

by the funds were administered. The manual training was found so thoroughly useful and acceptable that it was speedily extended. In 1890 wood-work was recognized by the Education Department as a school subject. The School Board was thus enabled to expend its own funds upon this branch of school work, and in the same year money was provided by Parliament for grants for it from the Imperial Exchequer. Now there are about 150 manual training centres; and as nearly as I could learn, about 50,000 boys between the ages of nine and fourteen are receiving courses of instruction in wood-work, iron-work, brass-work or leather-work in the Public Board Schools of London.

At a typical school which I visited, a room was fitted with some forty benches, each provided with wood-working tools. There was also a supply of general tools for the room, in addition to the particular tools at each bench. One instructor and an assistant were sufficient for the forty boys. The course of instruction is a three years' one; and each boy gives half a day per week to it. Consequently the manual training room, in that instance, provided facilities for 400 boys, there being ten half days in each school week.

A series of articles called models are made by the boys. The things are articles of use, and are known to be such by the pupils. Each one is wholly made by the pupil. When the teacher needs to give practical demonstration, he gives it on another piece of wood, and not on the piece on which the boy is working. It is not much learning, but much interfering which makes anybody mad. The pupils make the objects by copying directly from the actual models. Later on make drawings of the models from measurements, and make the objects from the drawings.

I observed that the children were deeply interested in their work. A casual glance of observation was all they gave to the visitors. A spirit of earnestness, self-reliance and careful perseverance seemed to pervade the whole school. The teacher told me that in accuracy of observation and accuracy of expression there was a noticeable improvement in the children after they had gone through the manual training course.

I found similar equipment and equal satisfaction reported in regard to the Board Schools in Liverpool.

#### SCHOOLS IN CANADA.

We all know schools have a two-fold use; the imparting of knowledge, and the drawing out of the natural powers and capacity of the pupils; but it is the teacher—the human element in the school and in the system—that counts for most. The personal qualities of the teacher are the prime power outside the pupil which make for educational culture—that is for growth by a leading out of the powers of the child. The main endeavour should be to lead out the mind by nourishing ideas, rather than to cram in a knowledge of unprofitable facts.

The object of education, the real controlling

influence which shapes its direction, depends on the ideals of the people. When the mothers want to see their sons ministers, and doctors, and lawyers and such, unconsciously perhaps but certainly, the schools will be turned that way. What is it desired that the children shall be when they grow up? On that question hinges the educational system. If the ideal be riches and easy life, or luxury or ostentation, it will be pernicious. If the supreme desire be that the children, and the grown people, shall be happy and capable, in the sphere of life in which they are to live, then the education and educational processes should be directed to attain these ends.

#### POWER TO OVERCOME OBSTACLES.

Manual training develops in children habits of industry and leads them to thoughtfully adjust their acts to desired ends. That of itself is of great educational value. It helps to keep out of later life whimsical and capricious conduct. It brings about the mental habit of appreciating good work for its own sake; and is quite different from that sort of education which consists in informing the pupils about the facts within a definite area of knowledge in order that they may be able to pass examinations on the subjects included within it. The so-called dull boys, who are not quick at book studies, have in many cases been found to show great aptness in the manual training part of education. It prevents them from being discouraged with school life, and from feeling any sense of inferiority to the quick children. It gives them self-reliance, hopefulness and courage, all of which react on their mental and physical faculties. It also is a soothing and strengthening corrective to the quick and excitable children who become over-anxious about examinations on book studies.

The glow of satisfaction—akin to the joy of triumph—from having done something well, has a stimulating effect. Is it different from what is revealed by the sacred historian when he wrote: "And God saw everything that he had made, and behold it was very good"? Indeed one can hear the echo, if you will, of that Divine satisfaction in the murmur of the waves, in the rustle of the leaves, in the soft, the almost silent cadencies of the ripening grain, in the singing of the birds, in the trees of the forest clapping their hands, and in the lullaby of the sunshine and breezes to the cattle on a thousand hills. It is a good thing to let every boy and girl become partaker of this Divine joy in their own work. The reaction gives mental power, power to overcome obstacles; and the power to overcome obstacles is perhaps the most desirable mental quality, inherited or acquired.

#### MANUAL TRAINING AS A CORRECTIVE.

Over-feeding of subjects is a common cause of mental dyspepsia, a most uncomfortable and unfortunate state of mind. There is a difference between informational subjects, and an educational process to train the useful faculties of the *mind* and *body*; and in the process of education the develop-