

posterior sulcus, the **paramedial sulcus**, which, however, is frequently interrupted by bridging gyri.

The **middle frontal gyrus** (*gyrus frontalis medius; medifrontal gyre*), between the superior and inferior frontal sulci, is continuous with the anterior orbital gyrus on the inferior surface of the hemisphere; it is frequently subdivided into two by a horizontal sulcus, the **medial frontal sulcus** of Eberstaller, which ends anteriorly in a wide bifurcation.

The **inferior frontal gyrus** (*gyrus frontalis inferior; subfrontal gyre*) lies below the inferior frontal sulcus, and extends forward from the lower part of the precentral sulcus; it is continuous with the lateral and posterior orbital gyri on the under surface of the lobe. It is subdivided by the anterior horizontal and ascending rami of the lateral fissure into three parts, viz., (1) the **orbital part**, below the anterior horizontal ramus of the fissure; (2) the **triangular part** (*cap of Broca*), between the ascending and horizontal rami; and (3) the **basilar part**, behind the anterior ascending ramus. The left inferior frontal gyrus is, as a rule, more highly developed than the right, and is named the **gyrus of Broca**, from the fact that Broca described it as the center for articulate speech.

The **inferior or orbital surface** of the frontal lobe is concave, and rests on the orbital plate of the frontal bone (Fig. 729). It is divided into four orbital gyri by a well-

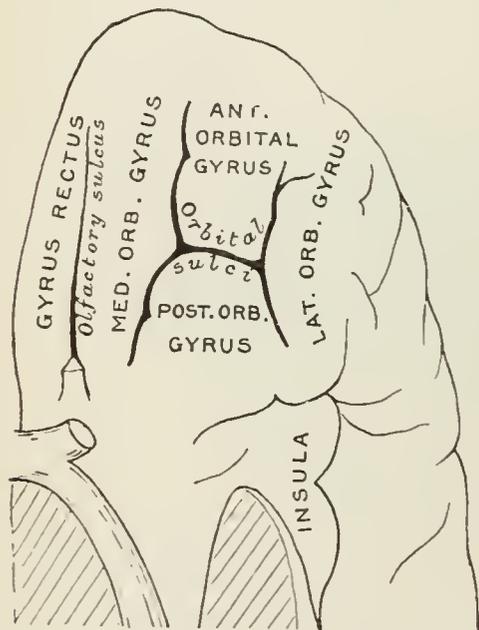


Fig. 729.—Orbital surface of left frontal lobe.

marked H-shaped **orbital sulcus**. These are named, from their position, the **medial, anterior, lateral, and posterior orbital gyri**. The medial orbital gyrus presents a well-marked antero-posterior sulcus, the **olfactory sulcus**, for the olfactory tract; the portion medial to this is named the **straight gyrus**, and is continuous with the superior frontal gyrus on the medial surface.

The **medial surface** of the frontal lobe is occupied by the medial part of the superior frontal gyrus (*marginal gyrus*) (Fig. 727). It lies between the cingulate sulcus and the supero-medial margin of the hemisphere. The posterior part of this gyrus is sometimes marked off by a vertical sulcus, and is distinguished as the **paracentral lobule**, because it is continuous with the anterior and posterior central gyri.

Parietal Lobe (*lobus parietalis*).—The parietal lobe is separated from the frontal lobe by the central sulcus, but its boundaries below and

behind are not so definite. Posteriorly, it is limited by the parietoöccipital fissure, and by a line carried across the hemisphere from the end of this fissure toward the preoccipital notch. Below, it is separated from the temporal lobe by the posterior ramus of the lateral fissure, and by a line carried backward from it to meet the line passing downward to the preoccipital notch.

The **lateral surface** of the parietal lobe (Fig. 726) is cleft by a well-marked furrow, the **intraparietal sulcus** of Turner, which consists of an oblique and a horizontal portion. The oblique part is named the **postcentral sulcus**, and commences below, about midway between the lower end of the central sulcus and the upturned end of the lateral fissure. It runs upward and backward, parallel to the central sulcus, and is sometimes divided into an *upper* and a *lower* ramus. It forms the hinder limit of the posterior central gyrus.

From about the middle of the postcentral sulcus, or from the upper end of its inferior ramus, the **horizontal portion** of the intraparietal sulcus is carried backward and slightly upward on the parietal lobe, and is prolonged, under the name of the