

electrode on one foot (well moistened with strong saline solution) and connect its wire with one pole of the secondary coil to the other pole of which a fine stigmatic electrode is attached. Clear away any blood clot from the upper end of the cord (using a moistened camel's hair brush) and while holding the neck stump in one hand, stimulate the dorsal columns of the cord, first near the median fissure and then as near as possible to the posterior horn of grey matter. In the former case it is the homolateral hind limb that flexes, in the latter case, the homolateral fore limb. It may be necessary to repeat the observation several times with varying strengths of stimulation in order to secure definite results.

5. THE FUNCTIONS OF THE SPINAL ROOTS, by removing the laminae and articular processes of the lumbar vertebrae. The procedure for this operation is in general the same as that described for the dog (p. 223) with the difference that the spinous processes of the exposed lumbar vertebrae are not cut at their bases, but the laminae are freely exposed by cutting away the muscles which lie over them. The articular processes are then snipped across and while pulling up the lowermost (7th) spinous process with a strong forceps, the laminae are cut through beginning with the 7th lumbar and working upwards. The ganglia of the posterior roots are brought into view by picking away the stumps of the articular processes. The 7th ganglion lies on a line with the iliac crests.

Finally it is important to use the decapitate preparation to study the various conditions which control THE ARTERIAL BLOOD PRESSURE. The technique is the same as that already described for the anaesthetized dog (p. 72) only, of course, small cannulae must be used and the pressure established in the tubing which connects cannula to manometer prior to removal of the clip from the artery, must not be more than about 50 mm. Hg.

There are certain vascular reactions which it is especially valuable to investigate in the decapitate preparation. These are:

1. The effect of stimulation of the spinal cord on the blood pressure.
2. The effect of varying amounts of epinephrin injected into the femoral vein.
3. The effect of pituitary extract similarly injected.
4. The effect of asphyxia.

This last group of observations may be done by advanced students.