AMYOTROPHIC LATERAL SCLEROSIS.

The great advance made in the knowledge of diseases of the spinal cord, owing chiefly to the labours of Erb, Charcot, and Leyden, has had, amongst its other good effects, that of encouraging the practice of accurate observation of phenomena which previously were regarded merely as strange and inexplicable. Notwithstanding the obscurity which still shrouds many points in the histology and physiology of the nerve centres, sufficient progress has been made, and sufficient interest awakened, to enable us to make our records of cases of some value when the attempt is made to refer the various manifestations of nervous disease to more general laws than are yet known or understood. There need, therefore, be no hesitation in recording the notes of a case uncommon in its occurrence and in its nature:—

Case.—The patient, a tall and powerfully-built man, aged thirty-four, was admitted into hospital under my care on the 2nd of October, 1878. He was a brewer's drayman, accustomed to lift heavy weights, and exposed to the influences of cold and wet weather. In the early part
of last February the patient was in his usual health, being then a strong muscular man. In the latter part of the month he complained of some pain and soreness in the left upper arm. It became fatigued upon exertion, and he found some difficulty in raising it, owing to its weakness and rigidity. Within a short time the forearm got weak, and a month afterwards a precisely similar condition was developed in the right upper extremity. He had a tired feel in both limbs; there were constant twitchings of the muscles, "as if something were alive in his arms;" he suffered occasionally from violent jerking movements in them, and they became rapidly wasted. In the following April he noticed some weakness in his left leg when walking, and shortly afterwards one morning, when getting out of bed, he fell to the ground. The right leg soon became affected, and a feeling of numbness was developed in both limbs; he felt his legs "sleepy," and he had sensations of creeping and tingling in them. An intermittent tremor attacked both limbs, often to such a degree as to arrest progression. It was generally developed during exercise, but it also occurred immediately after the patient got into bed and when he awoke in the morning. As the disease progressed the limbs became at times so stiff in extension that the patient was utterly powerless to move them. "They got like sticks," to use his own expression, and he often tried ineffectually to bend them with both his hands. The contracture often occurs when in bed, or when he stands, or walks for some time. Slight fibrillary twitchings were complained of in the gluteal muscles of both limbs.

At the same time that the lower limbs became affected, the patient noticed some difficulty in spitting, a dribbling of water from his mouth, which, when asleep, moistened his pillow, and a change in the expression of his face. Since then he has had some difficulty in swallowing. He suffered from attacks of giddiness in the head and occasional flashes of light before the eyes, which caused his sight to scatter. He felt occasionally his neck weak, so that if his head was thrown back he had a slight difficulty in bringing it forwards again. A few days before admission to hospital his voice became almost inaudible, but this lesion passed away in a few days. There was no history of any specific disease.

The points specially noticed during the time the patient was under observation in hospital are the following:—The face presents a somewhat stolid appearance; there is an absence of the movements of expression, at least as far as the lower part is concerned. The lower lip droops somewhat, and both lips are stiff in their motions. He can, however, blow out a candle and show his upper teeth, but he has lost the power of whistling, and he can spit out only by a great effort. The latter is effected by an explosive separation of the lips, and is accompanied by a sputtering noise. The movements of the tongue are apparently unaffected. The organ is, however, small, tremulous when protruded, and atrophied