When attention was drawn to the occurrence of paralysis, especially in the form of paraplegia, in chronic alcoholism, it was thought naturally that this would be due to disease of the spinal cord, but subsequent research has not quite confirmed this expectation. More constant morbid changes have been found in nerves. Nevertheless, in a certain number of cases, alterations have been detected in both. When the alcoholism has passed into paralytic dementia, changes in the cord have been found accompanying the changes before described in the brain. At the same time we have cases (I speak from my own experience) of what is thought to be acute myelitis due to excessive drinking. Are there any records of post mortem appearances in such cases?

Changes in the Peripheral Nerves.—Although the actual changes produced by alcohol in the nerves have only lately been observed, the symptoms now referred to them have been longer known, though referred originally to a lesion of the spinal cord. Dr. Wilks was, I think, the first in this country to give a clear description of these symptoms under the name of alcoholic paralysis.

Here I must venture to depart a little from the plan laid down, and say a word or two about the clinical aspect of the nervous disease, especially as it is not yet universally recognised by the profession.

The earliest symptons are disturbances of sensation, and, in the first place, hyperæsthesia. There may be peculiar sensation (paræsthesia), such as numbness, tingling, or feeling of pins and needles, or burning, and sensations of boring and stretching. There may be actual pain, but not usually continuous. Later on, all these disturbances give place to anæsthesia, which is often observed to be present in particular areas. Difficulty in locating sensation and retardation in the transmission of sensation have also been described. All these symptoms are evidently referable to cutaneous nerves, but the deeper nerve trunks and muscles are often tender on pressure. The special senses are very rarely affected. If we consider the phenomena relating to muscles, we find a very prominent symptom, and usually an early one, though sometimes absent, is inco-ordination and loss of muscular sense. The knee-jerk is lost at an early stage, and Dr. Gowers refers this phenomenon, apparently with justice, to the loss of the muscular sense.

All these phenomena constitute the condition of alcoholic ataxia, which may come on before there is actual paralysis of motion, and may remain, as I can state from personal observation, when actual paralysis, once present, has passed away, though it is probably always accompanied by muscular weakness. It is distinguished from tabes dorsalis, or what is called locomotor ataxia, by several characters, especially by absence of all symptoms connected with the pupil of the eye or with the sphincters. Next, if the affection continue and become more severe, we have the stage of actual motor paralysis. In this there will be entire loss of motor power in the muscles, sometimes quite local, sometimes in all four limbs. The paralysed muscles soon lose faradic irritability, and become impaired in galvanic irritability.

Now I think it is quite clear that the symptoms, of which the above is a bare outline, might be referred to injury of peripheral nerves.

Take first the case of the cutaneous nerves, the function of which is mainly efferent or sensory. The first result of slight injury to a nervous structure, if it do not pass a certain degree of intensity, is to cause its substance to be more easily decomposed—that is, to produce an apparent, or, at least, temporary, exaltation of function, which, in a sensory organ, is expressed as hyperæsthesia. A continuance or higher degree of the same injury will produce total loss of conducting power or anæsthesia. Whether this injury affects nerve endings, or nerve trunks, or both, is a question not yet entirely decided. It is evident that paræsthesia or irregular sensations may also result from injury to sensory nerves.

Now let us consider the case of the muscular nerves (a term which I prefer to that of motor nerves, at least for the present purpose). There nerves have a twofold conducting power: one efferent,