first to differentiate the angular gyrus (*pli courbe*) in the brain of Man and Apes,[1] places it behind the supramarginal gyrus, *i.e.*, behind the tier of convolutions immediately above the Sylvian fissure, and therefore in a position corresponding to what that part of the 2nd external convolution which gives a similar response to stimulus would assume were this convolution in the Dog's brain pushed backwards by a great development of the frontal lobe.

The general results arrived at in this comparison of the brains of these Mammals are to some extent to be regarded as tentative and provisional. For, until the development of the fissures and the development and structure of the convolutions have been worked out with greater detail than up to this time has been done, it will not be possible to speak with certainty on all the points which have to be considered in a detailed comparison of the cortex of the cerebrum in the Carnivora with that of Man and Apes. Further, it should be stated that in this, as in other organs of complex constitution, it does not follow that all the parts which are seen in the more highly developed brains are of necessity present, even in a rudimentary condition, in those whose organisation is not so complicated. It must also be remembered that whilst the brains of the Carnivora, and still more so those of the Pinnipedia, are highly convoluted, those of such Apes as the Marmoset Monkey (*Hapale jacchus*) are smooth on the surface, and, with the exception of the large surfaces separated by such fissures as the Sylvian and hippocampal, have no definite subdivision into morphological areas which are capable of being recognised by the naked eye. But both in the Marmoset Monkey and in such other New World Apes as *Œdipus*,[2] in which the convolutions are either absent or rudimentary, the cerebral hemispheres are prolonged forwards to the front of the olfactory bulbs and backwards above the cerebellum to an extent which is not seen in the Carnivora. In this respect, therefore, these brains, though either without convolutions or having them only feebly developed, are more highly organised than is the case in the Carnivora proper or in the Seals.

From the point of view of the hypothesis of evolution there would be no reason to think that the smooth-brained lower Apes had originated out of the Carnivora, at least after the cortex of the cerebrum in this latter order had begun to assume a convoluted arrangement. If they had been derived from a carnivorous animal with a convoluted brain, then in all likelihood the convoluted character of the cerebrum would not have disappeared in the process of evolution. If the higher Apes have been derived by descent from the lower Apes, then the hemispheres in the former with their complex arrangement of fissures and convolutions have been evolved from a smooth-brained stock and not from an animal with such an elaborate arrangement of convolutions as is possessed by either a Dog or a Seal. Hence the acceptance of this hypothesis is not inconsistent with the

[1] Mémoire sur les plis cérébraux de l'homme et des primates, Paris, 1869.

[2] See Gratiolet, *op. cit.*