

upper surface of the jugular process is a deep groove which curves medialward and forward and is continuous with the jugular notch. This groove lodges the terminal part of the transverse sinus, and opening into it, close to its medial margin, is the orifice of the condyloid canal.

**Basilar Part** (*pars basilaris*).—The basilar part extends forward and upward from the foramen magnum, and presents *in front* an area more or less quadrilateral in outline. In the young skull this area is rough and uneven, and is joined to the body of the sphenoid by a plate of cartilage. By the twenty-fifth year this cartilaginous plate is ossified, and the occipital and sphenoid form a continuous bone.

**Surfaces.**—On its **lower surface**, about 1 cm. in front of the foramen magnum, is the **pharyngeal tubercle** which gives attachment to the fibrous raphé of the pharynx. On either side of the middle line the Longus capitis and Rectus capitis anterior are inserted, and immediately in front of the foramen magnum the anterior atlantoöccipital membrane is attached.

The **upper surface** presents a broad, shallow groove which inclines upward and forward from the foramen magnum; it supports the medulla oblongata, and near the margin of the foramen magnum gives attachment to the membrana tectoria. On the lateral margins of this surface are faint grooves for the inferior petrosal sinuses.

**Foramen Magnum.**—The foramen magnum is a large oval aperture with its long diameter antero-posterior; it is wider behind than in front where it is encroached upon by the condyles. It transmits the medulla oblongata and its membranes, the accessory nerves, the vertebral arteries, the anterior and posterior spinal arteries, and the membrana tectoria and alar ligaments.

**Angles.**—The **superior angle** of the occipital bone articulates with the occipital angles of the parietal bones and, in the fetal skull, corresponds in position with the **posterior fontanelle**. The **inferior angle** is fused with the body of the sphenoid. The **lateral angles** are situated at the extremities of the grooves for the transverse

sinuses: each is received into the interval between the mastoid angle of the parietal and the mastoid part of the temporal.

**Borders.**—The **superior borders** extend from the superior to the lateral angles: they are deeply serrated for articulation with the occipital borders of the parietals, and form by this union the **lambdoidal suture**. The **inferior borders** extend from the lateral angles to the inferior angle; the upper half of each articulates with the mastoid portion of the corresponding temporal, the lower half with the petrous part of the same bone. These two portions of the inferior border are separated from one another by the jugular process, the notch on the anterior surface of which forms the posterior part of the jugular foramen.

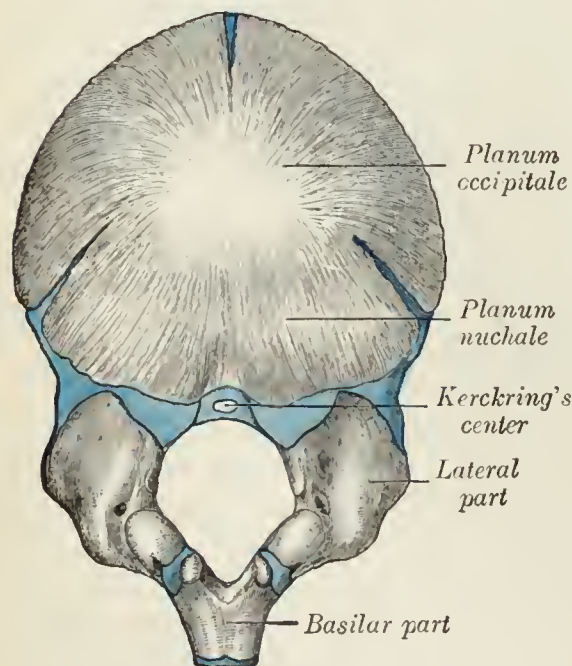


FIG. 131.—Occipital bone at birth.

**Structure.**—The occipital, like the other cranial bones, consists of two compact lamellæ, called the *outer* and *inner tables*, between which is the cancellous tissue or diploë; the bone is especially thick at the ridges, protuberances, condyles, and anterior part of the basilar part; in the inferior fossæ it is thin, semitransparent, and destitute of diploë.

**Ossification** (Fig. 131).—The planum occipitale of the squama is developed in membrane, and may remain separate throughout life when it constitutes the *interparietal* bone; the rest of