applied to the animal, the electrical parameters were selected whilst the output was passed through a 5 KΩ resistance—a resistance which approximates that of the animal. Subcutaneous needle electrodes were positioned one on the head and one half way down the spine. The output was then switched to the animal, and the two currents readjusted to the desired level.

The technique of " crash induction ", in which higher currents than those necessary for maintenance are applied initially, was commonly used.

Guinea-pigs, mice, rabbits and rats have been anaesthetized with variable success—there being marked species and individual variations. Most success was achieved with rats. This species may be anaesthetized for periods of over an hour using the following parameters: d.c. current, between 5 and 8 mA; pulsed current, 1–3 mA; frequency 100 pulses per sec; and pulse width 2–5 msec.

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Spontaneous and drug-induced electrical changes in longitudinal muscle strips from the rabbit duodenum

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Simultaneous tension and electrical changes were recorded in longitudinal muscle strips taken from rabbit duodenum (Ambache, 1954) using a sucrose-gap apparatus (Bülbring & Burnstock, 1960) in conjunction with a Grass polygraph.

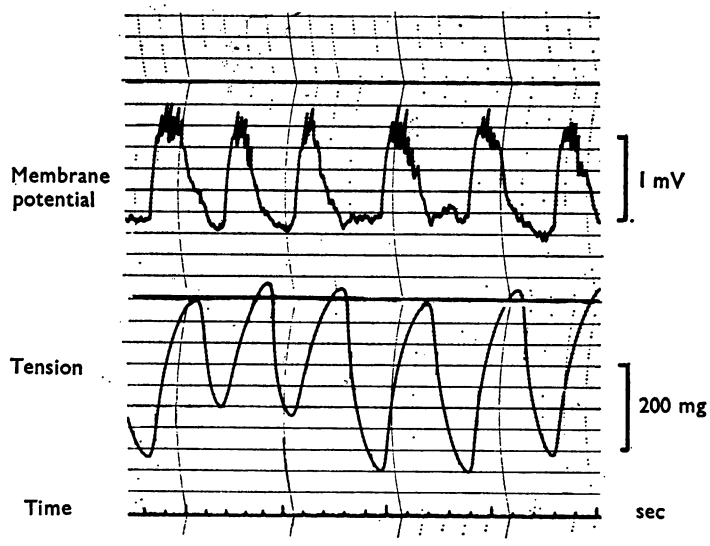

FIG. 1. Rabbit duodenum longitudinal muscle strip. Spontaneous tension and membrane potential changes.

The characteristic regular tension changes of the Finkleman preparation were shown by this isolated muscle strip. These tension changes were associated with slow depolarizations leading to bursts of spike activity (Fig. 1).

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The estimation of amylobarbitone and hydroxyamylobarbitone in serum by gas liquid chromatography

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A sensitive method has been developed for the estimation of amylobarbitone in human blood serum after sedative or hypnotic doses. The threshold was about 0·2 μg/ml.

Quinalbarbitone (4·0 μg) was added to 2·0 ml. samples of serum as an internal standard. The samples were acidified, saturated with ammonium sulphate and extracted with 20 ml. of diethylether.

The ether extracts were concentrated to about 100 μl. and transferred to activated thin layer plates (Kieselgel, H., Merck; 0·24 mm). The plates were developed first

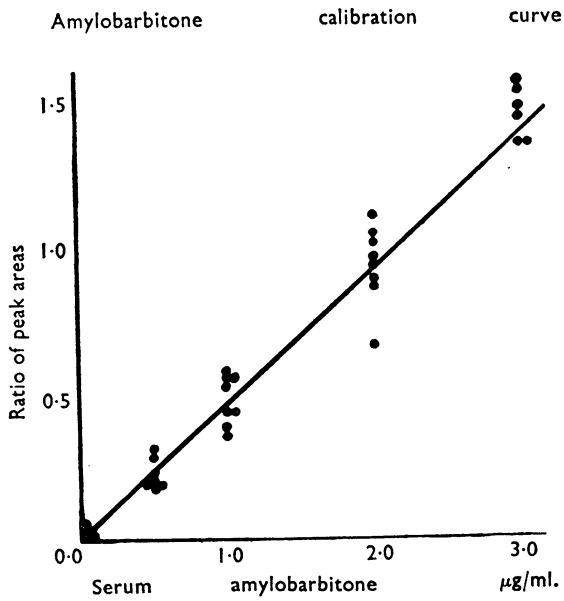

FIG 1.