

the direct supervision of the Principal and Masters of the Normal School, and the teachers of the various Divisions."

In view of the above clause in the curriculum, a representative of the *Times* last week paid a series of visits to the school, and he was most kindly received by the Professors in the various branches of study pursued there. He found the arrangements perfectly *en regle*, the lecture rooms in perfect order, and the gentlemen who occupy the chairs *au fait* in their work. Everything is conducted on a business-like footing. Nine o'clock in the morning sees males and females in their places in the class rooms, with the lessons prepared and ready for the queries of the lecturer of the day. To the credit of the fair sex be it said that as a rule they are (excuse a slang term) "better posted" than those of the sterner sex. To trace the whole course through would require an examination of the whole of the branches of study laid down, and perhaps it might be as well to give a brief synopsis of each of the professor's lectures, always bearing in mind that "lecturing" on the subjects taught is the system adopted, a monthly examination being held by the tutors in each class.

EDUCATION.

The following is a brief synopsis of the principles laid down in the professional lectures by Mr. McCabe:

First, it is important to start with a proper idea of what Education really is. It involves the culture and development of the various parts of our nature, physical, intellectual and moral. At this stage is given a hint that the healthful development of any one power involves the culture of the others. The cultivation of the intellect is first specially referred to. This culture involves two elements—in forming and developing—the first a cause, the latter an effect, and the more important. We must impart knowledge in such a way that it will awaken thought, stir the mind to new ideas by comparison and reasoning. We should aim to awaken a desire for knowledge, and train to the best method of acquiring it. Education is not to end with school life; but rather to begin when the child has left school, by his ability to acquire for himself.

Next comes the question how this all-important development is to be obtained? By exercise. We cannot educate by acting upon the child or working for him—we must secure action on his part.

We come back to the means—the various branches of knowledge taught in our schools. These branches must be taught in such a way as to awaken interest, induce effort, give activity to the mental powers and secure their development—the great end.

The different intellectual powers do not come into full activity simultaneously. In the young child, the perspective powers are first awakened, then memory, then reason. The educationist should conform to this order. If the knowledge presented appeals to a mental power not yet awakened, we shall fail to arrest the attention. The pupil must be taught *ideas* rather than words.

The more we can get the pupil to do for himself, the greater will be our success as teachers. He must be brought to the sources of knowledge, and led to discover and arrange for himself. He must be made to feel that knowledge is not confined to books—that it has not even its source there. The book is but an artificial *reservoir*; the *fountain*, the source, lies outside in the field of nature.

These remarks point to the necessity of a proper *method* of teaching, and introduce that part of the subject. Method involves the determination of the end in view, and the establishment of an intelligent plan to secure that end. The two grand methods of presenting knowledge are next referred to—*analytical* and *synthetical*. The former leads from an examination of the particulars to infer the general—from examples to principles; the latter from general principles to their application to various cases.

Young children, and those whose minds are but little developed, require analytic teaching. If we begin with principles and rules, they may commit these to memory without knowing anything of their meaning. We present individual objects or examples, thus appealing to a mental faculty already awakened; the child thus understands the subject, is interested in it, and gives his attention to it.

Guided by the teacher he proceeds from one example to another, fixing his mind on points of resemblance, gradually rising from individuals to classes; from examples to principles and rules.

All subjects should be taught on this plan to beginners; and after the mind has become more fully developed, and that the pupil is able to trace from the particular to the general, and back again, text books, in which knowledge is given in abstract form, may be used.

The teacher is warned against the practice of lecturing, doing all the work himself, against many other faults in questioning, &c.

Good teaching is next defined as a judicious combination of direct statement, questions, ellipses, the teacher discriminating between what he should tell the pupils, and what he should be able to draw from them without telling.

In using text books, the matter contained there should be treated as a *text*, not to preach a sermon from, but to *illustrate* and expand.

These are the general principles; and the teachers go on to apply these principles to the teaching of reading, spelling, grammar, arithmetic and geography, &c., &c. To freely appreciate this part of the course, the lecturer must be heard. We happened to be present at one sitting for the best method of teaching.

The subject of school organization is next taken up. This is intended to include registration, classification, distribution of time, and signals. These are dwelt upon in order. Then follows the subject of school management, which is distributed under two general heads—*teaching* and *governing*. *Teaching* is supposed to include assigning lessons, conducting recitations, supervision of desk-work, and reviews. *Governing* is considered under the heads preventives and punishments. Lastly is taken up a short sketch of mental philosophy, the successful teacher requiring to know something of the powers of the mind, &c.

We have here given but a very imperfect sketch of this most important department, but enough to show with what ability Mr. McCabe has organized the young institution committed to his care, and the system upon which the studies of the future teachers of the young are conducted.

THE SCIENTIFIC DEPARTMENT.

Under the department of sciences are included the following subjects: (1) chemical physics, (2) chemistry, (3) geology, (4) botany, (5) natural history, and (6) physiology and anatomy. This department is under the direction of Prof. Gibson, B.A., F.G.S., who is very favourably known in Canada as an enthusiastic teacher of the sciences, and an original investigator. His method of lecturing on the above topics is somewhat similar to that employed by Prof. Huxley in the Royal School of Mines, London, a plan of lecturing at once practical and efficient. The salient points in the lecture are in the first place given to the students in the form of dictation—the whole forming a sort of skeleton or *resumé* of the lecture, and taking up about twenty minutes in the hour. The remaining time is occupied in expanding and illustrating the points dictated, and in oral examinations of the previous lecture. In the meantime the Professor labours under considerable disadvantages from the fact that he has as yet at his command but a meagre supply of chemical apparatus and specimens for illustration in geology and botany. But this defect will shortly be remedied, seeing that the Ontario Legislature have voted a very handsome sum for the purpose of providing all such necessities. The laboratory in connection with the science department will, when furnished, be one of the most commodious and efficient in the Province, and is arranged with a view to finding the students of the first division an opportunity for practical work. In the botanical sub-department we observed a very fine herbarium containing about 2,000 species of the indigenous and naturalized plants of Canada. This, we believe, is one of the largest collections of plants in the Dominion, and has now become the property of the museum through the kindness of Prof. Gibson. As yet there are no geological, mineralogical or zoological collections; but in the course of two or three months a number of good sets of typical Canadian specimens are forthcoming through the courtesy of Mr. A. R. C. Selwyn, director of the Geological Survey, and Dr. Dawson, of McGill College, Montreal.

MATHEMATICAL DEPARTMENT.

This department includes the subjects of arithmetic, algebra, geometry, mensuration, trigonometry and mechanics, including statics, dynamics, hydrostatics and pneumatics. The manner of teaching these branches differs considerably in the different divisions and subjects. In arithmetic the second division are thoroughly drilled on the principles of underlying all arithmetical operations: lessons are assigned in the authorized text-book, for the actual preparation of which the students are held responsible. At each recitation, the statements of the text-book are enlarged upon, thoroughly explained and largely supplemented, special attention being paid to anything of practical importance. Little attention is paid to *rule*, the pupils being trained in analysis, and in the method of performing all questions of proportion, &c., by analysis. In the first division the students are supposed to be familiar with everything in the text-books, and lectures are given on the theory of interest, exchange, on commercial law, on money and its substitutes, on stocks, and on matters of importance in business life, as well as on the theory of numbers; difficult questions from all sources are taken up and discussed before the class, and no pains are spared to make the students perfectly conversant with any question which is likely to arise in life.

Instruction in mensuration is given entirely by lectures, the first division applying the elements of trigonometry to solve triangles and other figures. The second division, who do not take trigono-