

organic psychoses and in the schizophrenias, this correlation was of a higher degree than in the psychoneuroses or manic-depressive psychoses.

G. W. T. H. FLEMING.

*The Passage of Chlorine and Bromine through the Blood Cerebro-spinal Fluid Barrier* [*Sul passaggio del cloro e de bromo attraverso la barriera emato-liquorale*]. (*Riv. Sper. di Freniat.*, vol. lvii, p. 880, Dec., 1933.) *Diserfori, B.*

The author examined 57 patients, and found that chlorine and bromine act independently of one another. In 36 patients he found a greater concentration of bromine in the lowest parts of the arachnoid space. In 50% of cases there were small differences in the chlorine content of the fluid in various portions of the fluid. He recommends estimation of both the bromine and the chlorine.

G. W. T. H. FLEMING.

*Bromide and Chloride Distribution between Serum and Cerebro-spinal Fluid.* (*Proc. Soc. Exp. Biol. Med.*, vol. xxx, p. 473, 1933.) *Mishkis, M., Ritchie, E. B., and Hastings, A. B.*

Five patients were given sodium bromide in doses of .01 per lb. of body-weight per day for five days. Twenty hours after the last dose, serum and cerebro-spinal fluid were tested for bromine by the electrometric titration method. In all instances the ratio bromine in serum to bromine in cerebro-spinal fluid was greater than unity; this supports the theory that bromides are not freely diffusible between serum and cerebro-spinal fluid, in which case the ratio as predicted by the Gibbs-Donnan distribution law would be .95. The ratio bromine and chlorine in serum to bromine and chlorine in cerebro-spinal fluid was .87, which agreed with the reported ratio for chlorine alone.

C. V. BAILEY (Chem. Abstr.).

*Bilirubin and the Blood Cerebro-spinal Fluid Barrier.* (*Deut. Arch. klin. Med.*, vol. clxxiii, p. 234, 1932.) *Klein, N., and Szentinihalyi, S.*

Qualitative and quantitative studies of the bilirubin content of the cerebro-spinal fluid in various types of icterus show no relation between the amount of bilirubin in the fluid and the amount in the serum; bilirubin may be present in the fluid with very little in the serum, while the fluid may be quite colourless, with high concentration in the serum. In the cases studied the appearance of bilirubin in the fluid was dependent on the persistence of the icterus and upon the condition of the reticulo-endothelial system, especially the reticular elements of the meninges, the blood-vessel walls and the choroid plexus. Minimal amounts of bilirubin (not over 2 bilirubin units) were found in the fluid even in severe cholæmia, disturbance of the reticulo-endothelial system or acute atrophy of the liver; the amounts were usually too small to be detected.

P. J. JACKSON (Chem. Abstr.).

*Variations in Blood Urea, Uric Acid and Cholesterol Content during Meningeal and Cerebral Diseases* [*Il comportamento del tasso ureico, dell'acido urico e del colesterolo del sangue nel corso di meningo ed encefalopatie*]. (*Riv. di Pat. Nerv. e Ment.*, vol. xli, p. 96, Jan.-Feb., 1933.) *Lolli, N.*

The author investigated 23 cases of meningeal and cerebral disease, 10 of these being cases of cerebral hæmorrhage. In many cases there was a tendency towards an increase, sometimes very marked. The modifications in the blood-urea were independent of the chlorides, fever or renal alterations. The author subsequently carried on experimental work on rabbits by puncture of the floor of the fourth ventricle. He obtained the same results as he had found clinically. He thinks that metabolism possesses a centre in the floor of the fourth ventricle.

G. W. T. H. FLEMING.