

into convolutions by certain fissures. The most obvious of these sulci was the *olfactory fissure* (*ol*), in which the slender olfactory peduncle was lodged, and which was situated parallel to the mesial longitudinal fissure. Between and parallel to the olfactory and longitudinal fissures was the *gyrus rectus* (*rc*), which extended from the locus perforatus anticus forward to the prorean convolution at the anterior end of the hemisphere. The *rhinal fissure* (*rh*) (Wilder),¹ formed the outer boundary of the tuber olfactorium; it was shallow and was prolonged forwards into the olfactory fissure and backwards into the Sylvian fissure. External to the tuber olfactorium and the olfactory peduncle was an *intraorbital fissure*² (*io*) closely resembling what I have described in the brain of Man and the Chimpanzee as the *triradiate fissure*.³ Its radiations by breaking up the supra-orbital area contributed materially to the convoluted character of this part of the brain. Between it and the olfactory sulcus was a convolution which I shall name *internal supraorbital* (*isc*), and between it and the præsylvian fissure was a convolution which may appropriately be named *external supraorbital* (*esc*).

Returning again to the crucial fissure, at the spot where it changed from the oblique to the transverse, a short sulcus (*fissura præcruciata*, *pc*, Krueg) proceeded forwards and inwards from it, which along with the crucial and mesial longitudinal fissures marked off a convolution 27 mm. long, and as this arrangement occurred in both hemispheres a lozenge-shaped area was produced. This area was first noticed by St. George Mivart in the brain of the Arctoid Carnivora, and was named by him *Ursine lozenge*. In the Elephant Seal, as Mivart has also described in *Phoca vitulina*, this lozenge could not properly be seen until the hemispheres were slightly separated from each other (*ur*). It is of small size as compared with the corresponding area in the brain of *Ursus maritimus*. The *prorean convolution* (*pre*) was 17 mm. long; it was bounded externally by the *prorean fissure*, and internally by the mesial longitudinal fissure; it was immediately above the gyrus rectus, whilst the ursine lozenge was placed above and to its inner side.

The convolutions which lie around the Sylvian fissure were much more complex in arrangement than in the brains of the Dogs, Cats, and Bears, which was due in the Elephant Seal to their greater tortuosity and the more numerous secondary sulci.

Owing to the various modes of nomenclature which have been adopted by different anatomists in describing the tiers of convolutions which surmount the Sylvian fissure, the selection of the names to be applied to them in this description has been difficult. Leuret, in those brains where the tiers were four in number, simply distinguished them by numbers—I, II, III, IV—in their order from below upwards from the Sylvian to the mesial longitudinal fissure. Broca also named them from below upwards the 1st, 2nd,

¹ Ecto-rhinal, Owen.

² *Intraorbital fissure* of the carnivorous brain, Flower and Langley.

³ The convolutions of the Human Cerebrum topographically considered, Edinburgh, 1866. Notes more especially on the Bridging Convolutions in the Brain of the Chimpanzee, *Proc. Roy. Soc. Edin.*, February 19, 1866, vol. v. p. 578.