The nasal surface (Fig. 158) presents a large, irregular opening leading into the maxillary sinus. At the upper border of this aperture are some broken air eells, which, in the articulated skull, are closed in by the ethmoid and lacrimal bones. Below the aperture is a smooth concavity which forms part of the inferior meatus of the nasal cavity, and behind it is a rough surface for articulation with the perpendicular part of the palatine bone; this surface is traversed by a groove, commencing near the middle of the posterior border and running obliquely downward and forward; the groove is converted into a canal, the pterygopalatine canal, by the palatine bone. In front of the opening of the sinus is a deep groove, the lacrimal groove, which is converted into the nasolacrimal canal, by the lacrimal bone and inferior nasal concha; this canal opens into the inferior meatus of the nose and transmits the nasolacrimal duct. More anteriorly is an oblique ridge, the conchal crest, for articulation with the inferior nasal concha. The shallow concavity above this ridge forms part of the atrium of the middle meatus of the nose, and that below it, part of the inferior meatus.

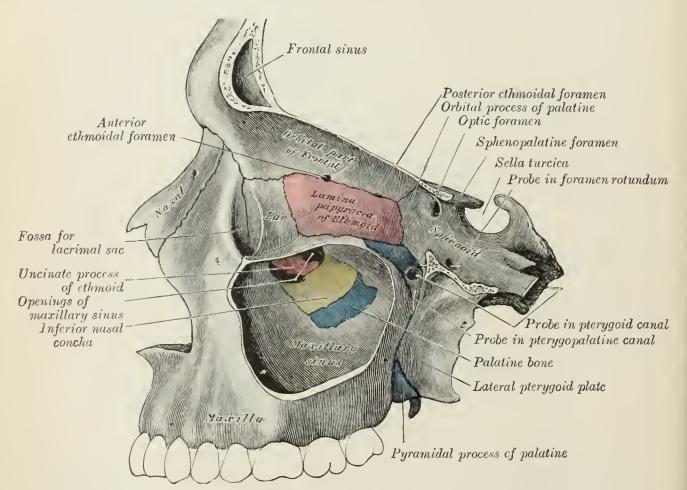


Fig. 159.—Left maxillary sinus opened from the exterior.

The Maxillary Sinus or Antrum of Highmore (sinus maxillaris).—The maxillary sinus is a large pyramidal cavity, within the body of the maxilla: its apex, directed lateralward, is formed by the zygomatic process; its base, directed medialward, by the lateral wall of the nose. Its walls are everywhere exceedingly thin, and correspond to the nasal orbital, anterior, and infratemporal surfaces of the body of the bone. Its nasal wall, or base, presents, in the disarticulated bone, a large, irregular aperture, communicating with the nasal cavity. In the articulated skull this aperture is much reduced in size by the following bones: the uncinate process of the ethmoid above, the ethmoidal process of the inferior nasal conchabelow, the vertical part of the palatine behind, and a small part of the lacrimal above and in front (Figs. 158, 159); the sinus communicates with the middle meatus