## The Neuro-physiological Effect of Intoxicating Drugs. (Amer. Journ. Psychiat., vol. xiii, p. 1007, March, 1934.) Lindemann, E.

Alterations of behaviour produced by adrenalin, sodium amytal, cocaine, mescaline and hashish have been observed. Increased contact and increased interest in the outside world result from sodium amytal and cocaine; withdrawal of interest and increased absorption in inner experiences result from mescaline and hashish. Blood-sugar level, white cell-count, the patellar tendon reflex time and the chronaxia values of the right upper extremity were also investigated. All the drugs produced changes in most of the physiological sectors of the organism. The physiological effect of the different drugs is not uniform; it varies just as much with the reaction types of the individual as does the psychological effect. Bloodsugar level and leucocyte level are fairly typical for each drug, and change little from person to person. The patellar reflex time shows limited changes for the different drugs ; increased variability is the main result of cocaine and mescaline in psycho-neurotics, though not demonstrable in the schizophrenic group. Adrenalin produces a marked rise in motor chronaxia level. Sodium amytal produces a slight drop in level. Loss of proper chronaxia ratio occurs in a number of organic conditions, and also as a result of toxic conditions. Whether a drug will produce a loss of ratio depends upon the state of the individual. M. HAMBLIN SMITH.

# The Neuro-muscular Action of Amides and Ammonium Salts. (Compt. Rend., vol. cxviii, p. 284, 1934.) Bonnet, R.

The amides (acetamide, oxalamide, succinamide) and urea are toxic to muscle and without action on nerve excitability. They are to be classed as curarizing poisons. Ammonium salts (acetate, carbonate, oxalate, succinate) are both muscle and nerve toxins. The pharmacodynamic action of urea favours the diamide constitution. P. D. ADAMS (Chem. Abstr.).

#### The Action of Veratrine, Eserine and Nicotine on the Neuro-muscular Activity Studied by Sound Reflexes. (Arch. fisiol., vol. xxxiii, p. 300, 1934.) De Marco, R., and Boccia, G.

All three alkaloids produce an increase of the reflex activity. Nicotine and veratrine have a longer action than eserine.

Nicotine first produces an inhibition of the reflexes for a certain period.

A. E. MEYER (Chem. Abstr.).

#### Bulbocapnine: Effect on Animals with Lesions of the Central Nervous System. (Arch. of Neur. and Psychiat., vol. xxxi, p. 987, March, 1934.) Ingram, W. R., and Ransom, S. W.

In labyrinthectomized cats the injection decreased the tremor and resulted in increased economy of movement. Animals with lesions of the mesencephalon involving the red nuclei showed much greater susceptibility to bulbocapnine than did normal animals, and well-marked catalepsy could be produced in them by amounts which would ordinarily be inadequate. The catalepsy resulting from bulbocapnine intoxication was found to be similar to that produced by lesions in the retromamillary region of the brain-stem. Cats which had previously displayed catalepsy due to retromamillary lesions were found to be exceedingly susceptible to the effects of bulbocapnine, and even after recovery from the effects of the operation a very small dose of the drug was capable of re-inducing a cataleptic state of great depth. G. W. T. H. FLEMING.

### The Influence of Ephedrine Sulphate on the Reflexes of Spinal Monkeys. (Journ. Pharmacol., vol. xlix, p. 363, 1933.) Jacobson, J. F., and Kennard, M. A.

Ephedrine sulphate injected into monkeys after cord transection causes an increase in the excitability of spinal reflexes, believed to be due to direct action on the central nervous system. T. H. RIDER (Chem. Abstr.).

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