

*mobi.* Beautiful specimens of it were shown by Dr. Friedlander. The coccus is usually surrounded by a sort of gelatinous capsule, and in its mode of growth on sterilized gelatine it appears distinct from other forms.

*Poliomyelitis and Neuritis.* Professor Leyden opened an interesting discussion on these points. Sir Chas. Bell first distinguished between muscular atrophy and paralysis. The progressive muscular atrophy and the spinal paralysis of children, though at first by Duchenne and others regarded as spinal, were subsequently believed to be largely of local myopathic origin. Charcot, in a number of these cases found degeneration of the motor cells in the anterior horns and the spinal view of their origin again prevailed. Duchenne and Joffroy grouped all the atrophic paralyses together into acute and chronic divisions. In the first were placed the acute paralysis of children and the analogous process in the adult, and in the latter the progressive muscular atrophy and the progressive bulbar paralysis. Charcot believed the process to be a parenchymatous inflammation of the grey matter, and Kussmaul gave it the name of poliomyelitis. Friedreich, in his monograph upon muscular atrophy, opposed this view and regarded the process in this affection as myopathic, and in many cases, carefully investigated, the cord was found intact. But it would appear that there are different forms of progressive muscular atrophy, and Hayem and Charcot published cases in which there was undoubted affection of the grey matter. Eisenlohr, Lichtheim, Remak, and Eichorst had shown by their cases that *neuritis* could produce a clinical picture of progressive muscular atrophy. In the case of Eichorst, which ran a rapid course, the cord was intact, but the nerves were macro- and microscopically affected. Leyden had published in 1879 two cases of paralysis with atrophy resembling very much the Duchenne's paralysis, and in both the cord was unaffected, but the nerves were diseased. The clinical picture of this form of peripheral neuritis is characterized as follows:—The disease appears in a previously healthy person, attacking the extremities symmetrically, either all four or the two lower, the most distant muscles being the most affected. Usually atrophy quickly supervenes. A light, medium, and

severe grade of the disease can be distinguished. In the first the electrical condition of the muscles is scarcely altered: in the severe form, the faradic excitability almost completely disappears, and only the galvanic remains, and there is extensive atrophy of the muscles. Between these there is a medium form characterized by slight loss of electrical excitability and moderate atrophy. The disturbances of sensation are at first slight, but usually there are pains, most intense, towards the periphery. Often the nerves are tender to pressure. The course of the disease varies, sometimes it is very acute, in others recovery may take place in a few weeks, or it may be protracted to months. The prognosis is much more favorable than in the acute atrophy from spinal disease. The disease appears not infrequently associated with or following upon rheumatism. When this is the case salicylate of soda appears beneficial. Rest is an important element in the treatment, and it is a great mistake to make too early attempts at movements of the muscles. When regeneration appears to have set in then the electrical treatment may be begun. Subsequently friction, massage and movements.

*The Etiology of Diphtheria.*—Dr. Löffler, one of Koch's assistants, gave a *resume* of the experiments which had recently been made upon the nature of the contagion of this disease. Material was obtained from thirty-two cases either immediately *post-mortem* or from the patient. There were present: first, a great number of different sorts of bacteria and micrococci; second, a group of chainlike cocci which were found at the site of loss of substance, as in the tonsils, and also in the internal organs, and third, small rods, already described by Klebs, which existed in the superficial part of the membrane; of the two last groups pure cultivations were obtained and inoculations made. With the chain-like cocci the experiments were all unsuccessful, nothing like diphtheria was produced; in rabbits a curious inflammation of the joints followed, similar to what happened with the coccus of erysipelas. The inoculations with the cultivations obtained from the small rods of the third group were unsuccessful upon mice and rats. Birds and guinea pigs often died the next day, and the rods were found at the site of inoculation but not in the inner organs. On the conjunc-