at a corresponding spot did for about 4 mm. indent the marginal convolution in the same region as in *Ursus arctos*, and a somewhat longer one was present in the left hemisphere. These fissures were so short and shallow that they gave me the impression of being quite subordinate furrows. On the other hand, the parieto-occipital fissure in the brain of Man and Apes is one of primary importance; it appears in the human fœtus at about the fifth month, and is especially marked on the inner surface of the hemisphere; whilst neither in *Ursus arctos* nor *Ursus maritimus* was there any evidence of a fissure which corresponded with the internal parieto-occipital fissure of the human brain.

Dr. Murie, in the course of his description of the brain of *Otaria jubata*, employs to a large extent the terminology of human anatomy, and believes that he can recognise in the brain of this Eared Seal the majority of the convolutions and fissures present in the human brain. Amongst other fissures he describes, by the name of internal perpendicular, the fissure which is more usually named parieto-occipital. He figures it as indenting the marginal convolution towards the hinder end of the hemisphere, and as present both on the mesial and cranial surfaces. In conformity with the method of nomenclature which he has adopted he has named the convolution in front of the inner part of this fissure the quadrilateral lobule of the parietal lobe, whilst that which lies behind it he names the internal occipital lobule. In the brains both of the Elephant Seal and Walrus the marginal convolution was indented in a position almost corresponding to that in *Otaria jubata*, by a continuous fissure both on the cranial and mesial surfaces, the length of which was, however, variable in the different brains, especially on the mesial surface. Partly owing to this variability, and partly because we have no information on the development of this fissure in the Pinnipedia, I am not prepared to say that it is homologous with the parieto-occipital fissure of the human brain.

The evidence obtained from experiments on the cerebral cortex has established the important fact that stimulation of the occipital lobe in the brain of the Monkey produces no definite reaction; whilst stimulation of the angular gyrus, both in its anterior and posterior limbs (13), affects the pupils and occasions movements of the eyes to the opposite side, so that this convolution is a visual centre.[1] In the Dog also the most posterior parts of the 1st and 2nd external convolutions do not respond to stimulus, whilst a portion of the 2nd external convolution in front of the most posterior part (13), when stimulated, gives reactions similar to those obtained from the angular gyrus in the Monkey. There is reason to think, therefore, that the most posterior parts of the 1st and 2nd external convolutions of the Dog are potentially equivalent to the occipital lobe in the brain of the Monkey, although they are not differentiated by a parieto-occipital fissure, whilst the 2nd external convolution immediately in front of the part which does not respond to stimulus and the angular gyrus are homologous with each other physiologically. In all probability these convolutions are also anatomically identical, for Gratiolet, who was the

[1] See the researches of Ferrier and other experimentalists.