

and dogs is a strong retention of urine, lasting as long as 48 hours. After feeding 400 mgrm. of the HCl salt to rabbits some 40-50% was excreted as 3, 4, 5-(MeO)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>H (I). This acid, however, is relatively non-toxic, and a dose of 800 mgrm. fed to a rabbit was excreted to the extent of 60% without retention of urine or evidence of physiological changes. Closely related substances, e.g., 3, 4, 5-(MeO)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CHO and 3, 4, 5-(MeO)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH (II) were decidedly more toxic, the former being excreted as 3, 4, 5-(MeO)<sub>3</sub>C<sub>6</sub>H<sub>2</sub>CO<sub>2</sub>H, and the latter as a nitrogenous substance containing MeO. In human beings, on the other hand, mescaline was not excreted as I, and I itself was excreted to 75% without causing drunkenness or urine retention. An excretory product of mescaline was an oil which on hydrogenation took up three hydrogen molecules and formed a saturated crystal substance of the formula C<sub>10</sub>H<sub>17</sub>O<sub>3</sub>N, containing 1 MeO and incapable of forming a picrate, chloroaurate or chloroplatinate, in contrast to the hydrogenation product of mescaline. Mescaline has a more powerful action on normal persons than on schizophrenics, whereas the reverse is true of the 2, 3, 4-isomer.

A. W. DOX (Chem. Abstr.).

*A Quantitative Study of the Phenomena of Synergism: Potentiation of Hypnotic Action in Mice.* (Compt. Rend., vol. cci, pp. 796-7, 1935.) Olszycka, L.

By injecting together inactive doses of alcohol and ethylbutylbarbituric acid, sleep of 2-78 minutes' duration was produced, depending upon the proportions used. A mixture of effective doses of the two hypnotics produced sleep of only slightly longer duration than that produced by each compound separately.

E. W. SCOTT (Chem. Abstr.).

*Narcoses and the Chronaxie.* (Journ. Pharmacol., vol. lv, pp. 72-81, 1935.) Knoefel, P. K.

Cocaine, chloral hydrate and urethan influence excitability rather than conduction of nerve. The chronaxie is not an index of the excitability of nerve during narcosis.

T. R. RIDER (Chem. Abstr.).

*Paraldehyde Idiosyncrasy.* (Brit. Journ. Anaesthesia, vol. xiii, pp. 25-7, 1935.) Brown, G.

Prolonged, deep, unconsciousness developed in a man æt. 20 and weighing 123 lb., with a blood-pressure of 120/78, after the rectal administration of 4 dr. of paraldehyde in 5 oz. of saline solution. Complete loss of all reflexes developed, associated with rapid respiration and very slight fall in blood-pressure. Eliminative methods led to recovery.

JAMES C. MUNCH (Chem. Abstr.).

*Barbiturates. XII. Factors Governing the Distribution of Barbiturates.* (Journ. Pharmacol., vol. lv, pp. 46-61, 1935.) Dille, J. M., Linegar, C. R., and Koppányi, T.

Barbiturates can be detected in the blood as long as they are present in the tissues, and no organ tissue has any specific affinity for them, although barbital is less concentrated in the brain than in other organs.

*XIII. The Duration of Action of Barbiturates.* *Ibid.*, pp. 62-71.

Long-acting-barbiturates are destroyed slowly; hence they are present in the brain for long periods. Pento-barbital is quickly destroyed, and rapidly disappears from the central nervous system; hence it is short-acting.

T. H. RIDER (Chem. Abstr.).

*The Effective Use of Small Non-Dehydrating Doses of Epsom Salts in Epilepsy.* (Journ. Neur. and Psychopathol., vol. xvi, p. 213, Jan., 1936.) Wolf, A.

In a group of 109 cases of epilepsy, magnesium sulphate in a dose not quite sufficient to produce a watery stool was given to each case in a full 8-oz. glass of water: 30% benefited. The group of cases with cerebral arterio-sclerosis showed