nences, named **gyri** or **convolutions**, and separated by furrows termed **fissures** and **sulci**. The furrows are of two kinds, *complete* and *incomplete*. The former appear early in fetal life, are few in number, and are produced by infoldings of the entire thickness of the brain wall, and give rise to corresponding elevations in the interior of the ventricle. They comprise the hippocampal fissure, and parts of the calcarine and collateral fissures. The incomplete furrows are very numerous, and only indent the subjacent white substance, without producing any corresponding elevations in the ventricular cavity.

The gyri and their intervening fissures and the sulci are fairly constant in their arrangement; at the same time they vary within certain limits, not only in different individuals, but on the two hemispheres of the same brain. The convoluted condition of the surface permits of a great increase of the gray matter without the sacrifice of much additional space. The number and extent of the gyri, as well as the depth of the intervening furrows, appear to bear a direct relation to the intellectual powers of the individual.

Certain of the fissures and sulci are utilized for the purpose of dividing the hemisphere into lobes, and are therefore termed **interlobular**; included under this category are the lateral cerebral, parietoöccipital, calcarine, and collateral fissures, the central and cingulate sulci, and the sulcus circularis.

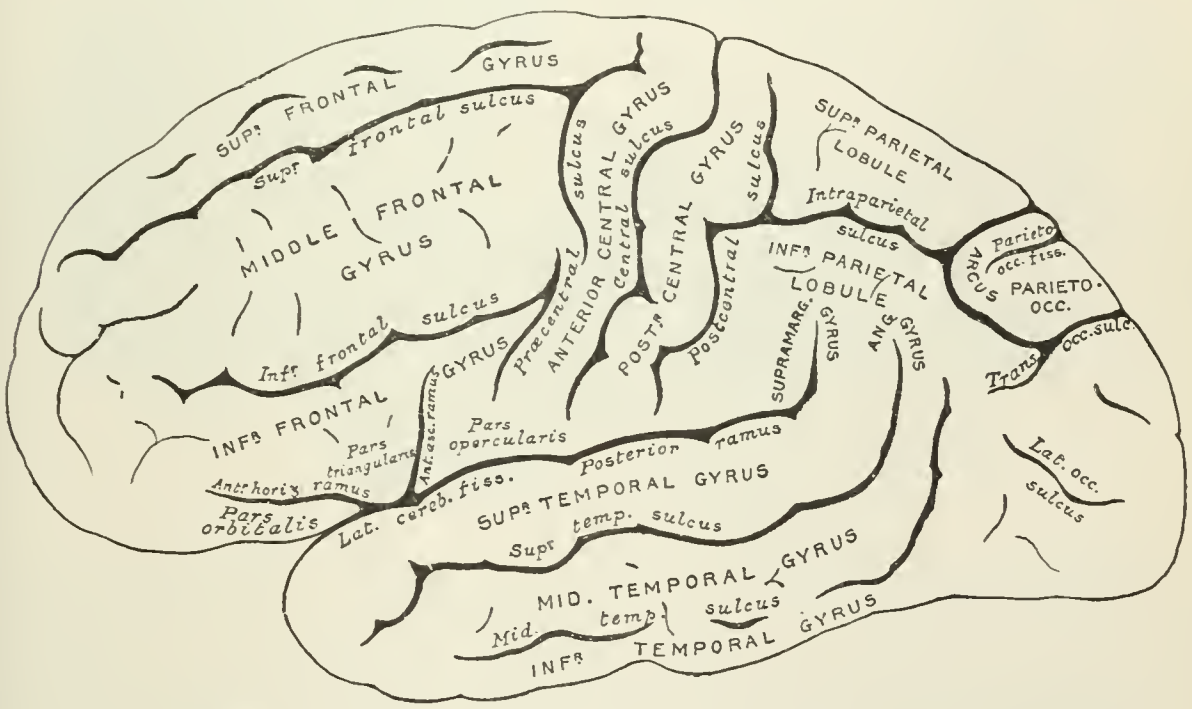

FIG. 726.—Lateral surface of left cerebral hemisphere, viewed from the side.

The **Lateral Cerebral Fissure** (*fissura cerebri lateralis* [*Sylvii*]; *fissure of Sylvius*) (Fig. 726) is a well-marked cleft on the inferior and lateral surfaces of the hemisphere, and consists of a short stem which divides into three rami. The **stem** is situated on the base of the brain, and commences in a depression at the lateral angle of the anterior perforated substance. From this point it extends between the anterior part of the temporal lobe and the orbital surface of the frontal lobe, and reaches the lateral surface of the hemisphere. Here it divides into three rami: an anterior horizontal, an anterior ascending, and a posterior. The **anterior horizontal ramus** passes forward for about 2.5 cm. into the inferior frontal gyrus, while the **anterior ascending ramus** extends upward into the same convolution for about an equal distance. The **posterior ramus** is the longest; it runs backward and slightly upward for about 7 cm., and ends by an upward inflexion in the parietal lobe.

The **Central Sulcus** (*sulcus centralis* [*Rolandi*]; *fissure of Rolando; central fissure*)