

measure the rate at which the slowing-down progress is going on and so predict very closely the age at which there will be a complete arrest. This, when we attain to it, will give us an immense advantage in the diagnosis and in the training of these children.

From the conclusions that we have so far drawn, it is evident that our educational treatment must be largely modified. When once we have discovered that a child is stopped in his development it is, of course, useless to attempt to teach him to do anything which requires an intelligence above that which he possesses. The notion that by setting him a task somewhat ahead of his ability will somehow draw him up to that capacity, is forever exploded. It is pretty certain that intelligence develops, as we may say, of itself, and yet we only utilize and exercise what is there, and do not create anything new by any of our training methods. Here we may conclude that as a rule, feeble-minded children are trainable but not improvable in intellectual capacity.

## DISCUSSION

Vice President Carroll: Dr. Goddard's address is now before you for discussion.

Dr. Rogers: Mr. Chairman, I am exceedingly glad that Dr. Goddard has given this explanation because this is one of the things that seems to be misunderstood in regard to value of laboratory tests. The process of mental evolution between birth and puberty might be likened to the movement of the bundle carrier of a dry goods store that starts upon its trip across the room under the impulse acquired from the salesman who gives the handle a vigorous pull. The momentum thus acquired is not increased by any other force acting upon it, though its progress may be delayed or stopped by any object placed in its way. If the impulse given to it in starting is insufficient to carry it to the cashier's desk, it is obvious that it will move with less than normal speed at first, gradually slow down and finally stop on the wire at the point where the energy becomes exhausted, or it may stop suddenly because of some unsurmountable obstacle. Here the simile ends.

The capacity for learning at the different ages during the evolutionary period might be likened to tin cups of uniform diameter but varying in height. The short cup can not be made to hold more than its capacity, so no amount of training will enable the child of a low mental age—the short cup—to perform the things which only a person of higher mental age—the long-cup—can learn. On the other hand there are things that a child of any given mental age can learn to do,—the number increasing with the advance of mental age to the end of the period of mental evolution.

Dr. Fernald: Mr. Chairman, I have been trying to reconcile Professor Goddard's statement with our definite method of instruction. What Dr. Goddard has just told us is the most significant, in a way, and the most discouraging statement that we have ever known. I am afraid it is true. No one believes in the possibility of education for the feeble-minded more than I do, I am sure, but I have always had the feeling that we were bound by some very definite limitations in each given case, and that the most we could do was to develop to the uttermost the potentialities of that particular case. I suppose that that applies to all of us. We are all bound down by protoplasmic limitations, that is to say, we have a certain voltage and a certain amperage, to use electrical terms. The quality and quantity of our mental possibilities are probably pretty well defined at our birth.

I am puzzled to know—I wish Dr. Goddard would straighten me out on it—the explanation of the following case: We have a feeble-minded girl nine years old, for instance, who was admitted to the school and put under training when she was six. She couldn't have the nine-year-old capacity, of course, at the age of six. I wish Doctor Goddard would give us a diagram of what happens to that six-year-old girl who finally gets to the ninth year of age. What was her mental age probably when she was admitted at six? In examining a six-year-old case or a seven-year-old case, what is to be our yard stick for prognosis for encouraging or discouraging ourselves as to the possibilities in that particular case?

Dr. Goddard: Mr. Chairman, of course, the child who is