ingeal artery; (4) lateral to the hiatus, a smaller opening, occasionally seen, for the passage of the lesser superficial petrosal nerve; (5) near the apex of the bone, the termination of the carotid canal, the wall of which in this situation is deficient in front; (6) above this canal the shallow **trigeminal impression** for the reception of the semilunar ganglion.

The **posterior surface** (Fig. 138) forms the front part of the posterior fossa of the base of the skull, and is continuous with the inner surface of the mastoid portion. Near the center is a large orifice, the **internal acoustic meatus**, the size of which varies considerably; its margins are smooth and rounded, and it leads into a short canal, about 1 cm. in length, which runs lateralward. It transmits the facial and acoustic nerves and the internal auditory branch of the basilar artery. The lateral end of the canal is closed by a vertical plate, which is divided by a horizontal crest, the **crista falciformis**, into two unequal portions (Fig. 140). Each portion is further subdivided by a vertical ridge into an anterior and a posterior part. In the portion beneath the crista falciformis are three sets of foramina; one group, just below the posterior part of the crest, situated in the **area cribrosa media**, consists of several small openings for the nerves to the saccule; below and behind this area is the **foramen singulare**, or opening for the nerve to the posterior semicircular duct; in front of and below the first is the **tractus spiralis foraminosus**, consisting of a number of small spirally arranged openings, which encircle the **canalis centralis cochleæ**; these openings together with this central canal transmit the nerves to the cochlea. The portion above the crista falciformis presents behind, the **area cribrosa superior**, pierced by a series of small openings, for the passage of the nerves to the utricle and the superior and lateral semicircular ducts, and, in front, the **area facialis**, with one large opening, the commencement of the canal for the facial nerve (**aquæductus Fallopii**). Behind the internal acoustic meatus is a small slit almost hidden by a thin plate of bone, leading to a canal, the **aquæductus vestibuli**, which transmits the ductus endolymphaticus together with a small artery and vein. Above and between these two openings is an irregular depression which lodges a process of the dura mater and transmits a small vein; in the infant this depression is represented by a large fossa, the **subarcuate fossa**, which extends backward as a blind tunnel under the superior semicircular canal.

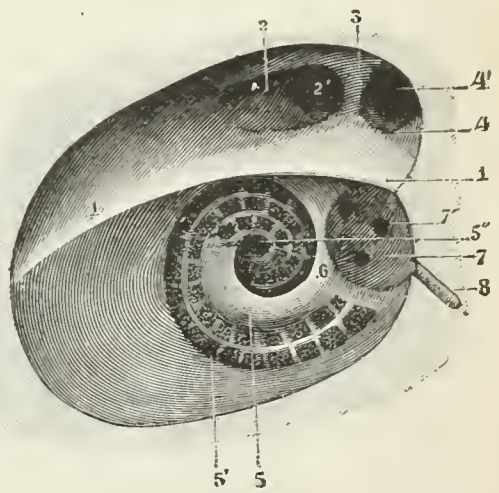

FIG. 140.—Diagrammatic view of the fundus of the right internal acoustic meatus. (Testut.) 1. Crista falciformis. 2. Area facialis, with (2′) internal opening of the facial canal. 3. Ridge separating the area facialis from the area cribrosa superior. 4. Area cribrosa superior, with (4′) openings for nerve filaments. 5. Anterior inferior cribriform area, with (5′) the tractus spiralis foraminosus, and (5″) the canalis centralis of the cochlea. 6. Ridge separating the tractus spiralis foraminosus from the area cribrosa media. 7. Area cribrosa media, with (7′) orifices for nerves to saccule. 8. Foramen singulare.

The **inferior surface** (Fig. 141) is rough and irregular, and forms part of the exterior of the base of the skull. It presents eleven points for examination: (1) near the apex is a rough surface, quadrilateral in form, which serves partly for the attachment of the Levator veli palatini and the cartilaginous portion of the auditory tube, and partly for connection with the basilar part of the occipital bone through the intervention of some dense fibrous tissue; (2) behind this is the large circular aperture of the **carotid canal**, which ascends at first vertically, and then, making a bend, runs horizontally forward and medialward; it transmits into the cranium the internal carotid artery, and the carotid plexus of nerves; (3) medial to the opening for the carotid canal and close to its posterior border, in front of the jugular fossa, is a triangular depression; at the apex of this is a small opening, the