were performed with some show of the same difficulty. She could not raise the arm above the head or put it behind her back normally, nor use it as well as she could the other. Her handwriting was of course affected, but it was legible.

All these motor disturbances were evident only upon attempted motion. Passive movement was perfectly normal. There were none of the spontaneous and rhythmic movements when the patient was at rest, such as occurred in athetosis. No hypotonia was demonstrated.

All the tendon reflexes were exaggerated, but they were equal on both sides. The plantar reflex was of the Babinski type, the same on both sides, but there was no clonus, Oppenheim or Hoffmann. The abdominal reflexes were present but not very active and were readily exhaustible. There were no disturbances of tactile, pain, thermal or postural senses. The electrical response showed no definite abnormality. The muscles seemed slightly less responsive to faradism and slightly more to galvanism than was normal, but there were no polar changes and no evidence of the myotonic reaction.

She had no trouble in swallowing or in phonation, though there was a dysarthria which seemed to be due to a dystonic spasm involving the tongue, the muscles about the mouth and probably the larynx. Her speech was jerky and hesitant, somewhat like a partially controlled stammering. The patient herself referred the difficulty to her throat; she indicated that the larynx seemed to get stiffened. But the movements of the mouth and tongue showed the same dystonic character. There was considerable nervous excitability and the patient was a very light sleeper. There was no Romberg. The pupils were not quite regular in outline, but they reacted to light and accommodation. There was no nystagmus and the fundi and vision were normal. Wassermann and urine were negative.

MYOTONIA CONGENITA

By H. W. Frink, M.D.

A schoolboy, ten years of age, was born in America of Spanish parents. He went to the neurological department of Cornell Dispensary on March 8, 1916, complaining of some difficulty in walking. Family history was negative and he had always been well, except for a double mastoid operation at the age of four and his present trouble.

From the time he first began to walk his mother noticed some stiffness in his legs, which condition had remained ever since and was not progressive. It was especially noticeable when he tried to go upstairs. The patient stated, however, that he could run pretty well if he "first practiced a little to warm up." He had some difficulty in beginning a movement after a period of rest; it was hard for him to rise suddenly after sitting in a chair. When he closed his eyes tightly he had some difficulty in raising the lids. When he first began to talk he had some speech difficulty; this disappeared without treatment. He had never had any pain or other sensory disturbances.

Physical examination revealed a healthy-looking boy, with a rather bronzed skin and what appeared to be a good development of all the skeletal muscles. The difficulty in raising his legs when trying to go upstairs seemed to be due to a spasm in the thigh muscles; the spasm and stiffness tended to disappear as the movement was repeated. After hard contraction of a muscle immediate contraction was difficult. The muscles were abnormally sensitive to mechanical stimulation. Percussion of any of the larger muscles produced a well-marked muscle tumor which remained for nearly a minute. Electrical stimulation of the muscles had a similar effect. The patient had been given tablets of thymus gland for about a month and a quite definite improvement seemed to have taken place.