

ledge. In each case, carefully selected specimens should be employed and presented to the mind in a regular graduated series, so that it might readily and at once refer what was brought before it to that which it most resembled, and in this way, as some one expresses it, the mind is as it were furnished with hooks with which to lay hold of and retain its subsequent knowledge. In fact, one great purpose of education ought to be to store the mind with such hooks, in other words, with ideas or impressions, with which whatever subsequently is brought before the mind may be compared and understood. But this cannot be the case unless it is done regularly and systematically, and with this end in view. Particularly ought this to be the case in the education of the senses, but, notwithstanding its importance, sense education is a thing that is entirely neglected at present.

The mind of man is thus ever associating, ever comparing, but like all the other powers or faculties of the mind, these require to be guided and trained, otherwise they will be as ready to associate and compare things that ought not to be associated or compared, as those that ought. Things ought only to be associated together that we wish to be associated, and to be compared by their more important, not their less important, qualities—by their essential, not their accidental, characteristics. We ought thus to be very careful only to bring together and associate such ideas or impressions as we wish to be together, and to be reproduced together. Ideas are reproduced or recalled in the same form and with the same associations as they were originally presented to the mind. Hence we ought not in teaching to present both the right and the wrong to the mind of a child, for they will be associated together and reproduced together—the living man chained to the putrid carcase. Build up the child's knowledge with the right, and the true, and the good, and let the wrong, the false, and the bad be as far as possible removed from him. Still more reprehensible is the practice of making a child suspect his knowledge, by asking him, after he has given a correct answer, if he is sure it is not something else. In teaching, one can scarcely do a greater injury to a child than to make him suspicious of his knowledge." "Spoil not," says Andrew Fuller, "thy memory by suspecting it; how canst thou find that true which thou wilt not trust."

Our ideas ought also to be stored up exactly in that order in which we wish them to be reproduced. In this way, each rises up in the mind in its proper place, and in the order in which it is wanted. Otherwise, many different ideas will crowd upon the mind at once, and confusion or embarrassment will be the result. As in any mechanical operation, the work goes on best when the materials are brought to hand exactly as and in the order that they are required, so in our mental operations, the mind ever acts best when the thoughts and words are brought before it exactly when and in the order that they are needed,—when it is given to them at the proper time what they shall say. Hence, in questioning a scholar on any subject, care ought to be taken to strictly observe the natural order, or the order in which it is best reproduced.

But the highest principles, the most exalted operations of the human mind are carried on unconsciously. "Here," (underneath this region of consciousness) says Carlyle, "in its quiet mysterious depths dwells what vital force is in us; here if aught is to be created and not merely manufactured or communicated, must the work go on." A knowledge of the nature and character of this ultra-conscious region of the human mind is of great importance in education; but, unfortunately, philosophy has not as yet been able to throw much light upon the subject. This is a branch of science to which philosophers, at least in this country, have as yet paid little attention. Consciousness has been the basis on which they have constructed their systems, and they have not troubled themselves, or cared to enquire what or whether anything was under or beyond this; and yet Sir W. Hamilton says, "I do not hesitate to maintain that what we are conscious of, is constructed out of what we are not conscious of; that our whole knowledge is in fact made up of the unknown and incognisable." This is the department of mental science of which least is known at present, and it is probably here that the next important discovery will be made, but it can only be established by a careful process of induction, which can be nowhere better carried out than in education. Indeed, we are of opinion that more will be learned respecting this ultra-conscious region from a properly directed system of education than in any other way.

At present it may perhaps be permitted to us to speculate a little on the subject. The human mind may be likened to a dark cavern, into which consciousness, like a light at the mouth, permits us to see but a very little way. In the dark and mysterious region beyond are stored up all our knowledge, and all our experience, and how are carried on those wonderful mental processes that are known to us only by their results. We know that a person may, after getting puzzled with a subject, and unable to see his way through it, lay it aside for a time, and on taking it up again, find it all arranged and clear before him, and that without his being conscious of having even once turned his attention to it in the interval. This can only be accounted for on the supposition that the mind has been unconsciously at work on the subject, and that too with finer and more perfect instruments than any that the conscious mind can command. All the higher and more perfect of the mental operations are unconscious or instinctive. "The truly strong mind," says Carlyle, "views it as intellect, as morality, or under any other aspect, is nowise the mind acquainted with its strength; here, as before, the sign of health is unconsciousness."

Genius in its higher forms is of this nature. "What," says Goethe, in speaking of his works, "is in such cases termed invention, is with me spontaneous." "Ich hab' nie über das Denken gedacht."

Look at the orator, for instance, how aptly he selects his words, how adroitly he plies his argument, and employs one after another the various forms of speech, each in its proper place and at its proper time. What mental powers, of which he is not conscious, must be at work here? There is reason to believe that the principles that are at work, and the operations that are carried on in this ultra-conscious region, are the same as those in the conscious, though finer, more minute, and more perfect. There are feelings, emotions, sensations, at work here of which we are unconscious, and which only manifest themselves to us by their results. Thus, certain conditions of the atmosphere, certain states of the body produce elevation or depression of spirits by means of sensations of which we are not conscious; and the beautiful, the true, and the good, when presented to the mind, excite in us feelings and emotions for which we cannot account. In all the higher operations of the human mind, it is not by reason, or even by consciousness that it is guided, but by ultra-conscious feelings and emotions, mostly connected with previous feelings and emotions, the associations connected with which they serve to recall. Association and comparison are, we believe, as active and dominant principles here as in the conscious region of the mind. As regards education, it is impossible to estimate the amount of light that may be thrown upon it from more knowledge on this subject. To know that there are operations of the human mind that are carried on unconsciously, that there exist feelings, and emotions, and sensations of which we are not conscious, that the mind compares unconsciously as well as consciously, that all our knowledge and experience is stored up in this unconscious region in strict conformity with the laws of association, and is reproduced exactly in the form and with the connections that it had originally, all this must of necessity be of immense importance to education.

But not only are all the higher and more perfect operations of the human mind unconscious, or instinctive, but the tendency of all of them is to become so by practice. Acts of which the mind is at first painfully conscious, become gradually less so by practice, until at length they may be performed quite unconsciously. The more simple the act, the more readily may it be brought by practice to be performed unconsciously, and hence the advantage of reducing each subject taught to its simplest elements. In the more complicated of the mental operations, there are a number of different acts that require to be carried on at the same time, and hence the greater number of these that we can render in a measure unconscious, the more is the mind left free to deal with the rest. The orator, for instance, who does not require to think about his actions, knowing that they will naturally suit themselves to his words, nor about the proper tone, accent, or emphasis of his words, knowing that these will unconsciously follow, nor about the best words in which to clothe his ideas as that has become habitual to him, will thus have his mental powers free to deal with the development and arrangement of his ideas. By attacking and mastering each element of a subject separately, we can thus the more easily guide and direct them in combination. For the object of such division, and of mastering them one by one, is to enable us afterwards to carry on the greater number of them at the same time.

Each of our mental powers or faculties has its unconscious as well as its conscious side or end; yea, even reason itself, the highest and most conscious of all our faculties, has its unconscious or instinctive side. It is during the earliest years of life that our instinctive or unconscious powers are most active and most highly susceptible of education, and hence it is during these years that most should be done to improve and strengthen them. Who can estimate the amount of knowledge that a child acquires unconsciously, spontaneously, during the first few years of life. The teaching of this period should be direct teaching, and rules or the application of them should be resorted to as little as possible. The less a child has to do with giving or receiving reasons at this period the better. How reprehensible then is the plan of some teachers who, not content with receiving correct answers to their questions, must also have the child to give reasons for them, or who, not content with telling the child what a thing is, must also puzzle him with reasons why it is so. The reasoning powers in place of being unduly stimulated at this period, should be rather repressed. It is a great mistake to fancy that a child must understand everything that it learns at this period. Let it rather collect all that it can while its perception and receptive powers are at the strongest, it will find plenty of time to reason about them afterwards.

But we must have done. We have only attempted to gather here and there a few specimens, to show the rich field of knowledge that education is, if it were only cultivated. And we have only entered upon the first of our three great divisions. We have said nothing of the means by which education ought to be carried out, or of the perfection of the individual at which education ought to aim. We have been unable to enter upon the nature and character of the individual faculties, the order of their development, or the laws which govern them; the order in which the various branches of knowledge, or any one branch, ought to be communicated; the place that classical knowledge, languages, or mathematics, ought to occupy. In teaching we ought always to proceed from the general to the particular, or first state the leading principles of a subject before we descend to particulars; on the principle