

sphenoid; *below*, by the lateral border of the orbital surface of the maxilla and the orbital process of the palatine bone; *laterally*, by a small part of the zygomatic bone;¹ *medially*, it joins at right angles with the pterygomaxillary fissure. Through the inferior orbital fissure the orbit communicates with the temporal, infratemporal, and pterygopalatine fossæ; the fissure transmits the maxillary nerve and its zygomatic branch, the infraorbital vessels, the ascending branches from the sphenopalatine ganglion, and a vein which connects the inferior ophthalmic vein with the pterygoid venous plexus.

The **pterygomaxillary fissure** is vertical, and descends at right angles from the medial end of the preceding; it is a triangular interval, formed by the divergence of the maxilla from the pterygoid process of the sphenoid. It connects the infratemporal with the pterygopalatine fossa, and transmits the terminal part of the internal maxillary artery.

The Pterygopalatine Fossa (*fossa pterygopalatina; sphenomaxillary fossa*).—The pterygopalatine fossa is a small, triangular space at the angle of junction of the inferior orbital and pterygomaxillary fissures, and placed beneath the apex of the orbit. It is bounded *above* by the under surface of the body of the sphenoid and by the orbital process of the palatine bone; in *front*, by the infratemporal surface of the maxilla; *behind*, by the base of the pterygoid process and lower part of the anterior surface of the great wing of the sphenoid; *medially*, by the vertical part of the palatine bone with its orbital and sphenoidal processes. This fossa communicates with the orbit by the inferior orbital fissure, with the nasal cavity by the sphenopalatine foramen, and with the infratemporal fossa by the pterygomaxillary fissure. Five foramina open into it. Of these, three are on the posterior wall, viz., the **foramen rotundum**, the **pterygoid canal**, and the **pharyngeal canal**, in this order downward and medialward. On the medial wall is the **sphenopalatine foramen**, and below is the superior orifice of the **pterygopalatine canal**. The fossa contains the maxillary nerve, the sphenopalatine ganglion, and the terminal part of the internal maxillary artery.

Norma Occipitalis.—When viewed from behind the cranium presents a more or less circular outline. In the middle line is the posterior part of the **sagittal suture** connecting the parietal bones; extending downward and lateralward from the hinder end of the sagittal suture is the deeply serrated **lambdoidal suture** joining the parietals to the occipital and continuous below with the **parietomastoid** and **occipitomastoid sutures**; it frequently contains one or more sutural bones. Near the middle of the occipital squama is the **external occipital protuberance** or **inion**, and extending lateralward from it on either side is the superior nuchal line, and above this the faintly marked highest nuchal line. The part of the squama above the inion and highest lines is named the **planum occipitale**, and is covered by the Occipitalis muscle; the part below is termed the **planum nuchale**, and is divided by the median nuchal line which runs downward and forward from the inion to the foramen magnum; this ridge gives attachment to the ligamentum nuchæ. The muscles attached to the planum nuchale are enumerated on p. 130. Below and in front are the mastoid processes, convex laterally and grooved medially by the mastoid notches. In or near the occipitomastoid suture is the **mastoid foramen** for the passage of the mastoid emissary vein.

Norma Frontalis (Fig. 190).—When viewed from the front the skull exhibits a somewhat oval outline, limited *above* by the frontal bone, *below* by the body of the mandible, and *laterally* by the zygomatic bones and the mandibular rami. The upper part, formed by the frontal squama, is smooth and convex. The lower part, made up of the bones of the face, is irregular; it is excavated laterally by the orbital cavities, and presents in the middle line the **anterior nasal aperture** leading to the

¹ Occasionally the maxilla and the sphenoid articulate with each other at the anterior extremity of this fissure; the zygomatic is then excluded from it.