CRANIO-CEREBRAL TOPOGRAPHY—No. 5.

THE DURA MATER HAS BEEN REMOVED AND THE FINE MEMBRANES STRIPPED FROM THE SURFACE OF THE BRAIN, EXPOSING THE OUTER ASPECT OF THE HEMISPHERE, AND THE POSITION OF SOME OF THE PRINCIPAL MOTOR AND SENSORY CENTRES HAS BEEN MARKED UPON IT.

The fissures and convolutions of the brain are at this age—5-years—very fully developed.

1. Motor centres. The great motor area of the outer surface of the hemisphere lies in front of the fissure of Rolando, and occupies mainly the ascending frontal convolution, extending into the depth of the fissure, and occupying the anterior wall and in some places the floor. It also extends into the adjacent portions of the frontal convolutions. The upper part forms the area for the lower limb, and below it is the area for the body. Near the centre of the fissure of Rolando, the precentral convolution grows backwards, deflecting the course of the fissure, and the area of the cortex which occupies the indentation so formed represents the centre for the upper limb of the opposite side. The centre for the shoulder lies highest, and lower down are the centres for the elbow, wrist, fingers, index, and thumb. The area for the face is continuous with the above, and the area for the tongue occupies the lowest part of the precentral convolution. The centres for the head and eyes occupy portions of the middle and inferior frontal convolutions in front of the centres for the limbs.

2. Sensory centres. The centre for vision is situated at the tip of the occipital lobe, while the centre for word-seeing is found in the angular gyrus.

The area for hearing is found in the superior temporal convolution.

The letters and figures indicate—

1. Fissure of Rolando.
2. Division of Sylvian fissure.
3. Parallel fissure.
4. Supra-marginal convolution.

A. Arm centre.
L. Centre for lower limb.
F. Centre for face.
B. Broca's convolution.
S. Angular gyrus (word-seeing).
V. Visual region (sensory).

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