

mind engaged in the acquisition of knowledge are three in number : the power of discrimination ; the power of detecting identity ; the power of retention. Here we have the problem clearly stated, and it is noticeable that the above definitions of science covers the cultivation of this entire group.

It would scarcely be wise to introduce text-book instruction in science before the child has reached ten years of age. There is no generally well known book on the market which is suitable, and from the nature of the case, it is doubtful if any such can be written. One of the best books that has so far appeared, is "First Steps in Scientific Knowledge," by Paul Bert ; yet it is likely that a child would receive many false impressions from it which would follow persistently into later years, were the attempt made to instruct from its pages. A certain amount of scientific instruction, however, is really necessary during this period, but should be given directly by the teacher. At first the endeavour should be simply to train the powers of observation, and not directly the judgment. When a child sees an object the impressions received from it are not clear, but confused, and when attempting to describe it afterwards it is apt to exaggerate and make false statements concerning the matter, for its recollections are necessarily vague as its impressions were not well defined. This is perhaps the most noticeable defect in the child age, and is one that we should use every endeavour to correct. A boy eight years of age rushed home from school one day in a state of great excitement, and said to his father that there would be no school that day, as all the children were sick with the measles. When closely questioned he could only name five who were really ill. Unfortunately this trait is not confined to children,

for it seems almost impossible for most men and women to give accurate and truthful descriptions, especially if there be any personal interest at stake. One writer puts it in this very forcible way : "Habits of inattention, of mental indolence, of surface or random thinking, of inexact statement are the source of a widespread and insidious corruption of character." If a teacher succeeds in making a child see accurately so far as its observation goes, and then give an exact description, he has done that for the child which will be of incalculable benefit to it in after life. Before the child is prepared for formal scientific instruction it must possess some facts as a basis for reasoning, and it would not be far wrong to denote these five years as a Foundation Period—the time for amassing facts.

Just at this period so many new objects are crowding upon the child's attention, that its mind is somewhat bewildered in the attempt to deal with them all, that it would be unwise to present new ones for consideration. A few facts well observed are better than a multitude half comprehended. The every-day life of the child will afford abundant scope for work, and the objects most frequently met with should be the ones to which attention be first called. For example, let such a thing as a brick be taken. The idea of the three dimensions in space can be readily impressed by pursuing this method : Cut a slip of paper of the length of the thickness of the brick and let it be applied to ascertain the length and width of the brick. This process will start the mind in the fundamental method of physical science—when a phenomenon is first presented it is carefully observed, then accurate measurements are made. More than that, it will give the child the idea of the *unit*, and then by having a crayon box measured in the same manner, that units