

posite the insertion of the carotid cannula is passed an iron rod, and by means of clamps the ends of the rod are fixed to two stout retort stands. A short piece of normal blood pressure tracing is taken on the drum and then at a given moment the dog is placed in a vertical feet-down position, by rotating the board (the dog must be carefully tied on the board). The blood pressure falls, but shows some tendency to return to normal while the dog is still upright. If the animal be very deeply under an anesthetic there will be a very marked fall in blood pressure with no tendency of the blood pressure to return, since the vasomotor nerves and center are no longer able to compensate for the hydrostatic effect of the blood in the vertical position (see p. 193).

E. The Effect of Asphyxia on the Blood Pressure (see p. 195).

A respiratory tambour is applied over the thorax or abdomen and connected by tubing with a recording tambour, the writing point of which is accurately adjusted so as to write in the same vertical line as the writing point of the mercury manometer. The tubing coming from the cannula is clamped and the effect of the resulting asphyxia on the respiratory movements and on the arterial pressure is noted. The three stages, as described on p. 000, should be obtained, but when the third stage is reached the clamp must be removed from the trachea so as to allow the animal to recover.

Note—1, the slowing of the heart; 2, the gradual, often insignificant, rise in blood pressure; 3, the effect of the respiratory movements on the blood pressure. Both vagus nerves are cut and the above experiment repeated, noting the difference in results. The rise in blood pressure is very great, since now the heart is no longer slowed by the vagus stimulation brought by the excess of the carbon dioxide in the blood.

DEMONSTRATION No. 4.

The Mechanism of Glandular Secretion.

A. Salivary Secretion.

The animal is anesthetized and prepared as in demonstration No. 1. An incision is made along the internal border of the jaw bone. The internal border of the digastric muscle is thus exposed. This is pulled aside by a hook so as to expose the transverse fibers of the mylohyoid muscles. The mylohyoid is carefully severed following the line of the digastric muscle. The edges are pulled to one side and the lingual nerve is seen emerging from under the ramus of the jaw. In its transverse course to the middle of the jaw, it crosses the ducts of the submaxillary and sublingual glands. Where it crosses the ducts it gives off a small branch, the chorda tympani. A ligature is placed beneath