

Frankel must be conceded the honour of seeing with the understanding eye and using this clinical fact to overcome the ataxia, not only in the arms but in the legs. These exercises are simply the practice of various movements by the ataxic limbs, at first, at least, under the guidance of the eyes until they become re-educated. I propose, then, with your permission, Mr. President, to have this patient go through some of these exercises.

*First, those in the recumbent position.* We have here two sets of apparatus which are the most useful among many. The patient's head should be raised by a wedge-shaped cushion so that he can see his feet and at the same time be quite comfortable. This first exercise is simply one of co-ordination in extension and flexion of the legs and may be varied indefinitely. The tendency for these patients is to allow the leg to fall out in abduction.

The patient should be told to keep the foot dorso-flexed in this way overcoming to a certain extent the hypotonia of the great calf muscles. First the patient should place the heel in the most distal hole of the board and then by means of flexion of the knee, drawing the foot along the board, place it in the next distal hole, and so on first one leg then the other; or they may be alternated or both work together.

Next, the hip should be more flexed the foot being raised off the bed, then extended and the heel placed in the next hole. By way of variety a halt may be called in the middle of this movement and the leg held steady in this position for a moment. This is difficult and tiring and should not be attempted till the patient has had some practice. Applying Edinger's theory again, we must avoid tiring the patient, otherwise we produce an increase in the symptoms rather than an amelioration, this has been proved clinically. It is thus necessary for the medical man to supervise these exercises carefully himself in order to avoid fatigue, as many tabetics owing to their loss of sensibility do not appreciate fatigue as readily as normal individuals. It is therefore necessary to take the pulse before and during the exercises. It will be found in cases of extreme ataxia to rise rapidly from normal to 120-130, especially at first when the patient is unaccustomed to the exercises. A rest must be given till it comes down to normal again. It must also be remembered that the exercises are for co-ordination and not to increase muscular power, therefore any exercise that requires much strength and is of no proportional value from the point of view of co-ordination should be avoided as harmful.

Another useful apparatus is No. 2. The idea here is for the heels to be placed in these notches, then one leg to be flexed at both thigh and