

A SIMPLE DOG HEAD HOLDER FOR USE WITH THE LAB TRONICS STEREOTAXIC INSTRUMENT¹

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The use of the dog as an experimental animal in neuro- and psychopharmacological studies is increasing because many drugs affect the dog in a manner similar to that of man. At least two stereotaxic atlases of the mongrel and/or beagle dog already have been published (Leontovich and Mering 1956; Lim *et al.* 1959) and several others are in the planning stage. Hume and Ganong (1956) have described a special stereotaxic instrument for use with X-ray visualization of the third ventricle of mongrel dogs by means of an intraventricular injection of a radiopaque material.

Inasmuch as many investigators now possess a Lab Tronics stereotaxic instrument designed for the

into the horizontal bars below the old numbers (for the cat and monkey) which were colored black. An extension of the horizontal bars and a supporting frame for the hind quarters of the animal is of value since most dogs of approximately 10 kg. weight extend considerably beyond the horizontal bars supplied by the manufacturer.

At present, the Horsley-Clarke stereotaxic coordinates for various structures in the dog brain are estimated from serial sections of the brains of a number of pure-bred beagle dogs approximately 8 to 12 kg. Considerable variation (up to 5 mm.) in the coordinates between long-legged and short-legged beagles have been observed. As a result, beagle-like

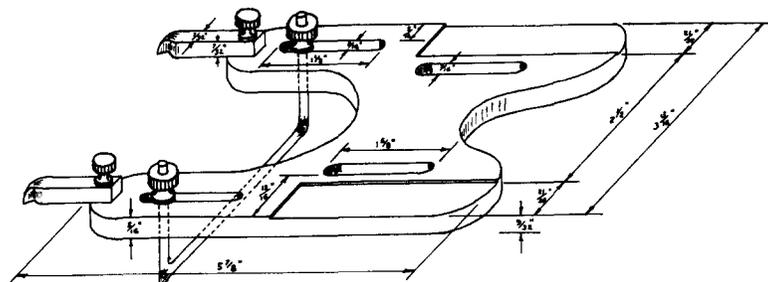




Fig. 2

Photograph of complete instrument with a dog's skull held in the Frankfort plane so that Horsley-Clarke coordinates can be used.

REFERENCES

- HUME, D. M. and GANONG, W. F. A method for accurate placement of electrodes in the hypothalamus of the dog. *EEG Clin. Neurophysiol.*, **1956**, *8*: 136-140.
- LEONTOVICH, T. A. and MERING, T. A. Data on the topography of subcortical formations in the dog brain in relation to experimental interferences in them. Original in Russian: *Biull. Eksper. Noi. Biol. I Med.*, **1956**, *42*: 71-78. English translation in: *Bull. Exper. Biol. Med.*, USSR, **1956**, *61*: 713-722.
- LIM, R. K. S., LIU, CHEN-NAO and MOFFITH, R. L. *A Stereotactic Atlas of the Dog's Brain*. **1959**, C. C. Thomas.

Reference: DOMINO, E. F. A simple dog head holder for use with the Lab Tronics stereotaxic instrument. *EEG Clin. Neurophysiol.*, **1960**, *12*: 521-522.

