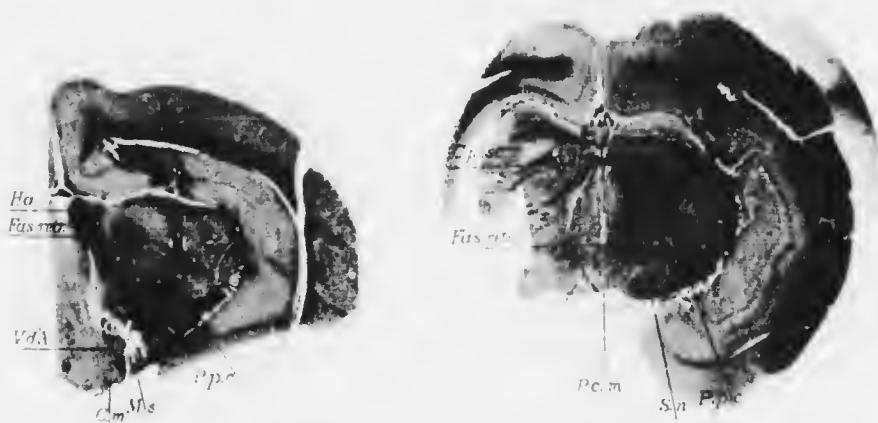


was due to stimulation of fibres in the pes pedunculi. As already mentioned, my own observations show that the effect is produced by contraction of the ipsilateral closing muscles. This fact makes it appear improbable that the contraction depends on stimulation of the pes. Examination of the anatomical arrangements of the region shows that the contraction is caused by stimulation of the mandibular nerve at its emergence from the skull by escape of current from the electrodes.

With respect to the disappearance of mastication and swallowing beyond the level of Fig. 1 it would seem that a more plausible explanation may be offered than that of Réthi. According to Prof. Sherrington¹



Figs. 1 and 2. Cross-sections of brain of rabbit. *C.m.*, corpus mamillare; *Fas. retr.*, fasciculus retroflexus; *Ha.*, habenula; *P.p.c.*, pes pedunculi cerebri; *V.d.A.*, bundle of Vieq d'Azyr; *M.s.*, situation of bristle indicating point from which mastication and swallowing were yielded; *C. post.*, posterior commissure; *P.c.m.*, pedunculus corporis mamillaris; *S.n.*, substantia nigra.

the explanation is to be found in the fact that the fibres concerned in these reactions have, beyond the level of Fig. 1, left the pes as "aberrant fibres" to proceed to their respective motor nuclei. Definite proof of the correctness of such a view would be furnished by demonstrating both mastication and swallowing in the decerebrate rabbit. Whilst swallowing is readily elicitable in the decerebrate cat⁽⁵⁾ its demonstration in the decerebrate rabbit appeared desirable. Decerebration was, accordingly, performed in the rabbit by Sherrington's original method as described for the cat, both hemispheres being completely removed. The level of the transection was, of course, a considerable distance posterior to that

¹ Personal communication.