

of the nose, generally by two small apertures left between the above-mentioned bones. In the fresh state, usually only one small opening exists, near the upper part of the cavity; the other is closed by mucous membrane. On the **posterior wall** are the **alveolar canals**, transmitting the posterior superior alveolar vessels and nerves to the molar teeth. The **floor** is formed by the alveolar process of the maxilla, and, if the sinus be of an average size, is on a level with the floor of the nose; if the sinus be large it reaches below this level.

Projecting into the floor of the antrum are several conical processes, corresponding to the roots of the first and second molar teeth;¹ in some cases the floor is perforated by the fangs of the teeth. The infraorbital canal usually projects into the cavity as a well-marked ridge extending from the roof to the anterior wall; additional ridges are sometimes seen in the posterior wall of the cavity, and are caused by the alveolar canals. The size of the cavity varies in different skulls, and even on the two sides of the same skull.²

The Zygomatic Process (*processus zygomaticus; malar process*).—The zygomatic process is a rough triangular eminence, situated at the angle of separation of the anterior, zygomatic, and orbital surfaces. *In front* it forms part of the anterior surface; *behind*, it is concave, and forms part of the infratemporal fossa; *above*, it is rough and serrated for articulation with the zygomatic bone; while *below*, it presents the prominent arched border which marks the division between the anterior and infratemporal surfaces.

The Frontal Process (*processus frontalis; nasal process*).—The frontal process is a strong plate, which projects upward, medialward, and backward, by the side of the nose, forming part of its lateral boundary. Its *lateral surface* is smooth, continuous with the anterior surface of the body, and gives attachment to the Quadratus labii superioris, the Orbicularis oculi, and the medial palpebral ligament. Its *medial surface* forms part of the lateral wall of the nasal cavity; at its upper part is a rough, uneven area, which articulates with the ethmoid, closing in the anterior ethmoidal cells; below this is an oblique ridge, the **ethmoidal crest**, the posterior end of which articulates with the middle nasal concha, while the anterior part is termed the **agger nasi**; the crest forms the upper limit of the atrium of the middle meatus. The *upper border* articulates with the frontal bone and the *anterior* with the nasal; the *posterior border* is thick, and hollowed into a groove, which is continuous below with the lacrimal groove on the nasal surface of the body: by the articulation of the medial margin of the groove with the anterior border of the lacrimal a corresponding groove on the lacrimal is brought into continuity, and together they form the **lacrimal fossa** for the lodgement of the lacrimal sac. The lateral margin of the groove is named the **anterior lacrimal crest**, and is continuous below with the orbital margin; at its junction with the orbital surface is a small tubercle, the **lacrimal tubercle**, which serves as a guide to the position of the lacrimal sac.

The Alveolar Process (*processus alveolaris*).—The alveolar process is the thickest and most spongy part of the bone. It is broader behind than in front, and excavated into deep cavities for the reception of the teeth. These cavities are eight in number, and vary in size and depth according to the teeth they contain. That for the canine tooth is the deepest; those for the molars are the widest, and are subdivided into minor cavities by septa; those for the incisors are single, but deep and narrow. The Buccinator arises from the outer surface of this process, as far forward as the first molar tooth. When the maxillæ are articulated with each other, their alveolar processes together form the **alveolar arch**; the center of the anterior margin of this arch is named the **alveolar point**.

¹ The number of teeth whose roots are in relation with the floor of the antrum is variable. The sinus "may extend so as to be in relation to all the teeth of the true maxilla, from the canine to the *dens sapientiæ*." (Salter.)

² Aldren Turner (*op. cit.*) gives the following measurements as those of an average sized sinus: vertical height opposite first molar tooth, $1\frac{1}{2}$ inch; transverse breadth, 1 inch; and antero-posterior depth, $1\frac{1}{4}$ inch.