

utes. When the traction is removed, there is again a latent period of several seconds, and then the pressure assumes its original level. Up to a certain point, the extent of the fall varies with the force of the traction; in most animals the maximal fall is reached when a weight of about 200 gm. is suspended from the divided carotid artery. A larger weight causes dyspneic convulsive respiration and may raise the blood pressure, probably by vaso-constriction.

The reflex is fairly resistant to most forms of shock. It occurs after curare, atropin, suprarenal, strychnin and phenol, and during depressor, splanchnic, and accelerator stimulation. When moderate doses of nicotin are injected, it is temporarily abolished, but reappears in a few minutes, whilst the vagus ganglia are still paralysed. This phenomenon can be reproduced by repeating the nicotin treatment.

11 (267)

A modification of Teichmann's method for obtaining hemin crystals, with a demonstration of specimens.

By **JAMES P. ATKINSON** and **ARTHUR I. KENDALL**.

*[From the Chemical Laboratory, Department of Health,
City of New York.]*

This modification consists in heating suspected blood in a tightly plugged or sealed tube. Heating is best carried out by immersing the tube in boiling water. The reagents are those usually employed, *i. e.*, sodium chloride and glacial acetic acid. Heating is continued for fifteen minutes, at the end of which time the tubes are removed from the water bath and allowed to cool slowly at room temperature. After cooling, the tubes are broken open and the liquid poured into a watch glass or small evaporation dish and concentrated over the water bath. When the volume of the liquid has thus been reduced to a few drops, it is poured on a glass slide and covered with a cover glass. If sodium chloride crystals appear under the microscope a drop of water will dissolve them and leave the observation of the hemin crystals unobstructed. The treatment with the hot glacial acetic acid in the closed tube completely decolorizes the material on which the stain occurs. Heating in the closed tube keeps the condition of temperature and

strength of reagents constant. This method appears to yield larger crystals than those obtained by the old method.

12 (268)

The influence of ether anesthesia on the excretion of nitrogen by dogs.

By **PHILIP B. HAWK.**

[From the Laboratory of Physiological Chemistry of the Department of Medicine of the University of Pennsylvania.]

A series of nine experiments were made upon four dogs, the experiments ranging in length from 7 to 17 days. The plan followed was to get the animals into a condition of nitrogen equilibrium, then to induce ether anesthesia continuously for periods varying from $\frac{1}{2}$ hour to $4\frac{1}{2}$ hours. The initial influence of the ether was to cause an increased excretion of nitrogen, the average daily percentage increase varying from 6.5 per cent. after 30 minutes anesthesia to 43.5 per cent. after 3 hours narcosis. In the latter case the animal had been anesthetized on each of the two preceding days and therefore this large increase may represent the cumulative effect of the anesthesia. In six of the nine experiments the average daily excretion of nitrogen continued above normal during the entire experimental time after anesthesia was induced, the ultimate average daily increase varying from 3.5 per cent. for a 5-day period following 2 hours anesthesia to 17.5 per cent. for a 14-day period after ether narcosis had been induced for periods of 1, 2 and 3 hours on 3 successive days. In the three experiments which showed a diminished excretion of nitrogen after anesthesia the normal output of nitrogen was decreased 1.5 per cent., 1.8 per cent., and 4.0 per cent. as the result of anesthesia periods of $\frac{1}{2}$ hour, $4\frac{1}{2}$ hours and 1 hour respectively.

In each experiment the anesthetic had a diuretic effect, the extent of the diuresis varying from an initial average daily increase of 5.7 per cent. in the volume of urine after $\frac{1}{2}$ hour of anesthesia to an increase of 24.8 per cent. after an anesthesia period of $4\frac{1}{2}$ hours. The diuretic effect continued until the close of the experiment in every instance except one, the average daily percentage