

**frontal border** is deeply serrated, and bevelled at the expense of the outer surface above and of the inner below; it articulates with the frontal bone, forming one-half of the **coronal suture**. The **occipital border**, deeply denticulated, articulates with the occipital, forming one-half of the **lambdoidal suture**.

**Angles.**—The **frontal angle** is practically a right angle, and corresponds with the point of meeting of the sagittal and coronal sutures; this point is named the **bregma**; in the fetal skull and for about a year and a half after birth this region is membranous, and is called the **anterior fontanelle**. The **sphenoidal angle**, thin and acute, is received into the interval between the frontal bone and the great wing of the sphenoid. Its inner surface is marked by a deep groove, sometimes a canal, for the anterior divisions of the middle meningeal artery. The **occipital angle** is rounded and corresponds with the point of meeting of the sagittal and lambdoidal sutures—a point which is termed the **lambda**; in the fetus this part of the skull is membranous, and is called the **posterior fontanelle**. The **mastoid angle** is truncated; it articulates with the occipital bone and with the mastoid portion of the temporal, and presents on its inner surface a broad, shallow groove which lodges part of the transverse sinus. The point of meeting of this angle with the occipital and the mastoid part of the temporal is named the **asterion**.

**Ossification.**—The parietal bone is ossified in membrane from a single center, which appears at the parietal eminence about the eighth week of fetal life. Ossification gradually extends in a radial manner from the center toward the margins of the bone; the angles are consequently the parts last formed, and it is here that the fontanelles exist. Occasionally the parietal bone is divided into two parts, upper and lower, by an antero-posterior suture.

**Articulations.**—The parietal articulates with *five* bones: the opposite parietal, the occipital, frontal, temporal, and sphenoid.

### The Frontal Bone (*Os Frontale*).

The **frontal bone** resembles a cockle-shell in form, and consists of two portions—a **vertical** portion, the **squama**, corresponding with the region of the forehead; and an **orbital** or **horizontal** portion, which enters into the formation of the roofs of the orbital and nasal cavities.

**Squama** (*squama frontalis*).—**Surfaces.**—The **external surface** (Fig. 134) of this portion is convex and usually exhibits, in the lower part of the middle line, the remains of the **frontal** or **metopic suture**; in infancy this suture divides the bone into two, a condition which may persist throughout life. On either side of this suture, about 3 cm. above the supraorbital margin, is a rounded elevation, the **frontal eminence** (*tuber frontale*). These eminences vary in size in different individuals, are occasionally unsymmetrical, and are especially prominent in young skulls; the surface of the bone above them is smooth, and covered by the galea aponeurotica. Below the frontal eminences, and separated from them by a shallow groove, are two arched elevations, the **superciliary arches**; these are prominent medially, and are joined to one another by a smooth elevation named the **glabella**. They are larger in the male than in the female, and their degree of prominence depends to some extent on the size of the frontal air sinuses;<sup>1</sup> prominent ridges are, however, occasionally associated with small air sinuses. Beneath each superciliary arch is a curved and prominent margin, the **supraorbital margin**, which forms the upper boundary of the base of the orbit, and separates the squama from the orbital portion of the bone. The lateral part of this margin is sharp and prominent, affording to the eye, in that situation, considerable protection from injury; the medial part is rounded. At the junction of its medial and intermediate thirds is

<sup>1</sup> Some confusion is occasioned to students commencing the study of anatomy by the name "sinus" having been given to two different kinds of space connected with the skull. It may be as well, therefore, to state here that the "sinuses" in the interior of the cranium which produce the grooves on the inner surfaces of the bones are venous channels which convey the blood from the brain, while the "sinuses" external to the cranial cavity (the frontal, sphenoidal, ethmoidal, and maxillary) are hollow spaces in the bones themselves; they communicate with the nasal cavities and contain air.