

simple way about the objects that form the subject of study. With somewhat large classes a training of this kind is obviously not very easy to secure, but we do not think there should be any difficulty in reaching a higher measure of success than is generally attained. The lessons are commonly treated mainly as a means of imparting information, the training in observation, comparison, and description of what might be learned by adequate examination of the object entering but slightly into the teacher's design. The existence of this defect is admitted readily enough by many teachers, who allege that they have not sufficient facilities for making the lessons truly objective. Without denying that there is some force in this plea, we hold that if teachers took more interest in these lessons, and were more discreet in their choice of subjects, they could readily find sufficient means of illustrating them, and of making their treatment at once more interesting and more educative. To do this doubtless involves some trouble, but this will not baulk any teacher who is really anxious to improve and interest his pupils. "Milk and its Products" is a subject on which a lesson is given almost every year in many schools, but a glass of milk is the only aid to objective study which we have seen provided. In rural districts cream, curd, whey, cheese, and rennet could all be shown and examined if foresight were exercised and a little trouble taken. And the exhibition of a specimen of these materials would obviously add very greatly to the possible educative quality of the lesson. We often examine, or hear teachers examine, on such a subject as "lead," but a piece of the metal and a common article or two made of it are to be found only in the larger schools, and not always in these. Yet there are few districts in which a bit of sheet lead, a bullet or some grains of shot, a piece of lead piping, and some solder, or some of these, could not be got without much trouble. If object-lessons are to take their due place in the process of education, it is imperative that suitable objects in some variety should be provided for their illustration; without this aid they must remain on the lower level of information lessons. Were it customary to announce at the close of an object-lesson the subject of the next one, some of the pupils would no doubt be able to contribute some objects or pictures in illustration of the lesson, and these might be left with the teacher to form a collection of illustrative material for the benefit of the school.

For lessons in natural history and in manufactures good pictures of suitable size are very necessary. Limited sets of pictures of animals have been supplied to numbers of the larger schools, and others have been occasionally provided by the School Committees, but much remains to be done in providing suitable pictorial illustrations in connection with these subjects.

As we have pointed out in former reports, the treatment of object-lessons is often marred by the introduction of unnecessary technical names and a too minute and tedious enumeration of technical processes. A full knowledge of the subject treated of is no doubt necessary for the teacher, but common-sense should guide him in selecting from his stores of knowledge only what is important or likely to benefit and interest his pupils.

The present arrangements for teaching science do not work out so satisfactorily as we could wish. Some teachers have not yet drawn up a three years' course of instruction in the subject, as the regulations of 1891 require; and even when drawn up, the course is often only partly overtaken. On the other hand, the frequent changes of teachers involve changes in the course of study that greatly interfere with the continuity and the efficiency of the teaching. In schools that are affected by changes of teachers—and all are more or less subject to this evil—it would undoubtedly be a great advantage if the science courses were somewhat explicitly prescribed and defined, for then a new teacher could take up the work at the point at which his predecessor left it, and both would work on much the same lines. At present there is no guarantee that this will happen. Each teacher is free to make his own arrangements, and these are as likely to conflict as to accord with those of his predecessor. Something like uniformity of scope and aim in lessons in the same subject—physiology and health of the body, for example—is so desirable that it should be secured somehow. We had hoped that the Teachers' Institute, or its branches, would have considered the question of sketching out suitable courses of lessons in science, but, so far as we know, nothing has been done in this direction. In these circumstances, we think the Board might fitly interpose and make arrangements for securing a reasonable uniformity in the course of instruction in science. If four or five courses, each providing a minimum of work in one subject for a year, were sketched out, teachers would enjoy liberty enough if they were allowed to choose the three courses they would take up, and determine the order in which these should follow each other. Few, we feel sure, would object to have the minimum of matter included in a year's course explicitly indicated for their convenience and guidance, and many would be very thankful for such direction.

In a number of the larger schools very satisfactory work is done in the science subjects taken up. In these the head masters or senior assistants have entered into the subject with commendable enthusiasm, and have taken great pains to make the teaching as experimental and illustrative as they can. In most schools, however, the science subjects are but moderately handled, while in some they have been greatly neglected, and the teaching is almost worthless. We do not look for any great improvement while circumstances remain as they are. The want of simple text-books fit to be put into the pupils' hands, and the scanty equipment of knowledge, sometimes of the facts, oftener of the methods of science, on the part of not a few teachers, must, we fear, make the teaching of science comparatively unfruitful for years to come.

In rural schools the elements of agriculture are very generally taught as the sole science subject. A good deal of useful knowledge is no doubt gained from these lessons, but their treatment very seldom possesses any value as a mental training. The text-book commonly used, and often found in the hands of the pupils, contains a very large amount of chemical matter that can never be assimilated or understood without a course of simple experiments which there is no means of giving. It would be a distinct gain if this part of the course were but slightly touched on, and more attention were bestowed on topics that can be easily illustrated, or with which children in a farming district are more or less familiar. We know of no text-book very well suited to the needs of the pupils of our schools, but we can recommend as a book of reference for teachers the excellent