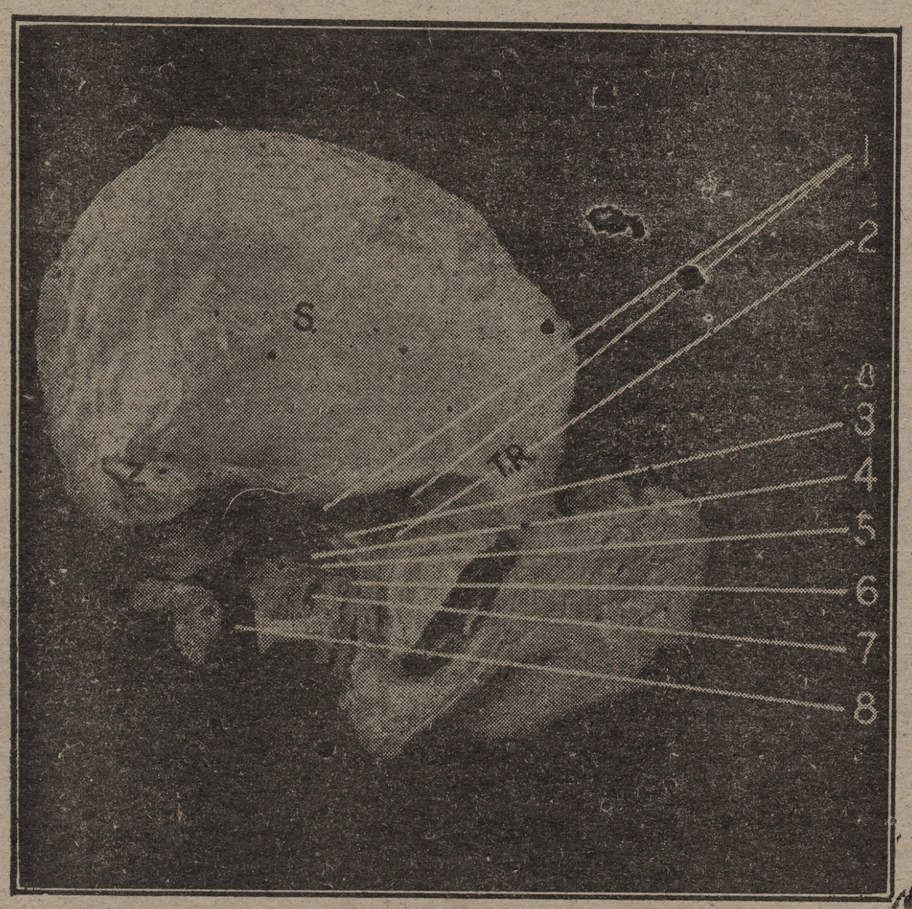
RELATION OF DESCENDING AND TRANSVERSE FACIAL NERVE TO HORIZONTAL OR EXTERNAL SEMICIRCULAR CANAL AND OVAL WINDOW

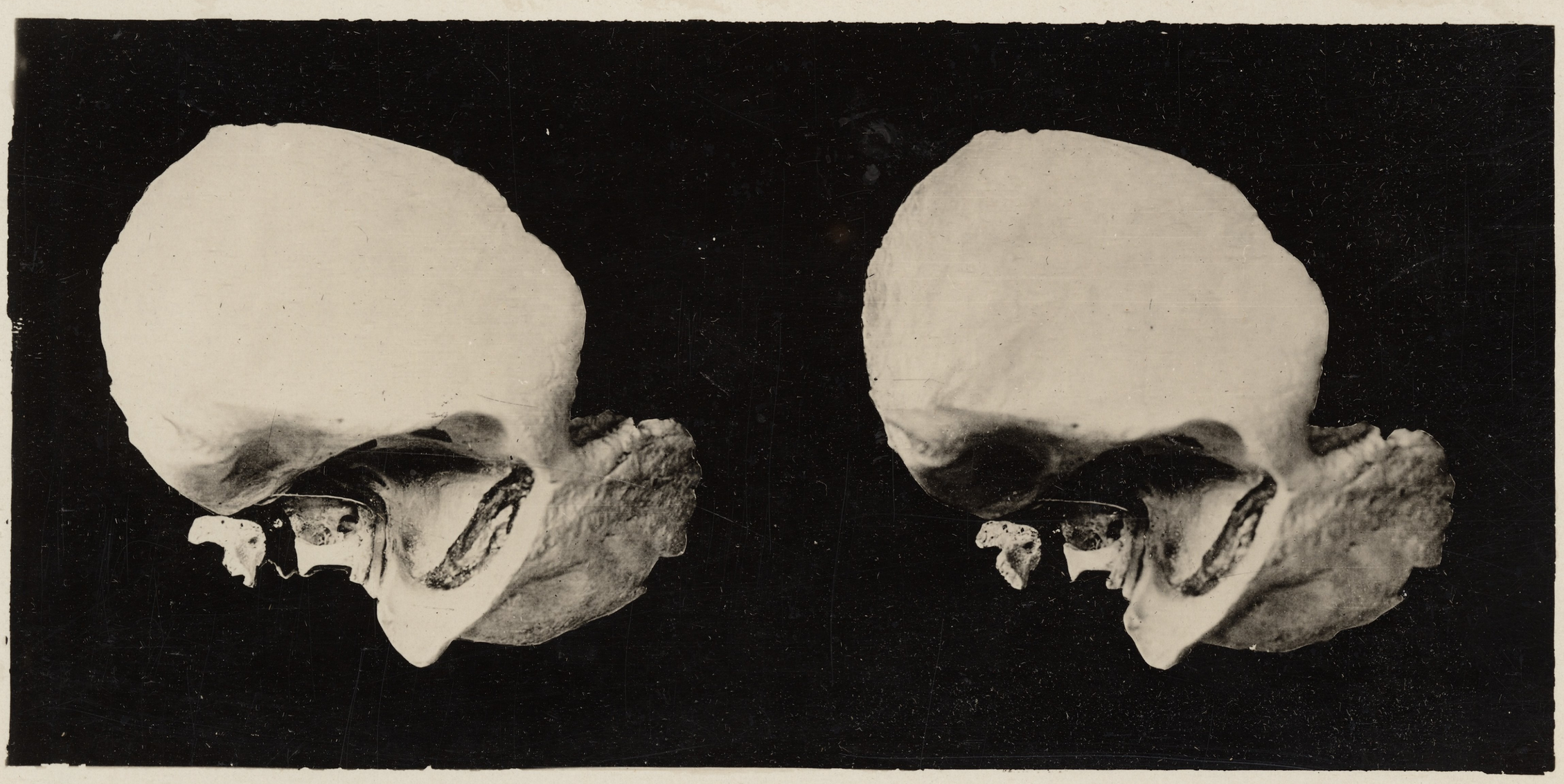
This dissection is carried sufficiently far and to a greater depth than any of the foregoing serial specimens. The entire auditory canal has been removed to the level of the annular ring. The facial nerve has been exposed throughout its entire course. The same depletion of the mastoid cells, trephine openings have been made through tegmen, same as in Fig. 6. The external wall of the ext. semi-cir. C. (horizontal) is removed. It will be seen that the transverse portion of the facial nerve passes beneath and parallel to this semi-circular, and above and parallel to the oval window; the fallopian canal wall is all that separates them. The ascending portion of the carotid canal forms the anterior inferior boundary of the tympanic cavity. This specimen shows how easily the carotid artery can be injured while curetting the tympanic mouth of the eustachian tube, for the external inferior wall of the eustachian tube forms the external posterior wall of the carotid canal. This lamina of bone (½ to 2 m.m. thick) is all that separates the eustachian tube from the artery.



The figures indicate—

1—Trephine Openings through Tympanic and Antral Tegmen
2—Mastoid Antrum (Floor)
3—Horizontal or External Semi-Cir. Canal
4—Oval Window
5—Chorda Tympani Nerve
6—Facial Nerve
7—Round Window
8—Carotid Artery

IMPERIAL PUBLISHING COMPANY - - - - - - NEW YORK



SECTION X | NO. 13