Periscope

with, but not dependent upon, the old age changes in the vascular system. Idiopathic paralysis agitans is probably one of the neurological manifestations of senility, due to an abnormal localisation of the processes in the basal ganglia.

MACDONALD CRITCHLEY. (*Brain*, 1929, vol. lii., pp. 23-83.)

A. N. B.

ANKLE-CLONUS: THE DISTINCTION OF THE ORGANIC AND FUNCTIONAL VARIETIES.

Sustained ankle-clonus is usually considered to be an indication of a lesion involving the pyramidal tract, but although usually associated with such a lesion, it may occasionally have a physiological or "functional" ætiology. A simple and rapid test to distinguish "organic" from "functional" types of clonus consists of forcible plantar flexion of the homolateral hallux while ankle-clonus is being maintained. If the clonus is then checked, an organic lesion in the central nervous system is postulated. If it persists in spite of toe-flexion, it is probably "functional" in origin. The mechanism of cessation of ankle-clonus by flexion of the great toe in organic disease depends on an antagonism of reflexes. Clonus requires increased tone of the extensor muscles of the foot. Forceful plantar flexion of the hallux gives rise to the withdrawal or flexion reflex in which there is strong tonic contraction of the dorsiflexors of the foot. That flexor contraction causes reciprocal relaxation of the opposing extensor muscles with consequent disappearance of the clonus.

The importance of the test consists in its capacity to differentiate between "hysterical" and true organic clonus from definite pyramidal lesions, but it has to be remembered that true foot clonus may occur in certain conditions where no anatomical destruction of the pyramidal tract is present, as, *e.g.*, anæsthesia, uræmia, and various infectious and toxic states.

R. S. LYMAN (*Brain*, 1928, li., pp. 168-183).

A. N. B.

THE TREATMENT OF ASTHMA WITH EPHEDRINE.

The use of ephedrine against the paroxysms of asthma appears to have received general approval. Its action is less rapid than that of adrenalin, but more persistent, and unpleasant effects are rather less frequent. Patients who object to adrenalin because of its side actions can often take ephedrine without trouble. Gay and Herman report the results obtained with ephedrine sulphate in a hundred asthmatic patients. Only eight cases failed to get relief, while seventy-one benefited immediately, the remainder being moderately improved by the drug. They found that the most striking results were obtained