arithmetic, it will be a single object to illustrate the number one, which will then be changed for other single objects, till the number is associated with so many of them, one by one, as to lead to an idea of its abstract nature, or its applicability to any one thing. Next, two similar objects will be presented, and the one be added to the other and then subtracted from it, till the nature and all the powers of this number are understood. In music, a sound will be presented, and imitated, and, for the sake of comparison, another will be introduced, and the difference in length, pitch and force noticed, till the pupil shall himself perceive, what by other methods would be told him, and received on the teacher's authority. In drawing, the same thing is done by presenting a straight line on the black-board, and varying its position, as vertical, horizontal, and oblique, and presenting another straight line in combination with it, making two parallel lines; a right, an acute, an obtuse angle; and then modifying these so as to produce all the forms and figures which can be made from them. And so, of a larger number of straight, curve, and waved lines, and figures produced by their combination, till the pupil shall have worked out for himself, by his own invention, the elementary principles of the art. In all these and other studies to which the method is applied, the attention of the learner is at the beginning drawn to that one point, which is the simplest and first in order, and then to another, connected with the proceeding and next in order, and so of the rest, the teacher merely directing the process, and the pupil going through with it for himself. Each step in the process is so arranged as to give the means of taking the next. Everything extraneous is carefully excluded, and all the difficulties which occur are solved by means of what has gone before. This method, which is appliable to many of the studies pursued in the schools, requires more care, labor and invention than teachers are generally willing or perhaps able to bestow. But if it be restricted to its proper uses, and skilfully applied, it is one of the best means of intellectual training. Nothing can be more valuable in respect to the formation of correct mental habits. It proceeds upon the principle of teaching nothing which the pupil can find out himself. The knowledge, too, thus acquired, is all perfectly arranged and grouped in the mind so as to prevent confusion, and thereby facilitates the work of the memory no less than of the understanding.

In studies which have not this unity of character, the complexity must be overcome by a similar process, by separating its parts from each other, so that the difficulties which would otherwise be accumulated may be taken one by one, and easily disposed of. To do one thing at the time is generally the right method in such cases. There may be instances in which two things are so reciprocal in their influences upon each other, that they appear simplest when taken together. Such cases are easily distinguishable, and can be treated according to their peculiar naure. But in most studies which are agglomerate in their nature, as orthography, reading, geography, and the like, the danger lies on the side of overwhelming the mind with too many things at once. It then becomes necessary to exclude what is not essential to the subject, to postpone what is not fundamental or strictly elementary, and to arrange the remainder in such a way that the part which sheds most light on the rest shall always precede.

It is scarcely a less important principle in teaching, to make sure of what has once been learned, either by constantly reviewing it, or by frequently using it in the subsequent part of the course. Every review shall be conducted in some new way, so that the same principle shall re-appear under ever-varying forms. The novelty of its new appendages will keep up a fresh interest in the mind, while the previous knowledge of the general subject will cause the light easily to break in and shine in all its parts. That which is essential will come to be clearly distinguishable from that which is accidental, and will consequently be more clearly comprehended. The want of attention to this obvious truth renders the knowledge acquired in the schools often exceedingly insecure, many things fading from the memory in order to make room for others. Nothing that is learned at this period should be allowed to be forgotten. Whatever is not worthy of being remembered is not worthy of a place among the appointed studies. The habit of forgetting some things, when attention is turned to others, is so great an evil in itself, and so disheartening to the learner, that it is better to know perfectly and retain easily and securely a part, than to have many studies pass through the mind as clouds sweep through the sky.

Difficult studies should have so much time devoted to them daily, at the beginning, as to render them familiar and attractive within a moderate period. Early success brings with it high mental gratification, the best means of creating a permanent interest, and securing energy and diligence in study. Such studies should alternate with others that are already familiar or easy, and that are adapted to recreate the mind, by calling into exercise other and dissimilar faculties. This power of relieving the understanding or memory when fatigued, by exercising the taste and imagination, as well as the organs of the body in vocal training, drawing and the like, has not yet received due attention. Such things are to the mind what oxygen is to the lungs, they renovate it, and speedily put it in a condition for renewed exertion. The mind can no more continue to work through one of its faculties without rest or change, than the body can through one set of its muscles. Change, at suitable intervals, is the law of life to both. Those studies, therefore, which furnish mental reaction, can be introduced into schools without any loss of time. As much can be accomplished in the severer studies, in connection with them, as without them. The skilful teacher will manage to keep the minds of his pupils in good condition and in the right mood, as a musician will keep his instrument rightly tuned and pitched, and will skilfully introduce those changes in successive exercises, which will keep the mind in the best working order.

THOROUGHNESS IN EDUCATION.

The necessity of thoroughness in every department of education ought to be ever present to the teacher. From the want of it pupils are sometimes blamed when the fault is not really theirs. The necessity is admitted by all writers on education; and we are far from thinking that we can throw any new light on the matter. But a few sentences by way of illustration, and of "stirring us up by putting us in remembrance," may not be without their use. The late Dr. Bell's advice on this matter is, we think, sound and valuable. "Never quit a letter, a word, a line, or a verse, or a sentence, or a paragraph, or a section, or a chapter, or a book, or a task of any kind, till the learner is well acquainted with it." According to the same authority, it is thoroughness, or the want of it —or, as he styles it, perfect or imperfect instruction, that constitutes the main difference between one school and another. And he goes on to caution the teacher against supposing that he has done his duty so long as there is a single child in the school who does not make daily progress according to his capacity, who is not perfectly instructed in each lesson as he goes along.

It may be difficult or impracticable to follow out this advice entirely; but we believe the more it is acted upon, the more comfort will the teacher have in his labours, and the more profit and pleasure will the pupil derive from them.

It is this principle of thoroughness, so far as it is carried out by frequent repetition, which constitutes the value of the exercise-books of Ollendorff, and Arnold, and other writers who have followed that system.

Who has not heard of the surprising results produced by Jacotot, by means of his system of "Universal Instruction?" On investigation it will be found that the one principle by which these results were produced was thoroughness, at every stage of the pupil's progress.

When children are allowed to pass over one step in their instruction without mastering it, they are the less able to surmount those which follow, and thus they are led to form a low and unjust estimate of their own abilities. They cease to make any effor to overcome difficulties, from a vague impression that they are sure not to succeed. It ought to be borne in mind that the object of an elementary education is not to supply the pupils with a given amount of information, but to furnish them with the means of obtaining it.

This is too often forgotten, and the teacher, in haste to get his pupils on rapidly, and to please the parents by the appearance of progress, drags them through a merely surface teaching, and and leaves them in reality worse than he found them; for he has confirmed them in desultory habits which unfit them for any vigorous concentrated effort of the mind. Under such a system a certain readiness of memory and smartness may be attained, but it merely serves for the time, and proves to be no real acquisition.