No. 3.

REPORTS OF INSPECTORS OF TECHNICAL INSTRUCTION.

WE have the honour to make the following report on the state and progress of manual and technica instruction in the colony during the year ending the 31st December, 1903.

A. MANUAL INSTRUCTION.

In most of the education districts there has been a noticeable increase both in the number of schools, and of classes in individual schools in which some form of handwork is being taken up. Compared with last year, the number of schools in which handwork is not confined solely to the preparatory classes is much greater. In many cases the time-tables forwarded to the Department show that it has been found possible to arrange for a course of instruction in handwork for each class, from the lowest to the highest, and it is encouraging to note that during the present year (1904) quite a number of such time-tables have been received. The number of school classes recognised for 1903 was nearly three times as large as for the previous year. It may safely be said that the continuation of special Saturday classes and the establishment of specially organized summer and winter classes for teachers, together with a more general knowledge of the more modern literature of handwork, both in the shape of text-books and of articles in the educational journals, are doing much to bring about a better appreciation of the value of handwork, not as a new subject, but rather as a new method. As indicating the growth of this appreciation, it may be mentioned that some of the older and more experienced head teachers, who at first looked upon handwork with suspicion, have reconsidered the matter after watching the result of allowing those of their assistants who had previously attended courses in handwork to take up some form of it in connection with their classes; in not a few cases the effect has been that head teachers have themselves attended courses of instruction, with the result that handwork has become a recognised part While instruction in handwork will be found to react favourably on the of the work of their schools. general work of the standards, it should prove a valuable aid to the teaching of the drawing. Suitable courses in brushwork, free-arm and blackboard drawing, and modelling will be found of great assistance to freehand drawing with the pencil, while the instrumental drawing, which, it is to be feared, has not always attained a very high standard of excellence in the schools, should show a marked improvement where it has been co-ordinated with suitable courses in paper, carton, and cardboard work. The difficulties in the way of obtaining supplies of the requisite apparatus and material are gradually being removed as Education Boards and those who supply school requisites gain fuller knowledge of what is required and where best to obtain it.

Of the various forms of handwork now being taught in the schools, cookery and woodwork call for special mention. In the larger education districts these subjects are receiving considerable attention, more especially in connection with the city and suburban schools. The system adopted for the teaching of these subjects is the central system, which has much to commend it; it is economical, and by rendering it possible to place the whole of the work in charge of expert teachers, it is likely to produce better and more uniform results. On the other hand, a central school in charge of a specially trained teacher is apt to give rise to the idea that cookery and woodwork are special subjects, apart from the general school course. If they are so, the benefit derivable from the instruction cannot fail to be less than it otherwise would be. One remedy, of course, would be for the instruction at the centre to be given by the regular teacher of the class. Under present conditions, however, this is unfortunately not

possible.

A few remarks on the woodwork-room and its equipment may not be out of place here. The building in which woodwork is to be taught is to be regarded rather as a workshop than a class-room. Its construction, therefore, need only be of the plainest description; for all practical purposes, a roomy, dry, well-lighted, and well-ventilated shell is all that is necessary. Careful consideration must, however, be given to the equipment. The benches must be substantial and sufficiently heavy to withstand the strain of the various operations incidental to woodwork. The bench-stops should be easily adjusted, and capable of firmly holding the pupils' work. End vices such as are found on the so-called sloyd benches are not necessary; such vices are seldom used by mechanics except as auxiliary vices. On the school-bench the proper place for the vice is the head of the bench. The vice must be substantial, and provided, preferably, with a steel screw. Simple lockers or stands for pupils' tools, two plain cupboards for general tools, &c., together with a blackboard, a grindstone, and an oil-stove for glue, complete what may be termed the bare necessities for the work. No doubt there are many accessories that for various reasons may seem to be desirable, but are they indispensable?

The number of teachers who present themselves for examination in cookery and woodwork in connection with the examinations of the City and Guilds of London Institute continues to increase. At the examinations held in 1903, fifty-eight teachers passed the examination in cookery, twenty-one obtaining first-class certificates; while twenty teachers were successful in satisfying the examiners in woodwork. It is to be hoped that it will presently be possible to utilise the services of teachers thus

qualifying in connection with the instruction of school classes in the subjects named.

The following extracts from the report of the Institute are here given for the information of instructors

and prospective candidates:

¹ Plain Cookery: The improvement noticeable in the quality of the paper-work in 1902 has been fully maintained. Many papers showed excellent work, answers being definite and confined to the point of the questions. There were, however, instances of discursiveness so pronounced as to obscure the meaning, and various errors or omissions occurred which lowered the value of some of the papers considerably. In Question 1, upon heating a body of water, some of the best papers dealt with (a) contraction of water by heat until the point of maximum density is reached, and its expansion upon increasing its temperature beyond that at which the point of maximum density occurs; (b) convection currents;