

## SURFACE MARKINGS OF SPECIAL REGIONS OF HEAD AND NECK.

**The Cranium.—Scalp.**—The soft parts covering the upper surface of the skull form the scalp and comprise the following layers (Fig. 1196): (1) **skin**, (2) **subcutaneous tissue**, (3) **Occipitalis frontalis** and **galea aponeurotica**, (4) **subaponeurotic tissue**, (5) **pericranium**. The subcutaneous tissue consists of a close mesh-work of fibers, the meshes of which contain fatty tissue; the fibers bind the skin and galea aponeurotica firmly together, so that when the Occipitalis or the Frontalis is in action the skin moves with the aponeurosis. The subaponeurotic tissue, which intervenes between the galea aponeurotica and the pericranium, is much looser in texture, and permits the movement of the aponeurosis over the underlying bones.

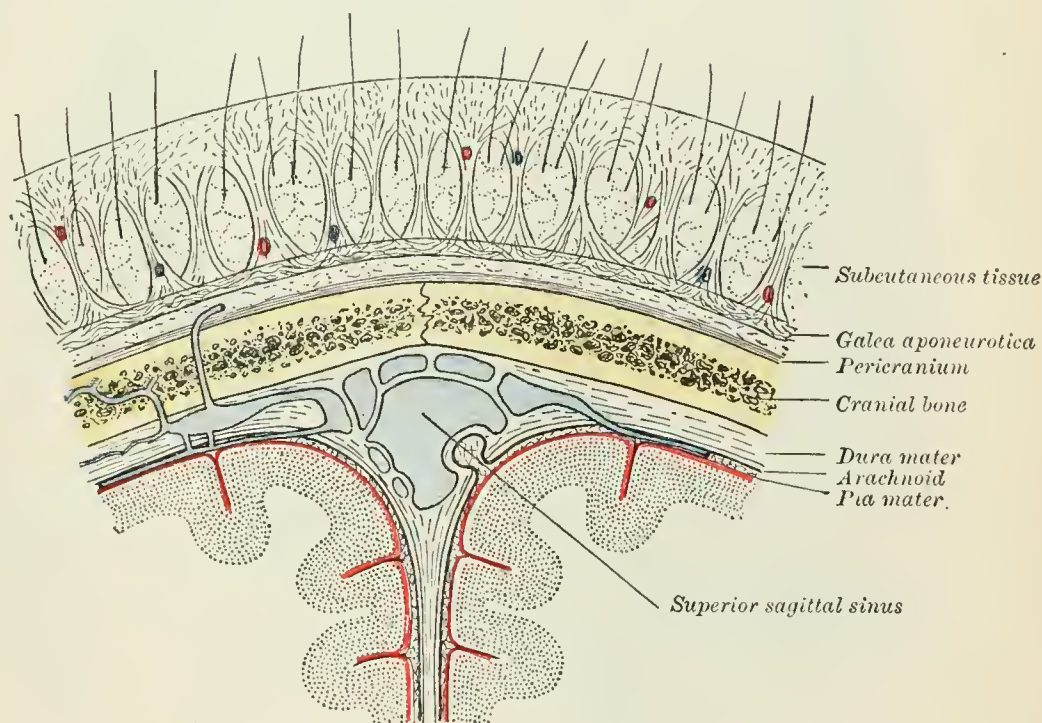


FIG. 1196.—Diagrammatic section of scalp.

**Bony Landmarks** (Fig. 1193).—In addition to the bony points already described which can be determined by palpation, the following are utilized for surface markings:

*Auricular Point.*—The center of the orifice of the external acoustic meatus.

*Preauricular Point.*—A point on the posterior root of the zygomatic arch immediately in front of the external acoustic meatus.

*Asterion.*—The point of meeting of the lambdoidal, mastoöccipital, and masto-parietal sutures; it lies 4 cm. behind and 12 mm. above the level of the auricular point.

*Pterion.*—The point where the great wing of the sphenoid joins the sphenoidal angle of the parietal; it is situated 35 mm. behind, and 12 mm. above, the level of the frontozygomatic suture.

*Inion.*—The external occipital protuberance.

*Lambda.*—The point of meeting of the lambdoidal and sagittal sutures; it is in the middle line about 6.5 cm. above the inion.

*Bregma.*—The meeting-point of the coronal and sagittal sutures; it lies at the point of intersection of the middle line of the scalp with a line drawn vertically upward through the preauricular point.

A line passing through the inferior margin of the orbit and the auricular point is known as **Reid's base line**. The **lambdoidal suture** can be indicated on either