31.96 and 99.40 for the respective sub-groups. There is no true difference between any of the mean figures, excepting neuro-syphilis and tabes without psychosis, and general paresis and tabes without psychosis; in these two instances the difference is so pronounced that there is no question of its existence. Accepting 39.99 mgrm. per 100 c.c. as the upper limit of normal protein, it was found that 23% of all the cases of neuro-syphilis possessed normal values; the figures for the sub-groups were 20.72%, 29.16% and 34.09%.

M. Hamblin Smith.

A Comparison of Some New Flocculation Tests for the Cerebro-spinal Fluid with the Wassermann Reaction (M.B.R. II, Modified Citochol and Modified Kiss Reactions). (Journ. Neur. and Psychopath., vol. xiv, p. 239, Jan., 1934.) Paterson, A. S., and McLaughlin, F. L.

The authors found from an examination of 500 spinal fluids that the Wassermann reaction carried out by means of the technique of Mann and Partner was more sensitive and specific than any of the flocculation tests. Of the flocculation tests, the M.B.R. II was easy to carry out, gave a result which was definite and easy to read, and could be used when there was too little fluid for the Wassermann. The citochol reaction was more difficult to read and was less sensitive. The Kiss reaction, even with the modification suggested, was still less useful.

G. W. T. H. FLEMING.

The Cerebro-spinal Fluid in Multiple Sclerosis. (Brain, vol. lvii, p. 56, March, 1934.) Merritt, H. H.

The author describes the findings in 100 cases of multiple sclerosis. The fluid is completely normal in less than 20% of cases. The intra-cranial pressure is usually normal. Pleocytosis of a moderate degree is common, occurring in 28% of cases. An abnormal colloidal gold curve was present in 71% of cases. The fluid was normal in regard to chlorides, glucose, non-protein N, calcium, phosphorus, sodium, total solids and freezing-point. The Wassermann is always negative. There are no changes that are pathognomonic of multiple sclerosis, but a first or mid-zone colloidal gold curve with or without a slight pleocytosis and increased protein content in an otherwise normal fluid is suggestive of multiple sclerosis, provided there is no history of syphilis or anti-syphilitic treatment.

G. W. T. H. FLEMING.

Studies in the Carbohydrate Metabolism of the Rabbit. I: The True Blood-sugar Value in Convulsions due to Insulin Administration. (Journ. Biol. Chem., vol. civ, p. 535, March, 1934.) Dotti, L. B.

The author found that the non-fermentable reducing substances in rabbits' blood were unaffected by amounts of insulin sufficient to produce convulsions. The total reducing substance in the blood at the incidence of convulsion is the same as the non-fermentable reducing substance in normal blood and blood during convulsions.

G. W. T. H. Fleming.

Convulsions of Undetermined Ætiology. Studies of the Blood-sugar. (Arch. Neur. and Psychiat., vol. xxxi, p. 1055, May, 1934.) Nielsen, J. M.

The author presents a series of 58 consecutive dextrose tolerance curves in idiopathic epileptics. This series showed that periodic or constant low blood-sugar occurs in 90% of epileptic persons during a tolerance test. He thinks that the syndrome of idiopathic epilepsy is almost confined to persons with a tendency to hypoglycæmia. Hyperinsulinism cannot be detected. Other necessary factors, the author thinks, are probably hydration, alkalosis, depletion of glycogen, hyposuprarenalism or imbalance of the vegetative nervous system.

G. W. T. H. FLEMING.