still greater good may be obtained by the education of the patient by a course of training intelligently carried out and sufficiently prolonged to establish habits of using the body to the best mechanical advantage. There are many to-day who are moving about on wheel-chairs, or upon crutches, who might have been much less dependent upon such aid had an adequate course of physical training been adopted within a reasonable time of the onset of the disease which has crippled them. By one means or another nearly all cases can be improved even after years of neglect, yet it goes without saying that after prolonged disuse of important parts as good results cannot be expected as are obtained in cases submitted to the best treatment at an earlier date. The following is an illustrative case:

G. M. L., a physician's daughter, was brought for advice when nineteen years of age. From early life she had walked with crutches, using only one leg. The other limb was atrophied, and contractures had occurred in the hamstrings preventing extension at the knee beyond an angle of 120°. A similar contracture of some of the leg muscles had produced a distortion of the foot. A three months' course of massage with efforts directed to correcting the deformities which had resulted from the contractures, and the application of a light brace with joints at knee and ankle, together with a cork-soled boot, effected such a degree of improvement that she now walks fairly well and comfortably without further aid.

Fig. 9.

Severe infantile paralysis involving both lower extremities. In this patient some power was retained in the right limb, but on the left side there was complete paralysis of all the muscles which control the movements of the knee joint, and the knee assumed a position of marked hyper-extension when he attempted to bear weight on the leg. The extreme atrophy of both extremities is well shown.

But even when certain groups of muscles have lost all power there are surgical means by which some control of flail-like parts may be restored.

About the same time in 1890, Phelps, of New York, and Parrish, of Philadelphia, resorted to the plan of transplanting the tendons of functionating muscles, so as to give them new insertions, enabling them to move parts which before were disabled, and transferring their action to a point where it would secure greater good to the individual. Sometimes the muscles that still retain power to act do injury to the part where their power is applied, owing to the opposing groups of muscles being destroyed. (Fig. 6.) In several cases we have found the ankle almost a flail joint; the peronei, how-