cerebro-spinal fluid. Hinman also examined ten cases with similar results. The present investigator shows that in these experiments satisfactory controls were not used, and he establishes four criteria, which must be satisfied before the assertion can be made that a drug whose detection depends on a chemical test appears in a particular body fluid after the drug has been given to the patient.

Experiments with the tests for formaldehyde and hexamine are described, and the phloroglucin test is found the most sensitive, but not as sensitive as previous experimental evidence would suggest. It is found that the sensitivity of the tests is impaired in the cerebro-spinal fluid.

A comprehensive table is given, showing the results of experiments on the cerebro-spinal fluid of 30 cases, of varying types of neurosis, psychosis, organic and infectious diseases of the nervous system, examined by the author. In each case the cerebro-spinal fluid has been taken before and after the administration of hexamine, either orally or intravenously, and each cerebro-spinal fluid has been examined by every relevant test, including the reaction, some with litmus and some by pH estimation. It is found that hexamine given orally or intravenously appears in the cerebro-spinal fluid 15 to 30 minutes after administration, but no formaldehyde is ever found in the cerebro-spinal fluid. The H-ion concentration of the cerebro-spinal fluid is not such as to favour liberation of formaldehyde from hexamine in the cerebro-spinal fluid, nor yet to prevent entirely the dissociation of hexamine. No marked difference is found between the excretion of hexamine in normal and in abnormal cerebro-spinal fluids. The writer has also investigated the bactericidal action of hexamine, and finds that hexamine itself has no bactericidal action, but any that is developed is due to the liberation of formaldehyde. No change in the antiseptic power of hexamine or formaldehyde is brought about by excess of serum protein in the solutions. The bactericidal power of hexamine remains *nil*, whilst that of formaldehyde is not altered.

Search has been made into the records of all the cases of acute infectious disease of the central nervous system admitted to the Queen's Hospital, Birmingham, during the years 1922–27, with special reference to the administration of hexamine. No real evidence was found in favour of the employment of hexamine as a therapeutic measure. F. H. HEALEY.

The Distribution of Soluble Phosphorus in the Nervous Centres, with Particular Regard to the Cortical Areas. (*Boll. soc. Ital. biol. sper., vol. viii, p.* 467, 1933.) *Longo, V.*

Soluble phosphorus, either inorganic or total phosphorus, is irregularly distributed in the various parts of the cerebro-spinal axis; it is found most where the grey substance predominates. Among the cortical lobes the richest in phosphorus is the occipital, followed by the sensori-motor, temporal and parietal regions. P. MASUCCI (Chem. Abstr.).

Diphtheria Toxin and Cerebral Phosphorus-containing Lipoids. (*Boll. soc. Ital. biol. sper., vol. viii, p.* 137, 1933.) *Cocchi, C.*

Diphtheria toxin placed in contact with either an alcohol-ether extract of cerebral lipoids, or directly with nerve substance, produces a marked and constant diminution in lipoidal phosphorus, as determined by Whitehorn's method. There is also a noticeable diminution in lipoidal phosphorus in the cerebral lipoids of the guinea-pigs which died of diphtheria and in children who died from post-diphtheritic paralysis. P. MASUCCI (Chem. Abstr.).

The Blood Cholesterol in Schizophrenia. (*Arch. of Neur. and Psychiat., vol. xxx, p.* 567, *Sept.*, 1933.) *Looney, J. M., and Childs, H. M.*

The authors found, in a group of 50 male schizophrenics studied over a period of seven months, at intervals of two weeks and of three months, that the mean cholesterol values were 146 mgrm. per 100 c.c. for the first period, 161 mgrm.