson are to be committed to memory, what are to be read carefully, and what may be either read hurriedly or left for class-room instruction on the morrow. If this be not done, the pupil has no other way left open to him when he prepares his lesson, than to memorize everything. This he seldom accomplishes. It is often hard, dry, technical, and unintelligible. The mere mass frightens him, and unless he has uncommon natural powers, he abandons it unlearned with disgust. Such work presses still more heavily upon girls than on boys, because the young feminine mind seems to commit to memory the school lesson more readily than boys; at least it adheres to its work with a finer conscientiousness than does the average young masculine mind. So it happens that when the hours fly by and the task is unfinished, the girl's pride quite breaks down, and the whole sympathy of the family is evoked by her tears. It is therefore not wonderful if the parental and maternal mind, losing all patience, inveighs strongly against memory lessons, and expresses itself when it can, through the avenues of the press, with more force than courtesy, finding a convenient term in the word "parroting."

The teachers have not been slow to perceive the popular complaint; at least, not so slow as the pungent newspaper articles indicate. The supply is, sooner or later, regulated by the demand, in teaching as well as in other callings, and so it has come to pass that in an anxiety to rectify this subject of complaint, we find a disposition to put the cultivation of the memory in the back ground, and to elevate to its place the training of the reasoning powers. In that remarkable treatise on Education, the "Emile" of Rousseau, this great educational reformer, in his anxiety to free the minds of children from the pedantic training of the times, opens the flood-gates of his passionate soul in appeals to his readers to free the children from compulsory training of the faculties. It was the revolt of a powerfully sympathetic mind against what is believed to be the ignorant oppression of the schools. But, as a revolt, it carried the point quite too far, although unquestionably it served an admirable purpose in releasing educational methods from the choking ligatures of the age. It is the same tendency we notice in the disciples of Rousseau—the German school—to exaggerate the method, or system of methods, which for the time was uppermost in their minds. And precisely because such a reaction must be vigorous in its attempt to overthrow the deeply-rooted wrong methods which have provoked the reaction, arises the danger that the attack will be pushed much too far.

Through just such an anxiety to escape from the evil of excessive use, or abuse, of the memory in the public schools we have been brought face to face with the danger that we may be led to undervalue that faculty in our new methods in the school-room. There is something very fascinating in the cry, "Cultivate the reasoning powers of the children," and something quite as powerful on the teacher's mind in the ridicule and caricature of the memory-work. Unquestionably the child is, to some extent, a reasoning being, and, as such, there can be no doubt as to the property of our recognizing this in our educational methods. But is equally true that the reasoning faculty is very slow of development. The discipline of the intellectual faculties, from the simple habit of correct observation onward to the complex habit of weighing and testing the value of evidence, which, more or less, becomes the great business of human intellect, is a well-nigh never-ending process of development. Nor can there be any doubt that this training should be begun at a very early day, both in school and at home. The reasons for right conduct, in particular, in connection with some personal experience, are reasons which a child soon apprehends. The reasons for certain operations in science are much more difficult of apprehension, and must be proceeded with more carefully. But whether in conduct or in school studies, are not attempts by way of excessive explanation or talk, very likely to deceive the instructor in his endeavors to develop the reasoning powers? Scarcely an idea is more delusive than that our constant preachments to children, however plain they may appear to ourselves, must appear equally so them; and look at is as we may, spontaneity in thinking is in great danger of being destroyed by excessive anxiety on the part of the teacher to impress his modes of thinking and reasoning on the pupil under twelve or thirteen years of age. How is this spontaneity to expand itself? Not by the child slipping its mind into the shell that the instructor or teacher has prepared for it.

There are a great many points in the morals or conduct, as well as in school studies, that we can not wait to reason into a young child. These must be accepted through the force of authority and as settled truths. There are other cases where the pupil must be left to puzzle them out for himself, or wait for the dawning of light that sooner or later comes to even the most moderately endowed intellect. These we trust to the operation of well ascertained mental processes. But the great majority of young instructors, in particular, are in a hurry for results, and think that by constant talk their children will become reasoning, thinking beings. In this way they fancy that in some unexplained way they will be able to meet this new demand for the cultivation of the reasoning faculties and the abolishment of "parroting."

These remarks are only incidental to the object of this short article, a plea for the cultivation of the memory in our schools. Youth is the time for the exercise of this faculty. If it be neglected then, it becomes more difficult to perfect it as the years advance. Besides, the proper training of the memory is our main dependence for correctly-learned lessons. If the use of text books is to be continued—and there is no prospect in the immediate future that they will be abandoned—what reliance is to be placed on our home work if the memory be neglected? It will be said that it is only the sense of the author that the teacher wants; he will be satisfied with the pupil's own language. But when is the young child to obtain its vocabulary? From clever children of twelve years, or from others of fourteen, there is some prospect of obtaining an approach to a connected, intelligent answer in their own language; but most teachers know that it is frightfully wearisome work to place dependence on that. The truth is that very few children have a vocobulary of any extent from which they can draw, and one of the first things that we ought to do is to assist them in enlarging it. For this there can be no better plan than committing to memory, with the utmost exactness, well-explained, simple language of a good writer. We say well-explained, because it is utterly wrong to require young children to learn what they do not understand. Possibly it was the doing of this that partly created the revolt in public opinion, expressing itself in that forcible word "parroting." A thoughtful teacher, on speaking of this very matter with the writer, remarked, that if he had the entire training of twelve children uninterruptedly, from seven years of age to twelve or thirteen years, he would undertake to furnish them with such a vocabulary and faculty of expression as would surprise me. He then added that he would do it by requiring them to commit to memory, at first, short pieces of pleasing poetry at least once a week. As the months flew on he would increase the amount He would review these from time to time. When they learned to write, they should write these as exercises. As the years passed, prose pieces would be mingled with poetical extracts, and in the last two years, perhaps more, he would exercise them in turning the poetry into prose, and in expressing the prose in other prose of their own. Three things would thus be gained, the habit of exact memory, fullness of vocabulary, with facility of expression, and a well-stored collection of short, beautiful, and serviceable extracts for future life. There can be no question but that such a process of training would also powerfully influence the thinking of children. Just as constant contact with good society influences the manners of youth, so would the habit of memorizing beautiful thoughts in time affect the mind, and weave itself in with all the processes of thought.

There can be no doubt that an exact memory is an immense blessing. The power of producing at pleasure not only the thought but its very form and texture just as it left the writer, every word marshaled in it proper place, instinct with life and vigor and beauty—what would not one give for this in certain moods? But the words have floated away, the form has gone: we are

like one who wearily seeks to restore the matchless but shattered ruins, or to carve anew the limbs of the mutilated Grecian torso. With poetry this is still more true than prose. With the latter, it is possible to make some approach to the thought, although we may not be able to repeat the exact words. Much may still be saved. But with poetry, how different! Try it with some extract from Shakespeare, from Byron, from Wordsworth, from Tennyson, or from our own renowned poets. The mind wanders, if there be a break; to confusion follows vexation, and what would otherwise be an unpurchasable pleasure becomes an unsatisfactory as well as demoralizing regret over our own feeble memory. These attempts are, perhaps, in the seclusion of our own thoughts. Of what pleasure are we bereft when we wish to recall, for the enjoyment of our friend, the passages that gave us exquisite satisfaction? In society, as well as before the public, to quote incorrectly is to involve us in ridicule. It is not only a mistake, it is a serious blunder. Society did not ask the quotation. If it accept it, it will only take it as a perfect thing, or not at all. The same is true with quotations from Scripture. Woe betide the poor wight who, among Bible-taught people, substitutes a word for the old King James' translation.

This admirable faculty of exact memory teaches other things besides society and solitude. It enters into business, and powerfully affects the advanced student: it gives definiteness to our general thinking and a consciousness of power, a firm tread to the paths over which the mind travels. Its more immediate training in the school will be further considered when we come to speak of the proper use of text-books, in another paper.

—*Schermerhorn's Monthly.*

The Art of Translation.

Translation is likely to occupy an important place in the classical scholarship of the future. The larger becomes the proportion of educated men who are imperfectly acquainted with the Latin and Greek languages, the more pressing will be the obligation on those who make them their special study to render the substance and the form of the great masterpieces of antiquity intelligible and appreciable to all persons of ordinary culture. But if the execution of this work is to be in any measure adequate to the laborious preparation which, exact and finished scholarship implies, it must be attended with a clearer conception of the end and nature of translation than the fallacies on this subject which appear to have sprung up under the shadow of distinguished names, both at Oxford and Cambridge, but which we cannot but regard as mere idols of the philological cave, overlaying the simple and obvious principles which should guide all translation, and not bearing the light when taken out of the peculiar atmosphere of the lecture-room. One of these is the assumption that freedom and laxity of translation are convertible terms; that a translation must necessarily be "slipshod" if it is free, Or, to adopt the converse mode of statement, it is assumed that a liberal and a faithful translation are the same thing. But surely a faithful rendering may yet happen to be free, and a very literal translation may be slipshod in point of style. Every good translator will aim at being faithful, and will avoid being loose; but to aim at being literal is only less mistaken than to aim at being free, at least in the sense in which freedom is opposed to literalness. For there is one kind of freedom which the translator, like every artist, must prize amongst his highest gifts—the freedom which is inseparable from perfection.

This fallacy has been reinforced by a false analogy from the art of painting. It is taken for granted that the work of translating an ancient writing is like that of copying a picture, and that hence, as far as possible, not only the meaning of every line, but the actual curves and sinuosities of every line, are to be preserved. But the two operations are not *in pari materiâ*. The impressions of colour and form are not so different in different ages and countries but that a similar effect may be produced by giving line for line and shade for shade. But it is otherwise with the varieties of human speech, which have a subtle and intricate correspondence with successive or simultaneous modes of thought. A line-for-line or word-for-word rendering may produce a wholly different effect from that which the original produced on those who first read or heard it, either because their ears were habituated to a greater fulness of sound, or their minds to less regularly constructed periods, or to a greater prominence of logical forms, or to a more perceptible blending of poetry with prose. It is another lesson that the analogy of the art of painting may really teach us—the lesson of preserving the *tout ensemble*, the general harmony of colouring, and, above all, the spirit and motive of the original. This is the higher and worthier aim, at once high and noble, which is indeed common to the translator and to the copier of a picture, and the attainment of which distinguishes the mechanical copyist from the real artist. The one sees only the lines and pigments of the work before him, the other sees in imagination the natural or ideal forms and hues which the old painter saw.

Take, for example, the well-known passage of the *Phædrus*, which, notwithstanding adverse criticism, in the revised edition of Dr. Jowett's *Plato* almost word for word as in the first:—

"Soc. But let me ask you, friend, have we not reached the plane-tree to which you were conducting us?

"PHÆDRUS. Yes; here is the tree.

"Soc. Yes, indeed, and a fair and shady resting-place, full of summer sounds and scents. There is the lofty and spreading plane-tree, and the agnus-castus high and clustering, in the fullest blossom and the greatest fragrance; and the stream which flows beneath the plane-tree is deliciously cold to the feet. Judging from ornaments and images, this must be a spot sacred to Achelous and the Nymphs; moreover, there is a sweet breeze, and the grasshoppers chirrup; and the greatest charm of all is the grass like a pillow gently sloping to the head. My dear Phædrus, you have been an admirable guide."

The aim of the translator here is to reproduce the atmosphere of the original, radiant with life and redolent of joy and youth, so that it may be felt in all its freshness by English readers. The image, so familiar to the Greek, but unfamiliar and therefore cold and formal to the English reader, of a chorus accompanied by the flute, is felt to interfere with this effect of freshness and pure life and light, and is therefore suppressed. On the other hand, the "summery sound" of the breeze is felt to be so important for the main object, that this epithet is, by a license which grammarians recognize as Hypallage, transferred from its immediate context and placed at the beginning of the sentence; only, instead of "summery," which has a false poetic ring, the simpler expression "summer sounds" is used, so as not to divert the attention from the single image which is being presented to any particular feature, of from the meaning to the words. But this and the like processes, which are really indications of extreme care, are apt to be condemned as negligences by scholars who are not aware of the amount of "combing and curling" which has been bestowed on

the work, and whose canons of judgment have more in common with Sheridan's *Critic* or the "correct diction" of Protagoras than with the spirit of the *Phædrus*. Plato has himself anticipated this manner of dealing with his ideas in the conclusion of the *Cratylus*, when he says that no man of sense will like to put himself or the education of his mind in the power of names. On which Mr. Jowett very properly remarks, that in this and other passages Plato shows that he is as completely emancipated from the influence of "Idols of the tribe" as Bacon himself. We think it fortunate for the English readers of Plato that Mr. Jowett has not fallen under the influence of the idols of the school.

In revising the passage above quoted for his second edition, the translator has made only one change. This is the omission of the word "here," which in the former version represented *metaêzu tone logone*. "But here let me ask you" has been altered to "But let me ask you." This change, trifling as it may seem, suggests a general consideration of some importance with reference to this whole subject.

One of the chief differences between the ancient and modern languages, and notably between Greek and English, is in the use of the particles, by which in Greek the relation of sentences and the parts of sentences to one another is often made explicit, when in English this relation is left to be understood. And this is perhaps the crowning test of excellence in English writing. A good writer knows how, without loading his style with conjunctions and qualifying words, to suggest the particular shade of expression and emphasis which he intends to convey. This skill has been rarely attained by translators of the classics. Either they neglect the particles and make a bald disjointed piece of work, or more frequently they show the exactness of their scholarship by preserving a minuteness of articulation which is intolerable to the English reader. It requires no ordinary nicety and discrimination of judgment to strike the proper balance here. Of the two failings, we must confess our preference for that which elevates the whole above the parts to that in which the feeling of the whole is obscured or lost through the pedantically minute rendering of the parts.

Mr. Browning's brilliant transcripts from Euripides are too often marred by his close adherence to what may be called (tropically, of course) "the doctrine of the enclitic *de*." In one of the finest parts of his rendering of the Hercules Furens, the ode in which the Chorus "tell us plaintively of how many evils old age is the cause," there occur these words :—

> "Never be mine the preference
> Of an Asian empire's wealth, nor *yet*
> Of a house all gold, to youth, to youth
> That's beauty, whatever the gods dispense!
> Whether in wealth we joy, or fret
> Paupers—of all God's gifts most beautiful, *in truth!*"

The italics are ours. What has "in truth" to do at the climax and turning-point of a lyric rhythm? When has Mr. Browning been wont to give us such "sarcenet surety" in his verse? There is only one explanation of the phenomenon. The translator was anxious that we should not lose his interpretation of an ambiguous particle. In a cursor yre-perusal (*goun?*) of his charming version of the *Alcestis*, we were ungracious enough to note forty-eight of these bits of "pepper-gingerbread" disturbing the melodious flow of Balaustion's recital. Our list includes fourteen "at leasts," with a proportionate sprinkling of "indeeds," "assuredlys," "undoubtedlys," "certainlys," and superfluous "thens." Here is a quantitative test which may enable some New Browning Society (when other keys to Euripides have been lost) to distinguish with certainty of cleavage between the translation and the beautiful, though too ingenious, commentary.

Another difference of idiom consists in the order of words and clauses. And here also the idea of translation has been hampered with a formal and empirical rule, which is not without a partial value, and has the sanction of no less a name than that of the late Professor Conington. This rule is, that the order of the words in the original should be as far as possible preserved. If by this it is meant that the most emphatic words shall be in the most emphatic places, and that connexion and association of ideas should be carefully observed, such a precept is not only just, but obvious. But, if taken literally, it is certainly not applicable to the process of translating from Greek into English. For in Greek the first word is the most emphatic; in English the last. The Greeks put relative before antecedent, predicate before subject, the consequence before the cause. The figure known to grammarians as *usteron proteron* (making first in thought what is last in nature) is far more frequently used by Greek than by English writers. The translator should take account of these and the like differences, not in any technical or formal spirit, but through the same instinctive sense of the relation existing between the idioms of both languages, which is his guide throughout his difficult and delicate task.

The pedantic tendencies which we are calling in question are apt to be summed up in the convenient formula, which is also not without a certain scholastic significance and value, that a good translation is the best commentary. By this it is perhaps meant that the best translator sums up the labours of previous interpreters, and adds someting more. But it is apt to be understood in another sense, which tends to cramp and warp the execution. For it is inferred that the translator has a duty not only to the English reader, but to the schoolboy or college student, whom he is to inform as to the significance of the Greek particles, on the force of a gnomic aorist, on the construction of a noun with a neuter or passive verb. But he who engages in this work is sure to be hampered and confused if he has any other end in view than that of conveying to persons unacquainted with the original as a nearly as possible the same impression, not only in detail, but in the contour and proportions of the whole fabric, which he believes to have been conveyed by the original to the mind of a Greek.

The foregoing remarks imply an assertion which to many, schoolmasters and others, is sure to sound like heresy—namely, that the object of translation "is not merely to render the worlds of one language into the words of another, but to produce an impression similar, or nearly similar, to that of the original on the mind of the reader." This ought not to be a paradox to any one who has ever been seriously engaged in translating from an ancient language. He must know that, while in the more level passages the language may be often turned "as clay to the seal," and the desired effect may be produced by an almost literal version, yet in those very places which most try his skill he finds an imperative need of a kind of alchemy by which the precious metal, when taken out of its first mould, may be fused and cast anew. He is above all things bent on giving to his work an appropriate *form*. And while he is rightly jealous both of losing anything essential and of the introduction of an alloy, he will hardly care to be bound by canons according to which his best work is that which costs him the least trouble. Why is Hope's Iliad, with all its spirit, an inadequate work? Not because it is not literal, but

because it fails to represent some of the essential qualities of the original. Pope could no more give the impression of Homer than he could have written *Erechtheus*. He had not steeped himself in Greek, nor had he the command of the English harmonies which are most kindred to early poetry. His theory of the nature of the Iliad was more detective than his theory of translation.

We are come to the edge of questions which are well worthy of separate treatment, such as that of the difference between translations from ancient and modern languages, from poetry and from prose, that of prose or verse translations of poetry, and, above all, the still vexed question of exotic rhythms. But the discussion of these would lead us too far afield, and may be reserved for some other time.—*Saturday Review.*

The Planisphere.

A rather novel method of instruction in geography has just been invented in Paris, and promises, if properly developed, to supersede all ancient experiments, and especially that most antiquated amongst them, known as "The Use of the Globes." The new device is of an eminently practical kind, and adapted especially to the wants of those who find a difficulty in the more elementary branches of the study. It is now to be seen in full working order in the city of its origin, and no doubt the Parisian children, young and old, will hasten to visit it as soon as its merits have been duly advertised by an appreciative press. Hitherto its charms have been modestly concealed whilst the elaborate apparatus necessary for its application has been in process of preparation; but it seems that now everything is ready, and an intelligent public is invited to come and drink at the new fountain of knowledge.

In the scientific neighbourhood of the Montsouris Observatory may be observed a huge signboard inscribed with the startling announcement, "Georama universal—the Planisphere, a geographical garden above 4000 square yards in extent, representing in relief the surface of the earth." Entering the gates, the visitor will find himself in a good-sized open space, differing but little, at the first glance, from an ordinary wall flower garden. A more attentive inspection of the ground beneath his feet will show him that he has embarked on a voyage of discovery which, in extent and completeness, if not in its actual perils, eclipses utterly the exploits of Captain Cook and of every one his successors. He will find himself walking at leisure, with fifty-league boots on his feet, through the several countries of the world, treading at each step upon a different province, or at any rate upon a different parish or commune.

A very short stride will carry him across the English Channel, the Straits of Gibraltar, or the Dardanelles. The Rhine, or even the Mississippi, may be taken in his stride; and if he is at all a good jumper, he will be able to clear Lake Huron or the Caspian at a bound. The ascent of Mont Blanc or the passage of the Himalayas will not delay him many seconds, or make him even out of breath; and, in fine, a few minutes' brisk walking will bring him fairly "from China to Peru." It is a thousand pities that this magic garden—worthy of a place in the "Arabian Nights"—was not discovered in time to serve as a recreation-ground for Sandford and Merton—those patterns of hopeful pupils amongst our forefathers. But it is not at all too late for the pedagogues and governesses of Paris and elsewhere to escort their charges to this paradise of practical education. They will be seen, no doubt, conducting a happy class of wondering disciples through the geographical garden, lecturing them with a new zest upon the population, history, and constitutional government, but more particularly upon the area and products of the various countries, and discoursing according to the veritable precepts and practice of the peripatetic philosophers. Maps and atlases will become only a supplementary means of imparting instruction, and may even be removed entirely from the list of studies which torment the most juvenile of students.

It is needless to insist upon the advantages of so intensely realistic a style of instruction. The stupidest dunce will hardly forget the islands of the Ægean Sea after having been compelled to pick his way among them as stepping-stones between Europe and Asia, nor persist in ignorance as to the whereabouts of Salamis and being ordered to balance himself on one foot for ten minutes or so upon the narrow territory of the mimic island. As for girls schools and girls' schoolmistresses, the garden will be an institution to be blessed by the latter as loudly as it is cursed by the former. Already the out-door exercise of the unlucky lady scholars is cut down to the most meagre limits compatible with tolerable health, the now miserable hour of recreation which was deemed advisable will possibly be spent in the Georama instead of in the Park or in the Bois. A refinement of cruelty on the part of the mistress would be to sentence a stupid or contumacious pupil to a march through the African Sahara, or promenade amongst the bleak deserts of Central Asia; while, on the other hand, good girls might be rewarded with a luxurious seat amidst the groves of Cyprus or in the valleys of Cashmere.—*The Globe.*

Who shall Teach Modern Languages?

So much as to *how* the modern languages may be taught. A more important as well as a more difficult question is, *who shall teach them?* This question, though it may be a delicate one, can not in good faith be avoided. Some prevailing opinions on this subject need, I think, careful revision.

Nativity alone does not, of course, constitute qualification. How far is it essentially even a *recommendation?*

Unquestionably the first requisite in a teacher of any language is a competent knowledge of the language to be taught. The second, which is hardly less important, is a competent knowledge of *English*. By this knowledge we mean here not merely the ability to read, write, and speak English, however perfectly, but, more than that, the power and the habit of using English as the *natural speech*, even in the actual presence of the foreign idiom and through all the trials of the class-room. That is to say, the teacher must be in full sympathy always with the modes of thought and expression which are native to the people. He must occupy *his* standpoint of idiom; he must comprhend *his* difficulties, and be able to explain them from *his* point of view, in relation to *his* linguistic consciousness. This he can do, if a foreigner, only so far as he identifies himself absolutely with the English language, making it for the time being his *mother-tongue* and his own a *foreign language*. With those not born to English speech this is a rare accomplishment, which requires not only great familiarity with English, but that discipline which gives the power to complete abstraction and intellectual self-control; for no relation is more intimate or more powerful than that which holds the natural mind under the dominion of the native idiom, a relation the more intimate and the more powerful because so profoundly unconscious. The difficulty with

many foreign teachers—Let me say, for example, German teachers of German, however accomplished as Germans—is often that they can not divest themselves of *instinct* that German is the mother-tongue and English the foreign language to be taught. For them German is *subjective*, English is *objective*. Thus they will unconsciously regard German from the German not from the English stand point, or, tempted from the one to the other, they will lose themselves and mislead their pupils in the confusion of a double point of view. So in the text-books of such authors one might sometimes imagine they were meant to teach English rather than German. Explanations will be directed, unconsciously, to difficulties in the English idiom, while the difficulties in the German will pass unnoticed and unexplained; and at other times the *form* of the statement will show that the writer has the German *in* his mind and the English *outside* of it. Such books reverse for us the natural order of thought and of acquisition. Such a teacher in a class-room is a foreigner to his pupils, and they are foreigners to him. There can be no full intellectual sympathy. He can not understand their difficulties, nor explain them as they need to have them explained; nor can he realize, often, why they do not see what is so clear, because so wholly instinctive, to him. Such books and such teachings not only increase the difficulty of learning, but breed confusion of method and of thought. Let us insist that French and German, as much as Latin and Greek, are for us foreign languages, and must be taught as such, with objective reference to English as the only subjective to the mother-tongue. Confessing this, we shall perhaps admit the consequence that birth implies only an added caution in the selection of our text-books and of our teachers. Nay, rather, if I could, I would have the German to teach French and the Frenchman to teach German; for then at least each will be teaching a language which he has himself *learned* by objective study, and *by experience* he will understand the wants of those who must learn it likewise. This experience will compensate for much of mere practical skill in the language. But, rather than either, I would have both French and German taught by our own American scholars, so far as these can be found with requisite qualification. Such scholars are becoming rapidly more numerous in our country. It is, we believe, only through their influence that the department of modern languages can be elevated to its proper rank and dignity in the course of higher education. I state this conviction because I believe it due to my subject, not without the profoundest respect for those French or German authors and teachers who constitute the numerous and brillant exceptions.—(*From September "Home and School."*)

The Ideal and the Real.

BY MARY H. LEONARD.

One man lives prose, and another lives poetry. One sees the bald, stiff, hard actualities of his life and circumstances; the other invests these with the drapery of his own imaginations, and changes them into forms of beauty. One watches the clouds to determine whether the weather will favor his plans; the other sees in them snow-capped mountains and silver palaces, and in their changing forms finds constant and ever varying delight. One hears the call of duty, and without flinching accepts the task she gives. The other looks at his life-work in relations which emancipate it from drudgery and materialism; he sees in it something more than its use, something which is a symbol of its higher and more perfect meaning.

Shall the practical man call the imaginative man an idle dreamer? What is the ideal, and is it of necessity opposed to the real? It is the often-repeated question, "what is substance, and what is shadow?" It is like that other question which goes echoing down the centuries without an answer: "What is truth?"

Is a diamond any less a diamond when it is placed in a golden setting, than when it was encrusted in the rough stone? Is not a cloud a cloud still when the setting sun gilds it with its glory? Would a painter better interpret nature, if he should refuse to see the lights and shadows which fleck the landscape, and paint only the bare forms of hills and clouds and trees? Do we make the truth any more true, when we refuse to see the divine light shining round about it, and persist in looking at it only in the blaze and glare of this every day world? The ideal, in its best sense, is *the truth looked at lovingly.*

It is true that there may be such a thing as idle dreaming. But because the imagination *may* consume itself in wild, wasteful combustion, there is no reason why we should allow this God-given power to dwindle into deadness. It need not be like the wind harp, sounding idly to every wind that blows. It may be the master-musician which creates and sends down to the ages sweet and soul-inspiring harmonies. This power, rightly used, shows us the possible and the true in its most beautiful form. It is wrong only when it makes us find our sole delight in that which is impossible and untrue. It is right to idealize, if we will not forget the realities of life. A modern writer has said, "Every life has its actual blanks which the ideal must fill up, or which else remain bare and profitless forever."

We walk on the seashore. Here is a little brown ball, dry and mixed with sand. It is not beautiful. A wave breaks over it and sweeps it away. We look again. The sand has been washed out; the fibres have straightened and expanded themselves, and the brown, unsightly thing is transformed into the most delicate of sea-mosses. Here is a pebble, dull, and scratched, and coarse. Put it in the edge of the water; its colors brighten, and what seemed like scratches, become delicate, white-lined tracery. Is the second view less true than the first? Nay, it is the more true, for it reveals to us the beauty that already existed. So the translucent medium of our own idealizations need not distort and render false; it may only brighten and vivify.

There is no work which can be more ennobled and beautified by ideal conception than the teacher's. There is no work which, wanting this, can become more irksome, painful drudgery. A young teacher comes to her work with earnestness and zeal, with a willingness to labor, and with faith and hope strong; but with powers all untried, and no real knowledge of the difficulties before her. She is met at the threshold by those who have been longer in the work with the remark, "Your enthusiasm will not last long. You will soon find that there isn't much poetry in teaching school." She enters the school room. The children are not like the children in her dreams of teaching. They seem bent on doing mischief, and every energy of her mind and body is called into action to control them. With a determination to succeed, she at last brings the school to order, and experience slowly teaches the best way of meeting difficulties that may arise; but alas, with the added power of experience, comes a lessening of interest, and at last, it may be, a positive dislike for the work. Then the teacher confesses "They were right. There

is no poetry in teaching. It is only vexations, grinding toil." Many a teacher of five years experience is ready to say, "I feel as though I were in a treadmill. I go round and round in my daily routine, seeing no goal before me, and no variety by the way. I would do anything to escape from the drudgery of my work." School officers sometimes have been even led to say, "Let us have young teachers in our schools. We consider want of experience a less evil than want of earnestness and love for the work." While the services of the doctor, the lawer, the minister, and the artisan are more valued as years go by, age and experience do not always in the same ratio enhance the value of a teacher's work. Happy is the teacher, who, when she has gained the power that maturity and experience give, retains in her heart still the freshness of feeling and interest in the work with which she began.

And is this unattainable? What if, O fellow teachers, we could throw a higher meaning into our work, and interweave within it the poetry of high and pure motive! What if we should oftener stop in correcting the errors of conduct and recitation, to look at the good in our pupils and in our surroundings; just as the gardener must sometime leave the work of weeding his garden beds to look at the beauty of a flower, or to search for buds among leaves! But this is not enough. As the artist places his easel where the light falls clearly and softly upon the picture, what if we, too, should look at our work in its best relations, and so judge it more truly, because more kindly?

Sometimes we meet with such a teacher, looking at her scholars in the light, not of what they actually are, but of what they possibly may become. To her, restless Harry is not merely a troublesome little boy, planning a piece of mischief. She thinks of him transformed into a noble man, with energies controlled and directed, who is prompt and active in every good work. The group of idle, laughing girls in the corner are mothers and teachers, showing the same patience toward their little ones that must now be exercised for them. Wilful, stubborn Joseph, with his obstinacy changed to firmness, may become a strong leader in some needed reform. So the teacher weaves around her pupils her personal interest and hopeful imaginings for the future, and thus, by a kind of divine alchemy, changes much of the dross to gold. She knows that God has placed in each human soul a wonderful possibility, and this knowledge becomes to her an inspiration. Others may see only the quiet worker in an uninteresting routine of labor; but the teacher herself, looking at her work with a divine light shining round about it, sees it rise before her in fair and graceful proportions, and with a halo round its head.

The ideal has a double office to do for us. No one can succeed in any undertaking who does not strive to realize an ideal. It is true that we can never attain our noblest ideal, for it goes before us and leads us on; and ever as it helps us attain to new heights, we yet must look up and see it above us still, for it is a winged creature, of heaven and not of earth, and its nature is to soar.

But it is also the duty, as well as the highest privilege, of all earth's workers, to some extent to idealize the real. Since pure ideal conceptions tend to enlarge and animate and glorify the life, we may form and gather them, and cluster them around the daily associations, in the spirit of the Eastern proverb, "Hold wide the skirts of thy mantle when the heavens rain gold."—(*New England Journal of Education.*)

OFFICIAL NOTICES.

Ministry of Public Instruction.

SCHOOL COMMISSIONERS.

County of Argenteuil, Harrington No. 1.—Messrs. John Shaw and Dugald McTavish, continued in office. This appointment should have been made in one thousand eight hundred and seventy four, and the term of office shall be considered to have commenced from then. There has been no election in either case.

County of Arthabaska, Chester-Nord.—Mr. Damase Dumas, *vice* Mr. Joseph Dubois, and Mr. Arsène Lafond, *vice* Mr. Alexis Gosselin, there having been no regular election.

County of Arthabaska, Saint Louis de Blanford.—Messrs. François Hyacinthe Germain and Isaïe Côté, continued in office, seeing that the election was presided over by the parish priest.

County of Chambly, Town of Longueuil.—Mr. Louis Vincent, *vice* Mr. A. P. Jodoin, and Mr. Bruno Normandin, *vice* Mr. A. Cherrier, both of whom have left the municipality and have not been replaced by election.

County of Charlevoix, Petite Rivière.—Mr. Hippolyte Lavoie, *vice* Mr. Auguste Racine, as the election was irregular.

County of Two Mountains, Saint-Placide.—Messrs. Ephrem Baby, Esquire, and Benoît Lalonde, farmer, *vice* Messrs. Zéphirin Raymond and Pierre Vaillancourt going out of office.

County of Gaspé, Glande Arbour.—Messrs. François-Xavier Thibault, Antoine Laflamme, Prudent Cloutier, Joseph Côté and François Lapointe, junior. New Municipality.

County of Hochelaga, Village of Rivière Saint-Pierre.—Messrs. John Crawford, Henri Headley, Edouard H. Goff, Louis Lesage and Joseph Lanouette, as the municipality was not erected in time to hold the elections.

County of Hochelaga, Saint-Gabriel.—The Revd. M. J. J. Salmon, Messrs. Edward McKeown, Adolphe Levesque, Edward Fennings, and Hormisdas Bourque, as the municipality was not erected in time to hold the elections.

County of Jacques-Cartier, Village Sainte-Anne.—Messrs. Jules Tremblay and Antoine Gauthier, continued in office, as the election was irregular.

County of Jacques-Cartier, Notre-Dame de Grâces.—Messrs. Félix Prudhomme, senior, Pierre Lemieux, Daniel Jérémie Décarie, Honory Mills and Gervais Décarie. New Municipality.

County of Kamouraska, Rivière-Ouelle.—Maurice Bossé, Esquire, continued in office, as the election was presided over by the parish priest.

County of Saint Hyacinthe, La Présentation.—Messrs. François Bergeron and Eusèbe Chabot, *vice* Messrs. Narcisse Provost and André Jacques, as the election was irregular.

County of Saint-Maurice, Saint-Etienne.—Mr. Thomas Desaulniers, *vice* Mr. Raphael Corriveau, who left the municipality and has not been replaced by any election.

BOARD OF EXAMINERS.

QUEBEC (catholic).

MODEL SCHOOL, 1st *class* (F): Misses M. Flore Catellier, M. Ludivine Lebel, M. Domitilde Pâquet and M. Lénora Paquet. 2d *class* (F): Misses M. Aurélie Bergeron, M. Anne Philomène Dionne, M. Rosalie Gagnon, M. Odile Garneau, M. Odile Gingras, M. Célina Justine Lisotte and M. Victoria Ouellet.

ELEMENTARY SCHOOL, 1st *class* (F): Misses M. Célina Chamberland, M. Léa Demers, M. Eloïse Demers, M. Dion, M. Suzanne Anna Fournier, M. Vénérende Gosselin, Félicité Perpétue Grégoire, M. Zoé Labrecque, M. Thérèse Oladie Lebourdais and M. Elise Emélie Lemay. 2d *class* (F and E): Misses M. Emélie Vermette; (F): M. Louise Beaudet, M. Caroline Bégin, M. Vitaline Boissonneau, Clarisse Victorine Boisvert, Philomène Bolduc, M. Eulalie Bouchard, M. Zélire Boucher, M. Démerise Bouffard, M. Hélène Bougie, M. Catherine Boulet, M. Léocadie Bussière, M. Séraphine Carrier, M. Pamela Courcy, M. Sara Evéline Demers, M. Félicité Denis, M. Euphémie Dussault, M. Philomène Dutil, Marie Dutil, Philomène Forgues, M. Célina Garon, M. Rose Jacques, M. Elise Laverdière, M. Elmire Aimée Lebel, M. Hénédine Morin, M. Hedwidge Ouellet, M. Delvina Ouellet, Virginie Paradis, M. Aurélie Eloïse Pelletier, M. Célina Adèle Pelletier, M. Louise Pinelle dit Lafrance, M. Pétronille Roy, M. Césarie Plante, Marguerite

Louise Savary and Ocalcia Cordélia Sévigny dit Lafleur; (E): Jane Agnes Cameron and M. Helen Morissey.
Quebec, 1st August 1876.

N. LACASSE, secretary.

MONTREAL (protestant).

ACADEMY, 1st *class* (E and F): Mr. B B. Banker.
ELEMENTARY SCHOOL, 1st *class* (E): Misses Jennie Barr, Eliza G. Bradford, Katie Buchan, Jane Burke, Mary Burke, Julia E. Davis, Jessie Doig, Angel A. Dowler, Isabella Fraser, Maggie S. Hunter, Annie M. Leggatt, Annie McEdward, Isabella McGregor, Susanna McGregor, Jemima A. Martin, Maggie Nicholl, Janet Stewart, Elizabeth Todd, Florence Wade; (E and F): Anrie E. Matthieu and Fanny Matthieu. 2d *class* (E): Misses Annie Black, Margaret Blair, Elizabeth Cook, Mary McWilliams, Martha A. Martin and Mr. Wm. Johnston.
Montreal, 29th August 1876.

T. A. GIBSON, secretary.

AYLMER.

ELEMENTARY SCHOOL, 1st *class* (E and F): Miss Joséphine Cantin.

JOHN WOODS, secretary.

POETRY.

The Conscience and Future Judgment.

I sat alone with my conscience,
In a place where time had ceased,
And we talked of my former living
In the land where the years increased.
And I felt I should have to answer,
The question it put to me,
And to face the answer and question
Throughtout an eternity.
The ghosts of forgotten actions
Came floating before my sight,
And things that I thought were dead things
Were alive with a terrible might.
And the vision of all my past life
Was an awful thing to face—
Alone with my conscience sitting
In that solemnly silent place.
And I thought of a far-away warning
Of a sorrow that was to be mine,
In a land that then was the future,
But now is the present time.
And I thought of my former thinking
On the judgment day to be,
But sitting alone with my conscience
Seemed enough judgment for me.
And I wondered if there was a future,
To this land beyond the grave.
But no one gave me an answer
And no one came to save.
Then I felt that future was present,
And that the present will never go by.
For it was but the thought of my past life
Grown into eternity.
Then I woke from my timely dreaming,
And the vision passed away,
And I knew the far-away warning
Was a warning of yesterday,—
And I pray that I may not forget it,
In this land before the grave,
That I may not cry in the future,
And no one come to save.
And so I have learnt a lesson
Which I ought to have known before.
And which, though I learn it dreaming
I hope to forget no more.
So I sit alone with my conscience
In the place where the years increase,
And I try to remember the future
In the land where the time will cease.
And I know of the future judgment,
How dreadful so'er it be,
That to sit alone with my conscience
Will be judgment enough for me.

Spectator.

THE JOURNAL OF EDUCATION.

QUEBEC, SEPTEMBER, 1876.

Visit of the Japanese Centennial Commissioners to the Department of Public Instruction.

On the 13th Instant we were surprised and delighted by the visit of a distinguished party of Japanese, the representatives of their nation at the Centennial Exhibition, who had arrived at Quebec in the course of a tour of observation through Canada. His Worship the Mayor of the City, Mr. Owen Murphy, accompanied and introduced them. The party consisted of Mr. Fujimaro Tanaka, Madam Tanaka, and three Japanese gentlemen of their suite: Mr. Tanaka occupies, in his own country, high official positions, amongst which is that of Vice-Minister of Education of the Empire of Japan; and the chief object of the visit to our Department was to ascertain particulars concerning the system of public education established in the Province of Quebec. More especially with respect to Primary or Common School Education, and to the organization sustained by the State for the education of the people at large, his inquiries and remarks betokened an enlightened curiosity and interest. Although, doubtless, every member of the party of gentlemen, as well as the accomplished lady, possesses a knowledge of the English and French languages, the conversation with Mr. Tanaka was carried on in Japanese and English, one of the other Japanese officials acting as interpreter.

In the course of the interview, many interesting facts concerning education in Japan transpired—to some of which, for the information of the readers of the Journal, we shall advert in another column. Mr. Tanaka had brought with him a number of printed official documents illustrative of the state of education in his own country, intending to present them to the Superintendent. One of these documents is a voluminous report on education in Japan for the year 1873, a work of about 600 pages, beautifully printed on fine Japanese paper, and in the Japanese characters. The use of several other languages, as well the Japanese, occurs in the other documents, especially that of English. French, and German.

As it was impossible to convey, in a comparatively brief interview, a full knowledge of all the particulars sought to be ascertained, copies of most of our printed official documents, relating to Education in this Province, were tendered to Mr. Tanaka, who accepted them with thanks, declaring that while he and his friends were much pleased by their visit to the Department, he was especially gratified by the opportunities that would hereafter be afforded, by means of those documents, of perfecting his knowledge of our Educational System, and and of profiting, on his return to his own country, by such hints and improvements as he might be enabled to derive from a careful study of their contents. It was proposed that the party should visit and inspect several of the Educational institutions in the city; but as the Mayor suggested the impossibility of doing this, in the limited time at their disposal, without sacrificing all opportunity of taking a glance at some other objects of interest in and near Quebec, it was agreed to pay brief visits to only two of the most numerously attended primary schools, one for boys, the other for girls. To these the Mayor and an official of the Department escorted our Japanese visitors, who expressed themselves as being much gratified with what they saw of the interior arrangements and efficiency of those institutions.

Prior to their departure from the city on the 14th instant, Mr. Tanaka and suite called again at the Department for the purpose of expressing their acknowledgements on account of the attention they had received, and their good wishes; and we have since been informed that the party left with very agreeable impressions concerning the ancient capital of the Province and its people.

Education in Japan.

The territory of the Empire of Japan, consisting of the large island of *Niphon*, three other considerable and several smaller islands, is less than that of the Province of Quebec, the difference in area being upwards of 36,000 square miles. Its population, however is nearly 30 times as large, for it numbers over 35,000,000.

Until within a few years, the Japanese Government pursued a policy of rigid exclusion with respect to other nations. The present Emperor, or Mikado, officially *Styled* "His Imperial Majesty, the Tenno of Japan," who was the second son of his predecessor on the throne, is a man of 26 years of age, and he succeeded his father in consequence of a revolution which occurred in the year 1868. Since that epoch in the history of the country, the former policy, in respect of intercourse with foreigners, has been greatly changed, and progress in every direction has been the order of the day. As was mentioned in our Journal for last May, the reigning Mikado has abandoned, the habits of seclusion practised by his ancestors—appearing in public, giving audiences to the members of the diplomatic corps employed in the Japanese Government service, dressing, eating, riding, and acting generally like an European Sovereign. Inspired by the example, if not by the express directions of the Mikadot, he leading men have exerted themselves in promoting reformatory movements throughout the Empire. In consequence, railways and telegraph lines have been constructed, machine shops and factories established with modern improvements and appliances, and foreigners, English, American, French, German, Swiss and Dutch, encouraged by the Government to come in and assist in the introduction of scientific methods of Agriculture and in the advancement of other important objects of national concern. Amongst these should be mentioned *Education*, to the promotion of which very great attention has been devoted. Formerly, although there had been schools in Japan for a long period anterior to the accession of the present ruler, the instruction imparted was of the most imperfect character, with slight benefit only to the upper classes of the people, leaving in a state of hopeless ignorance the population generally, including the cultivators of the soil, artisans merchants and women. But within a few years of the advent of the reigning Mikado this state of things has been revolutionized. Systems of education, elementary, intermediate on academical, collegiate and university, have been established, and a general school law adopted, by which attendance school is made compulsory for every child over 6 years of age, and to continue until at least the rudiments of learning, reading, writing, and arishmetic, shall have been acquired.

The aim of the Japanese school law is to leave none, male or female, throughout the Empire, in ignorance. The supreme authority in educational matters is a Department of Education, presided over by a minister of state, and exercising a continuous supervision through the agency of subordinate bodies and responsible officials, stationed in all the Provinces, and Districts, into which the country is divided and subdivided.

From the information derived from the party of Japanese representatives who recently paid a visit to Quebec, as related in another column, we learn that the whole territory of the Empire is divided into 7 grand divisions, styled Collegiate Districts, each having a central office in a considerable city, in charge of an official who corresponds with, and is responsible to, the Department of Education. In these grand divisions are comprised 80 Provinces, whose head men are the Seigneurs and constitute, when called together, the great Council of the Japanese Empire, as well as 3 great and populous cities; also, each grand division is subdivided into 32 Academical Districts, of which each must have with in its limits one *Middle, High School*, or *Academy*. By the school law every Academical District is further subdivided into about 200 *School Districts*, whose localities must be regulated by the comparative density of the population, their ability to pay school taxes, and by other conditions, such as convenience of access to schoolhouses. There are upwards of 50,000 such School-Districts in the Empire. In these arrangements, so far as the Academical and the School Districts are concerned, our readers will perceive a resemblance to our system of division of the country into School Municipalities and the School Districts into which these are subdivided according to the requirements of our people.

In respect of administration, every Academical District has about a dozen *Superintendents*, appointed by the local authorities, having control over schools to the number of from 20 to 30 each, and paid from local taxes, the amount of which, when deficient for the purpose, is supplemented from the public treasury of the Empire. The Superintendents report periodically to the chief of the Bureau of the Grand Division in which his District is situated, who transmits all particulars, statistics, &c., to the Department of Education, whence they are issued in a digested form once a year, printed and published for the information of the Japanese public.

The schools are classified under 3 general heads, termed respectively Schools for *Great Learning*, for *Middle Learning*, and for *Small Learning*, and they embrace institutions analogous to various kinds known to ourselves—*Infant Schools* (for children less than 6 years of age), *Charity Schools* (for the indiguent), *Private Schools* (taught by persons having licenses), *Village Schools*, *Schools for Imbeciles*, and *Evening Schools* (for those, who, from necessity, cannot attend in the day time).

Exclusively of the schools established for particular objects, such as Infant Schools, Schools for imbeciles, &c., those of the class for *Small Learning*, which constitute the true Public or Common Schools, open to all, and at which attendance is compulsory in cases where education is not being received elsewhere, are organized to as to be of two *grades*, the *Lower* and the *Upper* grade. The Lower Grade is for children from 5 to 9 years old, and includes tuition in the first rudiments of knowledge. In the Upper Grade Primary Schools, the age for Scholars is from 10 to 13, and these are taught the outlines of *History, Geometry, Botany*, &c.

Next come the *Secondary* or *Schools for Middle Learning*, attended by youth between the ages of 14 and 18 or 19, also having courses of instruction of Lower and Higher Grades. The Lower Grade, for boys and girls from 14 to 16 years old, embrace the subjects of *Japanese and Foreign Languages, Geography and History, the Elements of Mathematics and the Natural Science, Political Economy* (Constitution and Statistics of Japan) *Music*, &c. For youths, from 16 to 18 or 19 years old, there are the Upper Grade Secondary Schools and Subjects, the latter comprising more extended courses of those already mentioned.

Included in the class of Secondary Schools, or Schools for Middle Learning, are private academies whose

teachers must be licensed, and schools for special objects, as *Agricultural Academies*, *Academies for Languages*, for those intended to enter commercial business, and which must be established in cities, and the *Industrial Academies*, for the special training of those who are to devote themselves to branches of industry and the industrial arts.

In the class of *Schools for Great Learning*, or Colleges proper, are to be taught the branches considered to be necessary in preparation for professional life, as *Logic*, *Literature*, *Law*, *Medecine*.

Lastly the system embraces *Normal Schools*, for the training of teachers.

In all classes of Schools fees must be paid for every scholar, even for those attending the Charity Schools for which provision is made by means of local taxation and grants of money from the public funds. Teachers for the primary schools must be selected from those who are more than 20 years of age, irrespective of sex, and who possess the qualification of having graduated from an Academy or Normal School. Teachers in Academies must be over 25 years of age, and possess a College Certificate; while the instructors employed in Colleges must have had the title of *Professor* formally conferred upon them.

We have still to notice one or two characteristic features of the Japanese System of Education. Special provision is made from the public revenues for the education of poor scholars of decided ability, but what is thus advanced for their benefit is expected to be afterwards refunded.

Another noteworthy feature is the sending abroad, at the public expense, selected students for definite periods of time. These must be graduates of Colleges, possessing reliable certificates of good moral character, and appointed after passing examination. Their number is limited to 30 of the 1st class, who go abroad for 3 years, and 150 of the 2nd class, for 5 years. Subject to the control and directions of the central, or Education Department of the Empire, and to the supervision of the resident Japanese Ministers or Consuls, their time is to be spent in such countries as are considered most likely to afford them the opportunities of improvement and of advancement in learning, in the sciences and arts, by means of which, after their return to their native land, they may become useful instruments for promoting the progress and welfare of the Japanese people. The United States of America, chiefly, but also Great Britain, France, and Germany, as well as Italy and Switzerland, are, as might be expected, the countries resorted to. Such a practice as that now under consideration, in the case of such a people as the Japanese,—observant, imitative, ingenious and industrious—cannot fail to produe results which will influence most powerfully the national character and fortunes. From being the most exclusive community on the face of the globe, surpassing, in this respect, even their neighbours the Chinese, already their daily increasing intercourse with foreigners, and the continual influx of knowledge of what is going on abroad in the way of progress amongst other nations, imported by those students, who are mostly employed, on their return, as public teachers, the masses of the Japanese population are now steadily and rapidly becoming indoctrinated with ideas and aspirations of a far more elevated nature than could possibly have ever prevailed among them so long as they remained isolated and ignorant. Not only as relates to the sciences and the useful arts cultivated by other nations, but also in respect of social life, civil freedom, and government; great changes are taking place gradually in consequence of the feature in their system of Education now adverted to; and, judging from the information imparted by our late Japanese visitors, not many years will elapse before representative government, founded on the models of Great Britain and her more advanced colonies, will take the place of the ancient system of despotism by which, heretofore, the Japanese have been ruled.

We have not space in this article, for inserting the official statistics relative to the state and progress of Education in Japan, which would shew conclusively the correctness of the foregoing statements and remarks. Reserving these therefore, for a future issue of our Journal, we shall only add here that the last published returns, with copies of which, in English, we have been favoured by our late visitors, furnish the following results:

Number of Colleges and Schools in Japan, controlled by the Department of Education	20,608
" of Natural Institutes	52
" of pupils in Schools, Colleges, Normal Institutes and Foreign Language Schools	1,739,400
" of Teachers and Professors	38,365
Increase, for one year, ending in 1874,	
" " in the number of Schools and Colleges	7,945
" " in the number of pupils	402,118
" " in the number of Teachers and Professors	15,859

The Gilchrist Scholarship.

Since the last issue of our Journal, we have been informed of the results of the late competition for the Gilchrist Scholarship assigned to the Dominion of Canada. When the answers to the prescribed questions in the different branches—including *Latin*, *Latin Grammar* and *Composition*, *French*, *Greek* (or *German*), *Arithmetic*, *Algebra*, and *Geometry*, *English Language* and *Composition*, *English History*, *Natural Philosophy*, and *Chemistry*—have been examined by the examiners of the London University, the candidates, as well as the matriculants generally, are usually classified according to the numbers of marks which they may have gained on the values previously attached to the papers of questions. This year, of the candidates who presented themselves in the Dominion, two, both belonging to the Province of Quebec, were placed, respectively, first et third in the first class of matriculants, namely, Mr. D. C. Ross of Montreal, and Mr. Bland of Quebec, the former taking the Scholarship. This result undoubtedly bears favourable testimony in behalf of the quality of the higher education imparted in the Province of Quebec, when viewed as a test of the relative proficiency of our youth and those of the Mother Country and of the other British Colonies.

Mr. Ross, the winner of the Scholarship this year, belongs to the McGill University, at which institution, we believe, he has already graduated in the Arts. Mr. Bland is an undergraduate, in the Arts course at Morrin College, Quebec, affiliated to the McGill University, and as he is by several years the junior of Mr. Ross, our readers will concur in the opinion that he has, substantially, done himself and his college no less credit than the successful candidate. We congratulate both these young gentlemen on the result of the late competition, and we heartily wish them well in their future career.

Protestant Institution for Deaf-Mutes.

Cote St. Antoine Road, Montreal.

To Ministers, Mayors, Postmasters, Missionaries and others:

The Board of Managers of the Protestant Institution for Deaf-Mutes, Montreal, desirous to obtain reliable information, respecting the Protestant and non-Catholic deaf-mutes in the Province of Quebec, and to make known the existence and advantages of this institution for the instruction of this class of people, respectfully request you to forward to the undersigned the name, address, sex, age, circumstances and post-office address of parents or guardians of all non-Roman Catholic deaf-mutes between the ages of five and thirty years. By doing so you will not only confer a favor on the Board of Managers, but be doing an act of charity to the deaf-mute, whose parents or guardians may be unaware of the existence of an institution for the instruction of deaf-mutes in this Province.

When it is not convenient or possible to supply all the information desired, the name of the deaf mute's parents or guardians, and their post office address, or the name and address of their minister, will be sufficient to enable the officers of the Institution to communicate with the parties they desire to benefit.

The conditions of admission into the Institution are such as to place it within the reach of all deaf-mutes of school age, not mentally defective, so that poverty can be no excuse for keeping them in ignorance. These conditions and all information desired respecting the Institution can be obtained by addressing the Principal, Mr. Widd, Drawer 353 P. O., Montreal.

The Board of Managers trust that all those addressed will kindly co operate with them in their benevolent efforts, and aid them in ascertaining, as far as possible, the number of Protestant deaf-mutes of school age in this Province, which will materially assist them in determining the amount of accommodation required in the new Institution which they have in contemplation.

Communications may be addressed to any of the undersigned:

CHARLES ALEXANDER, President,
Protestant Institution for Deaf-Mutes,
Montreal.
F. MACKENZIE, Hon. Sec.-Treas.
THOS. WIDD, Principal.

—Wide Awake for September opens with Part I, of a noticeable story, "David Bushnell and his American Turtle," by Miss S. J. Prichard, in which figures the first of our sub-marine war-ships. Upon this explosive "Turtle" Benjamin Franklin and others built great hopes in their early struggle for independence. Farther on is a pleasant camping-out story by Mrs. Nason, "A Day on Lake Cupsuptue," and a Centennial story by the Editor, "Mrs. McAllister's Company," a rollicking account of some pretty children's fun. There are poems by Mary Clemmer, Clara Dory Bates, and others. "Mamma's Dolls," by the Editor, is charming, both picture and poem. Part II, of "A Child in Florence" is full of delightful art-gossip. "The House of Umbrellas," and "Little Boy Blue;" each honest transcripts of real child life, together with the two serials, "Good-for-Nothing Polly," and "Nan: the New-Fashioned Girl," and the various departments, complete an excellent number of an excellent magazine.

—Wide Awake for October is a bright and fresh as a June sunrise. It is full of good things, both for young and old. None of us can afford *not* to read "Two Burial Places of Florence," by Louise Chandler Moulton. We get a glimpse of the graves of Theodore Parker, Elizabeth Barrett Browning, Walter Savage Landor, and many others dear to all English-speaking people. No. V, of the "Behaving Papers" tells the children "How to Give a Party." "How One Woman Camped Out" gives Lady Baker's share in Sir Samuel Baker's expedition into Central Africa to suppress the slave-trade.

The article, "A Dolls' Fair," will rouse enthusiasm throughout the country. Children of the right sort will everywhere respond, and aid so benevolent and interesting an enterprise.

There are three excellent stories, "David Bushnell." "Charlie's Week in Boston," and "Unto Babes," by Sara J. Prichard, Charles E. Hurd of the *Boston Transcript*, and Helen Kendrick Johnson.

The little people will find their special delight in No. IV, of the Classics of Baby-land, "Puss in Boots," "Funny Hat," by Margaret Eytinge, and "Pinkie-Winkie's Mamma."

Only $2 per annum. Edited by Ella Farman. Publishers, D. Lothrop & Co, 30 & 32 Franklin Street, Boston.

Home and School, published at Louisville, Ky., may be safely said to be *par excellence* the educational journal of the West, or, for the matter of that, in the United States. Every month it has handsomely illustrated articles on natural history, animals and flowers, which show original research on the part of the writers, and which supplement the information found in text-books; essays, strictly educational, pertaining to language, history, literature, and art; papers concerning methods of teaching; in short, every subject that belongs to education is discussed in one or more of the twelve numbers that make up each volume. In the number for September we find Bats, Ostriches, the wild-flower Liver-leaf, all superbly illustrated; a lively commentary on some of Shakespeare's commentators; a philological article on the Position of Modern Languages in the Higher Education; some practical notes on Elocution, etc.; besides the editor's department of general intelligence, book-reviews, and scientific researches and discoveries—all making a highly interesting and instructive record of educational progress during the past few weeks. No teacher can afford to be without this magazine, and no intelligent man or woman would fail to be interested in its contents or profited by its teachings.

MISCELLANY.

Working Ways of Writers.—If a collector of curious historical bits could be found, with industry enough to find out what the peculiar working habits of great literary men and women have been, he might make of his material one of the most fascinating of books. There is no limit to the peculiarities of mental action, and these peculiarities for the most part determine the working ways of all intellectual toilers. Dr. Johnson, it is said, always knew every word of a propose essay before putting pen to paper.—He would not only mark out the main features of the work in his mind, but would actually compose the entire piece, and hold it word for word in his memory until he was ready to write, when nothing remained to be done except to transfer the completed but as yet unwritten essay to paper. Byron's habit was the exact opposite to this. He thought with his pen in his hand, drawing each new inspiration from the words already writen, changing, erasing, interlining as he went, until the result was wrought out, and that result was very often quite an unexpected one to the poet himself, apparently. Gray, the author of the "Elegy in a Country Church-yard," found writing very slow and very laborious. We are told that he would never leave a line until it was finally completed. He would alter and amend it over and over again, but would never begin a second line until the first was complete.—Tennyson seems never to have been done with the work of emendation. His extreme fastidiousness shows itself more strongly in his inability to satisfy himself than in anything else. He not only writes and re-writes his poems, but has them printed in his own house, so that he may see them in type and give them some final touches in that shape before sending them to the publisher. But even this does not satisfy him, and so we have lines altered here and there in second editions. In the poem *Enid*, for instance, as it first appeared he wrote "had wedded Enid;" but, in the later editions, it reads 'had married Enid,' a change which was made because of the poet's discovery, after the poem's first publication, that the first syllable of the name Enid is short, while he had thought it long. His "Charge of the Light Brigade" underwent very much greater alteration than this in passing through different editions. In truth, it is

hardly the same poem now that it was when it first thrilled the world in the reading.

Mrs. Browning is given to similar post-publication alterations, and nothing could be more provoking. When people have come to know a poem or a line, it becomes in a sense their own property, and any alteration, even though it works improvement, seems a sort of wrong to the reader, forever spoiling the poets' gift to him.

Woodsworth made his poetry during his long morning walks, and upon returning would go to bed, and dictate to an amanuensis while he ate his simple breakfast.

Mr. Dickens once said to a friend that he always arranged the catastrophe of a story in his mind before thinking of any other part of it, and that the events leading to it were made solely for that purpose. To this, however, the 'Pickwick Papers' was clearly an exception, as every reader would discover, even without the history of that work which Mr. Dickens had himself given us. From the fact that at his death no memoranda of any importance with regard to his unfinished 'Mystery of Edwin Drood' were found among his papers, it seems probable that Mr. Dickens worked almost entirely without notes. Sheridan, on the other hand, made copious memoranda; and not only so, but he carefully wrought out his ideas in his note books, altering and improving them from time to time until finally they were ready to be transfered from their nursery to his books or his speeches. His note-books thus became quite as interesting as any of his published works. We find in them not only the germs of his most brilliant witticisms, but also the witticisms themselves in every stage of their growth, from the first crude conception to the finished epigram. He made notes, too, of the various characters he intended to introduce into his dramas, and these also under went many changes while yet in the note-book stage of their existence.

Sir Walter Scott never found composition so easy as when children were playing in the room with him; while Bulwer, on the other hand, thought absolute solitude necessary to successful literary work.

Gems of Thought.—Don't worry yourself about another man's business. A little unselfishness is sometimes commendable. Don't attempt to punish all your enemies at once. You can't do a large business with a small capital. Don't imagine you can correct all the evils in the world. A grain of sand is not prominent in a desert. Wives and mothers should always strive to make home happy, so that it may be a place of pleasure for the husband and father. It has been remembered that "no statue which the rich man places ostentatiously in his windows is to be compared to the little expectant faces pressed against the windowpanes watching for father, when his day's occupation is done." How much is contained in that one word "happiness!" How much more happiness there would be if we thought of the happiness of others rather than of our own? But, instead, we are often so selfish in looking out for our own pleasures, that there is not much room left in our hearts to think of anybody else. It is a good and safe rule to sojourn in every place as if you meant to spend your life there, never omitting an opportunity of doing a kindness, or speaking a true word, or making a friend. Seeds thus sown by the wayside often bring forth abundant harvests.

"*Mother.*"—It is the cry of the infant, just from the cradle; it is the only balm that will heal the wounded heart in youthful days. 'Mother, I'm hurt;' 'Mother, I'm tired,' 'Mother sing to me, rock me tell me stories.' It is always 'Mother,' with the child and the lad. No one like mother. No hand that falls on the fevered brow so softly as hers; no words so sympathetic as those that pass her lips. The house would be a grave without her. Life would be a dreary, thorny road without her warning voice and guiding hand. A father may be kind, may love none less, but the wearied child wants the mother's arms, her lullaby songs; the caresses of her gentle hand. All childhood is a mixture of tears and joys. A kind word brings a smile, a harsh word a sigh, a fall is pain, a toss, a joy. The first footsteps weak and trembling grow stronger by the guidance of a mother's love. The little wounds, the torn clothes, the headaches, and heartaches, the trials, all vanish at the words of a mother, and there is built up in the heart of every man an edifice of love and respect that no crime can topple down—no dungeon can effect. And a lad grows to be a man only to find that mother is the same. If he errs, she weeps; if he is good and manly she rejoices. Hers is the only love that lasts—endures forever. The wolf of starvation may enter the door, but her love is only tried to shine the brighter. All the world may call her son a criminal, but the mother only believes it not. Trial may beset you, storms gather over you, vexations come, ruin drags you down, but there is one who ever stands firm in your cause, who will never leave you. The criminal on the scaffold has suffered in feeling because his bad deeds would cause a pang to his mother's heart. The low and wretched dying in some dark abode of sin, have died with that name on their lips. There is no praise like her praise there are no sad tears that pain us so much as hers.

Weather Proverbs.—Throughout the northern countries of Europe July is always regarded as the hottest month of the year, although the sun has already commenced its downward course. As is well known, the so called Dog-Days begin on the 3d of July and continue into August, during which time great heat unfrequently prevails. The husbandman looks for calm and bright weather diversified by mild showers of rain to bring on his crop in due season,

"July, God send the calm and fayre,
That happy harvest we may see,
With quiet tyme and hearthsome ayer,
And man to God may thankful bee."

"A shower of rain in July, when the corn begins to fill,
Is worth a plough of oxen and all belongs there till.

"No tempest, good July,
Lest corn come off blue by (mildew)."

There is a general belief that during July a spell of fine or wet weather may be expected—the former if the spring has been wet, the latter if dry. This is the result of accurate observation, and cannot be gainsayed; but unfortunately the proverbs embodying this idea have been attached to particular days, which in themselves cannot, of course have any effect on the succeeding weather. The special days are July 13th, 15th, and 27th, the latter of which is 'Old' Saint Swithin's Day. They all point out to the particular weather on those days as heralding a duration of summer weather.

"If the first of July be rainy weather,
It will rain more or less for four weeks together.
"If Billion's Day be dry there will be a good harvest."
"If the deer rise dry and lie down dry on Billion's Day.
There will be a good harvest.

The last special day is sacred to St. Swithin on whom great reliance is placed by the common people. Observations during several years prove, as might be expected, that this confidence is not warranted so far as the particular day is concerned, but that a spell of dry or wet weather is very common about this time. Consequently, if the proverbs connected with this day are transferred to the three or four days collectively on each side of it, the general weather experienced throughout that week is no bad index to that of the future.

"St. Swithin's Day, if thou dost rain,
For forty days it will remain;
St. Swithins Day, if thou be fair,
For forty days 'twill rain nae mair.

"If Swithin greets, the proverb says,
The weather will be foul for forty days."

"In this month is St. Swithin's Day,
On which if that it rain, they say,
Full forty days after it will
One more or less some rain distill."

The same day belongs to two other saints, Processus and St. Martin; and a Latin proverb tells us that 'it suffocates the corn if it rains on the feast of St Processus and St. Martin.' The homely saying, 'St. Swithin is christening the apples, applied to rain on that day is a fitting conclusion to the proverbs of this month.—*Leisure Hour for July.*

ABSTRACT FOR THE MONTH OF AUGUST, 1876.

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

Day.	Thermometer.				Barometer.				†Mean Pressure of Vapour.	‡ Mean Relative Humidity.	Wind.		Sky Clouded in Tenths.			Rain and Snow Melted.	Day.
	Mean.	Max.	Min.	Range.	Mean.	2 Max.	2 Min.	Range.			General direction	Mean Velocity in M. p. hour.	Mean.	Max.	Min.		
1	69.53	76.8	60.6	16.2	30.1332	30.211	30.015	.196	.4878	68.2	N. E.	6.8	0.6	1	0		1
2	72.18	83.3	62.3	21.0	30.2395	30.289	30.208	.081	.5483	70.2	S. E.	4.8	0.5	1	0		2
3	73.65	82.2	63.6	18.6	30.1886	30.267	30.095	.172	.5400	66.3	S.	8.5	4.8	9	1		3
4	75.35	84.0	67.7	16.3	30.0841	30.131	30.037	.094	.6533	72.3	S. W.	6.2	7.6	10	1		4
5	80.02	89.2	70.6	18.6	30.0722	30.121	30.031	.086	.7383	73.0	S. W.	5.8	3.0	6	1		5
Sunday 6		92.2	73.7	18.5							S. W.	8.9					6 Sunday
7	79.08	87.0	72.4	14.6	29.9695	30.041	29.873	.168	.7210	73.2	S. W.	13.2	6.2	10	1	0.15	7
8	74.66	84.0	67.2	16.8	30.0062	30.930	29.963	.067	.5273	62.5	N. W.	10.3	0.6	4	0		8
9	75.91	86.0	63.6	22.4	30.0813	30.122	30.048	.074	5300	60.2		5.1	1 6	6	0		9
10	77.35	89 0	64.7	24.3	30.1308	30.169	30.096	.073	.6258	67.8	S. W.	4.8	2.3	4	2		10
11	78.22	88.4	67.9	20.5	30.1186	30.174	30.063	.111	.7056	73.8	S. E.	3.5	5.0	8	2		11
12	78.76	87.8	69.3	18.5	30.1131	30.195	30.075	.120	.7290	78.7		4.3	7.7	10	3		12
Sunday 13		91.0	72.0	19.0								3.4					13 Sunday
14	82.13	90.6	71.4	19.2	29.9583	30.054	29.823	.231	.7446	69.0	S. W.	6.4	5.0	10	2	Inapp.	14
15	72.90	84.7	61.1	23.6	29.7993	29.924	29.735	.189	.5957	72.7		9.4	5.5	10	0	0.85	15
16	62.86	69.8	55.5	14.3	30.0291	30.069	29.957	.112	.3822	67.0		7.3	3.7	10	0	0.04	16
17	65.48	76.7	56.0	20.7	30.0202	30.060	29.977	.083	.4682	74.8		3.6	5.6	10	1	Inapp.	17
18	68.61	77.9	59.2	18.7	29.9280	29.998	29.831	.167	.4892	71.7		5.0	4 1	10	0		18
19	67.16	69.2	64.8	4.4	29.7271	29.778	29.657	.121	.6107	91.7	S.	8.8	9.9	10	4	0.97	19
Sunday 20		67.0	51.5	15.5							N. W.	12.5					20 Sunday
21	56.21	66.0	48.4	17.6	30.0648	30.152	29.964	.188	.2850	62.6	N. W.	11.1	7.5	10	0	Inapp.	21
22	64.06	75.4	55.4	20.0	29.9625	29.993	29.899	.094	.3530	59.6	N. W.	7.5	5.1	10	2		22
23	63.47	70.0	56.9	13.1	30.1007	30.185	30.004	.181	.3413	58.8	N. E.	6.2	1.1	8	0		23
24	64.30	76.4	53.3	23.1	30.1070	30.170	30.004	.166	.4195	71.5		4.2	5.5	10	0		24
25	70.22	82.3	59.7	22.6	29.8107	29.960	29.653	.307	.5477	73.2	S.	8.8	7.2	10	1	Inapp.	25
26	62.46	70.0	55.5	14.5	29.4801	29.907	29.792	.115	.3525	63.1	W.	11.1	4.5	10	0		26
Sunday 27		60.7	51.5	9.2							N. W.	14.4				Inapp.	27 Sunday
28	58.03	66.4	48.8	17.6	30.0410	30.076	29.016	.060	.3283	68.2	S. W.	10.1	3.0	9	0		28
29	63.16	73.0	54.6	18.4	30.0291	30.076	29.986	.085	.3861	63.8	S. W.	4.8	1.7	5	0		29
30	67.02	78.9	53.7	25.2	29.9300	29.995	29.865	.130	4097	62.5	W.	5.3	0.7	3	0		30
31	69.77	78.8	53.8	24.9	29.8341	29.898	29.767	.231	.5110	69.9		6.5	7.0	10	0		31
Means.....	70.092	79.18	60.86	18.32	30.0117			.1371	.5190	68.74		7.05	4.3				

Barometer readings reduced to sea-level and temperature of 32° Fahr. † Pressure of vapor in inches mercury. ‡ Humidity relative saturation, 100. Observed. Ten inches of snow is taken as equal to one inch of water.

Mean temperature of month, 70.092. Mean of mean max. and min. temperature, 70.02. Greatest heat was 92.2 on the 6th; greatest cold was 48.8 on the 21st,—giving a range of temperature for the month of 43.8 degrees. Greatest range of the thermometer in one day was 25.2, on the 30th; least range was 4.4 degrees on the 19th. Mean range for the month was 18.43 degrees. Mean height of the barometer was 30.0117. Highest reading was 30.289 on the 2nd; lowest reading was 29.653, on the 25th—giving a range of 0.636 inches. Mean elastic force of vapor in the atmosphere was equal to .5190 inches of mercury. Mean relative humidity was 67.74. Maximum relative humidity was 98 on the 19th. Minimum relative humidity was 44, on the 22nd. Mean velocity of the wind was 7 miles per hour; Greatest mileage in one hour was 24, on the 27th. Mean direction of the wind, W. S. W. Mean of sky clouded was 43 per cent.

Rain fell on 9 days. Total rainfall, 1.98.

Printed by Léger Brousseau, 9, Buade Street, Québec.