who direct the treatment of the patients and the occupational department. He discusses hospital " atmosphere," " personality " in the teachers, the attitude and mental make-up of the patient in relation to treatment and the *rôle* of the physician.

WM. MCWILLIAM.

5. Pathology and Psycho-Pathology.

Occipital and Lumbar Puncture [*Puncion Occipital y Puncion Lumbar*]. (*Rev. Argent. de Neur. Psiquiat. y Med.-Leg.*, *i*, 1927.) *Belado, Manuel.*

As the result of the investigation of the cerebro-spinal fluid in 35 cases in which samples of the fluid were drawn off both by occipital and lumbar puncture, the author concludes that the method gives valuable indications. This is particularly the case in lesions which partially or wholly occlude the canal. The main differences between the two specimens are in pressure, but some other differences are noted, as, for instance, in a case of syringomyelia, where the Nonne-Appleton and Pandy tests were positive in the lumbar fluid and negative in the occipital, the Wassermann reaction being negative in both cases. MALCOLM BROWN.

A Histo-pathological Study of the Cerebral Cortex of Malaria-treated General Paralysis [*Estudio Histopatologico de la Corteza Cerebral de Paraliticos Generales Malarizados*]. (*Rev. Argent. de Neur. Psiquiat. y Med.-Leg.*, *i*, 1927.) *Siena, Adolfo M.*

From the anatomical and pathological point of view, malarial therapy, in six cases examined by the author, does not seem to have produced any appreciable modification of the lesions constantly found in the brains of paralytics. In the brains examined the macroscopical changes were identical with those found in the brains of untreated cases, *viz.*, chronic leptomeningitis, normal appearance of the arteries at the base, atrophy of the convolutions, dilatation of the ventricles and granularity of the ventricle ependyma. Likewise the microscopic changes were classical, and the intellectual level of the patient could not be deduced from the pathological changes. MALCOLM BROWN.

The Acetic Anhydride Test in Cerebro-spinal Fluid. (*Journ. of Neur. and Psycho-path.*, *January*, 1927.) *Greenfield, J. G., and Carmichael, E. A.*

The authors record the sulphuric acetic anhydride test in the cerebro-spinal fluid, and discuss the possible underlying " causal factor " in the cases. After reviewing the literature on this test, the technique followed by them is described. One c.c. of the cerebro-spinal fluid is measured into a test-tube with a graduated pipette. To this is added 0·3 c.c. of *chemically pure* acetic anhydride. The test-tube is then gently agitated to cause an

emulsion to form. To this is then added, drop by drop, 0·8 c.c. of chemically pure sulphuric acid. Should no colour appear immediately the test-tube is again shaken gently, when invariably some coloration takes place. A positive result is constituted by a very definite lilac colour.

Results are tabulated, the headings of the table being: Sex, acetic anhydride test, physical characters, cells, total protein, Nonne-Apelt, Pandy, Lange, and Wassermann reaction in cerebro-spinal fluid and blood.

The cerebro-spinal fluids are from cases of general paralysis (16), of tabes dorsalis (6), of other forms of syphilis (4), of various other organic nervous conditions (18), and of non-organic conditions (6).

The authors conclude that the acetic anhydride reaction cannot be associated with any single one of the usual syphilitic reactions or with any known combination of these, and that the "causal factor" of the reaction must be some other substance in the fluid than that producing the syphilitic reactions. "The suggestion that it may be due to an increase in the cholesterol content of the fluid appears a possible explanation." A positive reaction occurs in practically every case of dementia paralytica, and may occur in secondary neuro-syphilis. Cases of cerebral degeneration may give a weak reaction.

WM. MCWILLIAM.

Gastro-duodenal Ulcers and Autonomic Imbalance. (*Arch. of Neur. and Psychiat., May*, 1927.) *Wolff, H. G., and Thomas, E. W.*

The authors, after a complete consideration of the anatomy, nerve-supply and physiology of the stomach, come to the following conclusions: (*a*) Anatomical and physiological peculiarities cause the "gastric pathway" and the first part of the duodenum to be especially favourable sites for chronic ulcerative processes once an initial mucosal erosion or hæmorrhage has occurred. (*b*) There is much evidence that the agents producing mucosal erosions and those perpetuating such erosions as chronic lesions are separate and distinct. (*c*) Electrical stimulation of the vagus led to hypertonicity, hyperperistalsis, hypersecretion and mucosal erosions. (*d*) A group of so-called gastric neuroses has been found to have much evidence of autonomic imbalance. (*e*) A group of acute gastro-duodenal ulcers has, in a high percentage of cases, shown evidence of autonomic imbalance similar to that of the gastric neuroses. (*f*) Another group of gastro-duodenal ulcers has shown little or no evidence of autonomic imbalance; this group gave the usual evidence of stenosis and chronicity. (*g*) It is possible that local (toxic, mechanical, infectious, etc.) or remote irritation (chronic appendicitis, disease of the biliary tract, congenital bands, genito-urinary diseases, etc.), by direct or indirect stimulation of the vagus, may cause a mucosal erosion. The mucosal erosion once produced, the anatomical and physiological peculiarities at the site of the lesion will determine whether or not a chronic gastro-duodenal ulcer will occur, or whether immediate spontaneous healing will take place.

G. W. T. H. FLEMING.