yeast and its products. They were, in addition, given vitamin B concentrates and liver extract by parenteral injection, in order to obviate any possible disturbance in absorption present in the patients or resulting from their use of alcohol. Improvement in the polyneuritis occurred in every instance. The writer thinks that alcoholic polyneuritis does not result primarily from a direct neurotoxic effect of alcohol, but is probably due to dietary deficiency, possibly conditioned in some cases by disturbed gastro-intestinal function. Alcoholic polyneuritis may be regarded as similar to the polyneuritis of beri-beri and treated accordingly.

G. W. T. H. FLEMING.

## 5. Pathology, Biochemistry and Bacteriology.

Value and Significance of the Boltz Acetic Anhydride Reaction of Cerebro-spinal Fluid in Neuro-psychiatry. (Minerva Med., vol. ii, pp. 160-3, 1934.) Borgarello, G.

The Boltz reaction on cerebro-spinal fluids from 394 cases of various nervous and mental disorders showed a certain parellelism to the amount of globulin, but this was not strictly consistent nor proportional. Similar relations existed between the Boltz and Wassermann reactions. The Boltz reaction was considered of complementary diagnostic value.

Helen Lee Gruehl (Chem. Abstr.).

The Alkali Reserve of the Blood and the Spinal Fuid. (Magyar Orvosi Arch., vol. xxxv, pp. 256-66, 1934.) Thurzó, J., and Katzenelbogen, S.

Intraperitoneal injection of concentrated solutions of ammonium chloride causes acidosis in cats. In acute acidosis the decrease in carbon dioxide-combining power of the blood-serum is not paralleled by that of spinal fluid. In chronic acidosis, however, there is a decrease of the alkali reserve of the blood as well as the spinal fluid. Chronic acidosis, as produced by ammonium chloride, causes tonic and clonic convulsions.

H. TAUBER (Chem. Abstr.).

Ultra-violet Absorption Spectrum of Cerebro-spinal Fluid in Progressive General Paralysis. (Rev. especialidades, vol. vi, pp. 8, 1250-6, 1931; Anales asoc. quim. Argentina, vol. xxii, p. 204B.) Pirosky, I.

Examination of absorption of ultra-violet radiation by cerebro-spinal fluid in apparatus comprising an Adam-Hilger quartz spectrograph, model E³, with a rotary sector, by light emitted by a condenser discharge at 15,000 v., in 20-mm. tubes, at a concentration of 17-43 mgrm. of protein per 100 c.c., shows differentiation of normal fluids from that of progressive general paralysis, the latter containing small quantities of proteins. The variations in the shape of the curves and in the width of the absorption bands, in progressive paralysis, are due to the presence of globulin. This method allows safe and accurate identification of the presence of globulins at concentrations at which proportion and coagulation reactions are doubtful or negative.

E. M. Symmes (Chem. Abstr.).

The Cholesterol Content of the Cerebro-spinal Fluid [Der Cholesteringehalt des Liquor cerebrospinalis]. (Arch. Psychiat., vol. cii, p. 147, 1934.) Holthaus, B., and Wichmann, B.

The authors estimated the cholesterol content of the cerebro-spinal fluid in 390 cases, 56 of which were normal. The technique is described in detail, and is a modification of the methods of Bloor, Allen and Pelkan and of Liebermann-Burdach. The normal content varies from 0.31 to 0.6 mgrm.%.

The authors find an increase of the cholesterol whenever there is a destruction of the lipoids in the central nervous system, or when there has been an alteration in the exchange between blood and cerebro-spinal fluid. No constant relationship to any single disease could be discovered. One case only (a hypersecretory hydrocephalus) showed a decrease of cholesterol.

S. L. Last.