No. 2. REPORT OF THE INSPECTOR OF MANUAL INSTRUCTION.

SIR,— Education Department, 13th July, 1917.

The maintenance of the steady growth during the year in the number of schools taking one or more forms of elementary handwork may be regarded as indicating the growth of clearer ideas in regard to the value and place of handwork in a scheme of education. It is becoming the exception rather than the rule to find teachers who treat the better-known branches of handwork as isolated subjects, and while there is still evidence of hazy notions and a failure from many causes to make the best use of the concrete method in teaching, the growth of clearer notions and of a desire to know and apply them is unquestionable, due in not a few cases to an interest in and study of the Montessori method.

Increased attention is being given to cardboard-work, particularly in districts where it is not practicable to provide facilities for instruction in woodwork. In one district the Board has made carton and cardboard work compulsory for all pupils in Standards IV, V, and VI unable by reason of distance from a centre to attend classes in woodwork and cookery, and has provided a special course of instruction for the teachers. It is difficult to understand why this subject is not more popular. In addition to its value as an aid to manual dexterity, it provides opportunities for useful exercises in elementary mensuration and instrumental drawing, while many of the completed models are very suitable for lessons in free drawing, and incidentally for exercises introducing pupils to first notions of capacity or volume.

The opportunities afforded to students at all the training colleges of gaining a sound knowledge of the methods and aims of the more elementary forms of handwork encourage the hope that, apart altogether from the aid in mental, moral, and physical training which handwork in schools provides if rightly applied, the possibilities the exercises afford of helping to create and increase the manipulative skill of the nation will not be lost sight of. During the past few years the value, as a national asset, of a large body of skilled hand-workers has been brought home to us with poignant force, and the earlier the training of the hand in common with the training of the intellect is begun the better for the child and therefore for the nation. The boys and girls that can "use their hands" as well as their brains are national assets not to be lightly esteemed.

Reference is again made to the decline in the number of approved classes in elementary physical measurements. It is recognized that, speaking generally, an increase in the number of subjects to be studied is undesirable, but for pupils unable to attend classes in woodwork and cookery a course in elementary physical measurements, besides providing a series of exercises in mechanical manipulation, affords an excellent and interesting introduction to scientific method.

It is pleasing to record that steady progress has been made in teaching the more specialized forms of handwork in the direction of the elimination of non-essential matter, and the inclusion in the instruction of elements which assist pupils to assume the right mental attitude towards the work, with the result that improvements in both drawing and bench-work are apparent in the woodwork classes. The stimulation of the creative and aesthetic faculties is not neglected, and new and original forms of some of the older models have been devised by pupils, and in some instances original surface decorations suggested. It appears necessary again to call attention to the necessity of instructors demanding in the bench-work a closer relation between the dimensions of the finished model and those of the drawing. In many instances there is too much disparity. The drawing is not made without purpose. It is for the guidance of the pupil as to the form and dimensions of the model, and it is not too much to expect of Standard VI pupils that the completed model should, in all dimensions, be within $\frac{1}{32}$in. of those shown on the drawing. The ability to read a drawing and to work to it accurately are valuable acquisitions for a lad and for the future mechanic. This naturally leads to the question, Which is more important, quality or quantity of work? The answer appears to be obvious. If quality is the desired goal, then much more time will have to be given to each model, and with the view of sustaining the pupil's interest until the model is completed the models will have to be of a type calculated to interest the boys. The average boy loves to make something which he can use, and if this is constantly kept in mind by instructors there should be no difficulty in devising the most educative and interesting models. In one district a small and useful bookshelf is included in the second-year models. The sample made by the instructor is used as a suggestion, and pupils are encouraged to alter the form and dimensions, and are allowed to carry out any alterations, provided they can furnish good reasons for so doing. The accuracy and finish of some of the completed examples appear to indicate that the pupils' interest had been sustained during the process of construction.

The truth of the generally accepted statement that the greater the resistance offered by a material the greater the accuracy that may be attained in working it appears to be borne out by the standard of accuracy attained in a course of combined wood and metal work; the simple, useful, and sometimes decorative metal additions to the model appear to have a most salutory effect upon the work generally. At the centre where a complete course in manual-training metal-work is carried out a carefully graded and interesting set of models has been arranged; on comparing the average work of the classes with that of classes where the metal-work is taken after a year of woodwork the conclusion was arrived at that a higher standard of accuracy was attained in the case of the combined course. As both courses may be regarded as in the elementary stages, the present conclusion that the average pupil just entering on a course of