schizophrenics. The values of the serum varied between 20–40 diastatic units and showed no variation with the nature of the psychosis.

G. W. T. H. FLEMING.

The Presence of Amylase in the Blood and in the Cerebro-spinal Fluid in Neuro-syphilis [*Sulla presenza dell'amilasi nel sangue e nel liquor nella neurolue*]. (*Riv. di Neur., vol. vii, p.* 53, *Feb.*, 1934.) *Disana, G.*

The author examined the blood and spinal fluids of 62 cases of neuro-syphilis. He did not confirm the results of Kafka and Hayashi, who found an increase in the amylase in general paralytics, the latter writer particularly in remissions. On the other hand he did not obtain the completely negative results recorded by Marchionini and Othenstein. In cured cases of neuro-syphilis the author found negative results in only one-third of the cases.

The amylolytic value of the serum was increased above normal in all his cases. No constant relationship between the amylolytic values of the spinal fluid and the blood was ascertained. G. W. T. H. FLEMING.

Spirochætes in the Spinal Fluid in General Paralysis after Artificially Produced Meningeal Reactions [*Le spirochæte nel liquor dei paralitici progressivi in seguito a reazioni meningee acute artificialmente provocate*]. (*Riv. di Neur., vol. vii, p.* 65, *Feb.*, 1934.) *Vizioli, F.*

The author found that after aseptic meningitis produced by doubly distilled water, there was an increase in the number of cases in which spirochætes could be found in the cerebro-spinal fluid from 4% to 12·5%, showing their passage from the parenchyma of the brain into the spinal fluid. G. W. T. H. FLEMING.

Oxidase-reducase in the Cerebro-spinal Fluid in Some Forms of Mental Disease, and the Possibility of its Investigation by the Potassium Permanganate Reaction of Benedek and Thurzo [*Sulla ossido-reducasi nel liquido cefalo-rachidiano in alcune forme di malattie mentali e sulla possibilita di poterta esplorare con la reazione al permanganato di potassio (reazione di Bendek e Thurzo)*]. (*Riv. di Pat. Nerv. e Ment., vol. xliii, p.* 476, *Jan.–Feb.*, 1934.) *de Marco, A.*

The reaction of Bendek and Thurzo consists in adding to ·25 c.c. cerebro-spinal fluid in a sterile and dry test-tube, 1 c.c. of 1% oxalic acid and one drop of 1% potassium permanganate. The mixture, using distilled water instead of spinal fluid, is rose-violet in colour ; the colour changes to yellow-rose, to yellow, and then to a pale yellow. The control takes 30 minutes for this change to be completed ; with normal spinal fluid the time taken is 14 minutes, and with pathological fluids round 8 minutes. The greater the amount of albumen present in the fluid, the more rapid and intense the changes.

The author found that in schizophrenia, epileptic psychoses, alcoholic conditions, syphilitic conditions, circular psychoses, confusional psychoses and generally in all conditions where the amount of albumen is very minute the reaction was negative. The reaction was pronounced in cerebral syphilis, meningitis, cerebral tumours, spinal cord tumours, general paralysis and in any other conditions where the fluid albumen is much increased. G. W. T. H. FLEMING.

Phagocytic Behaviour of Interstitial Cells of Brain Parenchyma of Adult Rabbit towards Colloidal Solutions and Bacteria. (*Arch. of Path., vol. xviii, p.* 50, *July*, 1934.) *Lebowich, R. J.*

The author found that coloured colloidal particles, blood-pigments and bacteria were stored by transitional microglia cells, but not by normal resting and dividing microglia cells. No phagocytosed dye particles, etc., were observed in silver-reduced neuroglia and oligodendroglia cells. There is a distinct relationship between the phagocytic capacity of the microglia cells and their maturity. The

failure of the endothelial cells of the cerebral vessels to store vital dyes, etc., places them outside the class of specific phagocytic endothelial cells. The actively phagocytic adventitial cells of Marchand supplement the protective function exercised by the hæmato-encephalic barrier. G. W. T. H. FLEMING.

Exploration of the Reticulo-Endothelial System in Schizophrenia [Exploración del sistema reticuloendotelial en la esquizofrenia]. (Arch. de Neurobiol., vol. xiii, p. 1053, 1933.) Fanjul, L., and de la Vega, P.

The technique adopted was the intravenous injection into a fasting patient of 10 c.c. of an aqueous solution of 1–100 of Congo red. Blood specimens were taken five minutes after the injection and at the expiration of one hour. The concentration of Congo red in these specimens was estimated colorimetrically. A value of 100 was given to the first specimen, and the amount absorbed during the course of the hour was calculated. Normally the index of absorption varies between 50 and 70. In pathological conditions the index is raised to 80 or higher, according to the intensity of the toxic process. The authors believe that in schizophrenia there is an alteration in the working of the reticulo-endothelial system, and that this alteration is in close relation with the clinical picture of the disease.

M. HAMBLIN SMITH.

Insulin Convulsions and the Reticulo-endothelial System. (Klin. Woch., vol. xiii, p. 101, 1934.) Dünner, L., Ostertag, B., and Lücke, H.

Reticulo-endothelial blockade with Indian ink in dogs increases the convulsive dose of insulin six-fold. Similar blockade in rabbits is ineffective.

H. EAGLE (Chem. Abstr.).

The Problem of the Amount of Bromine in Normal Blood and its Variation in Manic-depressives [Il problema del quantitativo di bromo nel sangue normale e delle sue variazioni nella psicosi maniaco-depressiva]. (Riv. di Neurol., vol. vii, p. 339, June, 1934.) Bignoni, A.

The author does not find the method of Wadim Roman reliable, and used instead that of Bernhardt and Ucko (*Biochem. Zeits.*, H. 1–2, 1925). He found that in manic-depressive insanity there was no decrease in the bromine in the blood, as asserted by Zondek and Bier.

G. W.T. H. FLEMING.

Tryptophane in Some Groups of Mentally Affected Patients: IV. (Biochem. terap. sper., vol. xxi, p. 79, 1934.) Neri, A.

The tryptophane content in the serum is increased in progressive paralysis. A parallelism was found between tryptophane content and Wassermann reaction.

A. G. MIX (Chem. Abstr.).

Serological Reactions in Hereditary Syphilis [Reacciones serológicas de la lúes anormalidad infantil]. (Arch. de Neurobiol., vol. xiii, p. 749, 1933.) Juarros, C.

The Wassermann reaction has been proved to possess the greatest sensitivity in the diagnosis of hereditary syphilis; in 161 cases serologically examined there were 124 positive Wassermanns. The benzocol reaction (by the method of Mouriz) holds the second place. The third place is held by the Meinicke turbidity reaction. Judgment on the Meinicke clarification reaction is suspended until a larger number of cases has been examined. At a very short distance follows the reaction of Muttermilch. The Sachs-Georgi reaction is also very sensitive, but there are limits to its usefulness. The reactions of Kahn and Müller have not proved as satisfactory as other workers have found them to be. As a routine measure, for use in all cases, the Wassermann, benzocol and Meinicke reactions should be employed.

M. HAMBLIN SMITH.