

and the mesoderm enclosing them is soon converted into cartilage, forming the **cartilaginous ear-capsules**. These cartilaginous ear-capsules, which are of an oval shape, fuse with the sides of the basilar plate, and from them arise the petrous and mastoid portions of the temporal bones. The **trabeculæ cranii** (Fig. 69) are two curved bars of cartilage which embrace the hypophysis cerebri; their posterior ends soon unite with the basilar plate, while their anterior ends join to form the **ethmoidal plate**, which extends forward between the fore-brain and the olfactory pits. Later the trabeculæ meet and fuse below the hypophysis, forming the floor

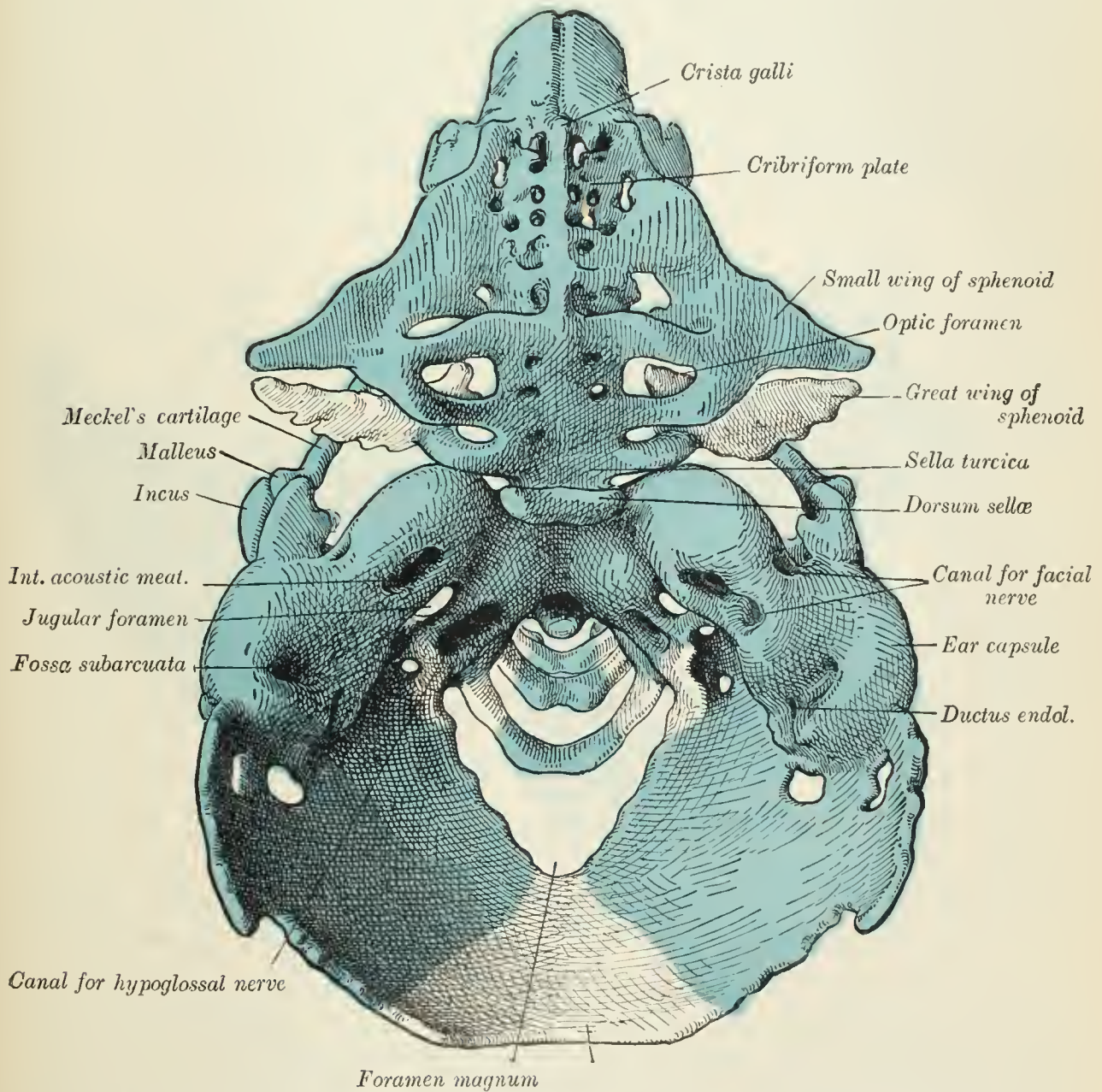


FIG. 70.—Model of the chondrocranium of a human embryo, 8 cm. long. (Hertwig.) The membrane bones are not represented.

of the fossa hypophyseos and so cutting off the anterior lobe of the hypophysis from the stomodeum. The median part of the ethmoidal plate forms the bony and cartilaginous parts of the nasal septum. From the lateral margins of the trabeculæ cranii three processes grow out on either side. The anterior forms the ethmoidal labyrinth and the lateral and alar cartilages of the nose; the middle gives rise to the small wing of the sphenoid, while from the posterior the great wing and lateral pterygoid plate of the sphenoid are developed (Figs. 70, 71). The bones of the vault are of membranous formation, and are termed **dermal** or **covering bones**. They are partly developed from the mesoderm of the membranous