

volution which represents this area was not definitely defined. Dr. Mivart attaches much importance to the presence of the ursine lozenge in the Pinnipedia, as indicating phylogenetic relations to the ursine group of the Carnivora.

I shall now compare the convolutions on the mesial and tentorial surfaces of the hemisphere in the Pinnipedia with the corresponding surfaces in the brains of several of the Canidæ, and the brains which I have examined are those of the Dog, Jackal, and Fox. In all these animals the postrhinal fissure joined the splenial fissure as in *Phoca vitulina*. The splenial fissure on the tentorial surface was not bridged superficially by a retrolimbic convolution. The lobus and the hippocampal and callosal divisions of the gyrus fornicatus were definitely expressed. The splenial fissure was continued at its anterior end into the crucial fissure, which was placed in the anterior third of the dorsum of the hemisphere. In none of these brains was a suprasplenial convolution differentiated from the sagittal convolution by a suprasplenial fissure, though in the Dog's brain an indication of such a fissure was present. The crucial fissure was bounded by the sigmoid gyrus, which was continuous with the sagittal convolution. Immediately external to the sigmoid gyrus was the coronal fissure, which was continued backwards into the medio-lateral fissure, but not forwards into the præ Sylvian fissure. There was neither præcruciate fissure nor ursine lozenge. The olfactory peduncle was both relatively and absolutely larger than in the Seals and Walrus notwithstanding the much smaller brain, and the continuity of its large root with the lobus hippocampi was plainly marked across the fissure of Sylvius.

In the Polar Bear (*Ursus maritimus*) the postrhinal fissure was deep, and passed back towards the splenial fissure, but was separated from it by a slender retrolimbic gyrus partially sunk in the fissure. The anterior end of the splenial fissure was not continuous with the crucial fissure, but bifurcated; the posterior branch reached the dorsum of the hemisphere as a sulcus in the ursine lozenge, the anterior passed horizontally forwards in front of the knee-like bend of the callosal convolution. The suprasplenial was not differentiated from the sagittal convolution by a suprasplenial fissure, although there was an indication of such a fissure posteriorly. The tentorial surface possessed both a postsplenial fissure and a splenial convolution. The ursine lozenge was large, being 34 mm. long by 42 mm. wide. It formed a large proportion of the anterior third of the dorsum of the hemispheres, and was partially intersected by small sulci, one of which was the posterior branch of bifurcation of the splenial fissure. The crucial fissure was 40 mm. long. The sigmoid gyrus which enclosed it was strongly developed, and its posterior limb was continuous with the sagittal convolution. The coronal fissure was behind and to the outer side of the posterior limb of the sigmoid gyrus, and was prolonged backwards into the 1st curved fissure, but not forwards into the præ Sylvian fissure. The Polar Bear had three distinct convolutions above the Sylvian fissure. It seemed at first as if they represented the Sylvian, suprasylvian, and marginal convolutions,