

from the orbital surface by a rounded border, which enters into the formation of the inferior orbital fissure.

The Sphenoidal Process (*processus sphenoidalis*).—The sphenoidal process is a thin, compressed plate, much smaller than the orbital, and directed upward and medialward. It presents three surfaces and two borders. The **superior surface** articulates with the root of the pterygoid process and the under surface of the sphenoidal concha, its medial border reaching as far as the ala of the vomer; it presents a groove which contributes to the formation of the pharyngeal canal. The **medial surface** is concave, and forms part of the lateral wall of the nasal cavity. The **lateral surface** is divided into an articular and a non-articular portion: the former is rough, for articulation with the medial pterygoid plate; the latter is smooth, and forms part of the pterygopalatine fossa. The **anterior border** forms the posterior boundary of the sphenopalatine notch. The **posterior border**, serrated at the expense of the outer table, articulates with the medial pterygoid plate.

The orbital and sphenoidal processes are separated from one another by the **sphenopalatine notch**. Sometimes the two processes are united above, and form between them a complete foramen (Fig. 168), or the notch may be crossed by one or more spicules of bone, giving rise to two or more foramina.

Ossification.—The palatine bone is ossified in membrane from a single center, which makes its appearance about the sixth or eighth week of fetal life at the angle of junction of the two parts of the bone. From this point ossification spreads medialward to the horizontal part, downward into the pyramidal process, and upward into the vertical part. Some authorities describe the bone as ossifying from four centers: one for the pyramidal process and portion of the vertical part behind the pterygopalatine groove; a second for the rest of the vertical and the horizontal parts; a third for the orbital, and a fourth for the sphenoidal process. At the time of birth the height of the vertical part is about equal to the transverse width of the horizontal part, whereas in the adult the former measures about twice as much as the latter.

Articulations.—The palatine articulates with *six* bones: the sphenoid, ethmoid, maxilla, inferior nasal concha, vomer, and opposite palatine.

The Inferior Nasal Concha (Concha Nasalis Inferior; Inferior Turbinated Bone).

The **inferior nasal concha** extends horizontally along the lateral wall of the nasal cavity (Fig. 170) and consists of a lamina of spongy bone, curled upon itself like a scroll. It has two surfaces, two borders, and two extremities.

The **medial surface** (Fig. 171) is convex, perforated by numerous apertures, and traversed by longitudinal grooves for the lodgement of vessels. The **lateral surface** is concave (Fig. 172), and forms part of the inferior meatus. Its **upper border** is thin, irregular, and connected to various bones along the lateral wall of the nasal cavity. It may be divided into three portions: of these, the anterior articulates with the conchal crest of the maxilla; the posterior with the conchal crest of the palatine; the middle portion presents three well-marked processes, which vary much in their size and form. Of these, the anterior or **lacrimal process** is small and pointed and is situated at the junction of the anterior fourth with the posterior three-fourths of the bone: it articulates, by its apex, with the descending process of the lacrimal bone, and, by its margins, with the groove on the back of the frontal process of the maxilla, and thus assists in forming the canal for the nasolacrimal duct. Behind this process a broad, thin plate, the **ethmoidal process**, ascends to join the uncinat process of the ethmoid; from its lower border a thin lamina, the **maxillary process**, curves downward and lateralward; it articulates with the maxilla and forms a part of the medial wall of the maxillary sinus. The **inferior border** is free, thick, and cellular in structure, more especially in the middle of the bone. Both **extremities** are more or less pointed, the posterior being the more tapering.