

which I have expounded on p. 124, *e.s.*, that the Sylvian convolution of the Dog subsides in Man and Apes into the Sylvian fissure, and that the suprasylvian and Sylvian fissures become, as it were, thrown into one, then one can account for the presence of only a single convolution on the lower aspect of the intraparietal fissure, which convolution represents the anterior limb of the suprasylvian convolution of the Dog, and is the supra-marginal convolution in the higher brains. Ferrier's experiments also to some extent bear out this view, for his area (11), stimulation of which produces retraction of the angle of the mouth, is situated in the Monkey partly in the lower end of the ascending parietal, but more so on the adjoining supra-marginal gyrus, and in the Dog in the anterior limb of the suprasylvian convolution.

One of the most noticeable fissures of the cerebrum of Man and Apes is that which under the name of parieto-occipital fissure separates the parietal from the occipital lobe. In the human brain it is as a rule more strongly marked on the mesial than on the cranial aspect, owing to the development on the cranial surface of strong bridging convolutions which pass across its upper end. In the brains of Apes it is as well marked on the one surface as on the other, though in the brain of both the Orang and Chimpanzee superficial bridging convolutions sometimes obscure its upper end.<sup>1</sup>

Almost all writers have stated that this fissure is absent in the brains of the Carnivora, so that in them the occipital lobe is not differentiated from the parietal part of the brain. In a recent memoir, however, Max Flesch has described in the brain of the Brown Bear (*Ursus arctos*) a short fissure as arising from the highest part of the fissure which he calls middle-curved or suprasylvian, but which I have named in this Report 2nd curved or lateral fissure, and as passing towards the mesial longitudinal fissure, near its hinder end, though without reaching it. He represents it as arising by a stem about 3 mm. long, and then as bifurcating into an anterior and a posterior part, of which the latter is apparently the deeper. On the mesial surface of the hemisphere, however, there is no fissure which could be regarded as parieto-occipital. He considers that in the brain of the Bear the upper curved fissure is only partially present, as in the short coronal fissure and one or two other short fissures near it. He associates the appearance of a parieto-occipital fissure as in direct relation to the disappearance of the 1st curved fissure, also to the metamorphosis of a part of this fissure into the fissure of Rolando (central fissure) and to the disappearance (*Rückbildung*) of the crucial fissure. He obviously considers that in the corresponding part of the brain of the Felines there is an indication of a parieto-occipital fissure, but that this fissure is absent in all Carnivorous brains where the three curved fissures are completely developed.

I have examined the brain of *Ursus maritimus* with the object of seeing if a corresponding fissure existed in it. In the right hemisphere a shallow fissure situated

<sup>1</sup> See my Notes more especially on the Bridging Convolutions in the Brain of the Chimpanzee, *Proc. Roy. Soc. Edin.*, vol. v. p. 578.