

artery caudally and gives rise to the external carotid rostrally. The recurrent origin of the external carotid is clearly marked externally, in the angle between the common and external carotids, by bulges produced by the convex aspects of the medial and lateral caudal roots of origin of the external carotid.

The *common carotid artery* (which has a bore of about  $200\mu$ ) dilates in the proximal third of the labyrinth to form the *main chamber*. This chamber,  $500\mu$  long and  $300\mu$  across, is placed eccentrically towards the caudal aspect of the organ, and is drained distally by four openings, two directed dorsally to the internal carotid rete and two rostrally to the external carotid rete.

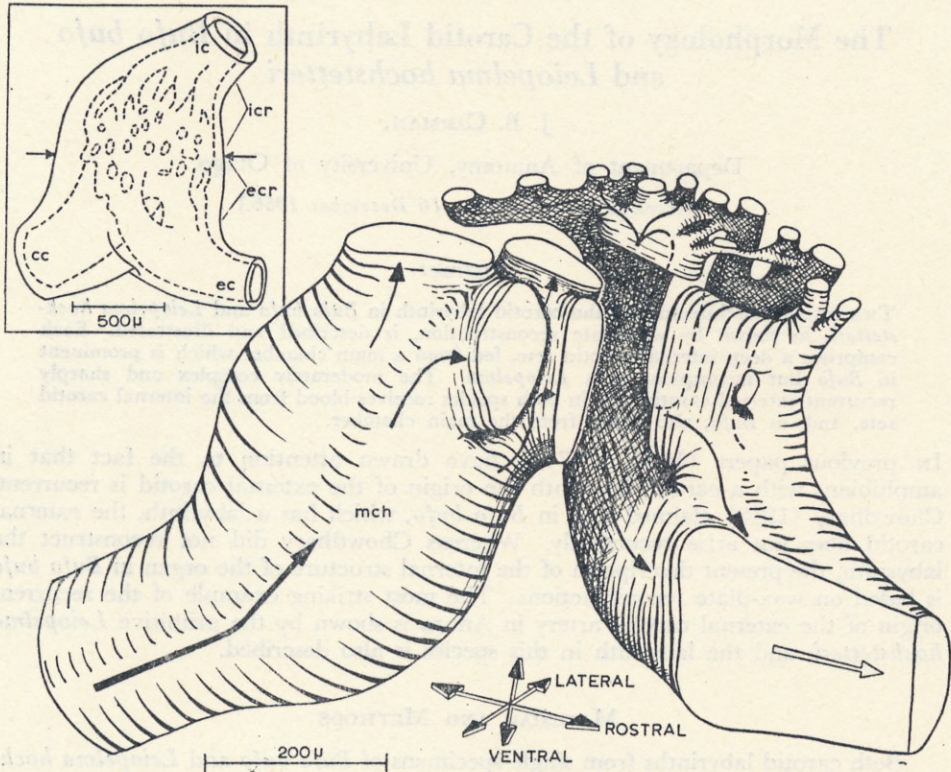


FIG. 1.—A cast of the interior of the proximal half of the carotid labyrinth in *Bufo bufo*. The cast of the whole interior is shown ghosted within the labyrinth in the inset; proximal (ventral) is below and the common carotid (cc) enters from the left. The main drawing illustrates that part of the interior of the organ below the arrows in the inset. The common carotid and main chamber (mch) have been detached from the rest of the cast and withdrawn slightly caudally to reveal the four openings leaving the dorsal part of the main chamber. The remainder of the cast is of the lateral half of the external carotid rete (ecr) and the commencement of the external carotid artery (ec) which has been sectioned longitudinally where the medial half of the external carotid rete has been removed. The uppermost parts of the cast represent the commencement of the internal carotid rete (icr) which can be seen feeding the internal carotid artery (ic) in the inset. The arrows in the main drawing represent the direction of blood flow.

The *external carotid rete* is a simple one, comprising three or four major roots. One or two of these arise directly from the rostral aspect of the main chamber and turn back quite sharply to run a short recurrent course before opening into the dorsal wall of the external carotid artery. These rostral roots communicate by a few small channels with the internal carotid rete. Arising from the medial and