and convolutions can be identified as without question morphologically alike in their development and relations, that a certain basis would be obtained from which it may be possible to extend the comparison to other parts of the surface. A most important investigation conducted in accordance with this method was published by Dr. Paul Broca, on Le grand lobe limbique et la scissure limbique. In the course of this memoir he reviewed the arrangement of the limbic lobe or convolution, and showed that it can be identified throughout the mammalian series. It consists of a callosal and hippocampal portion with a lobus hippocampi, and forms the boundary both of the corpus callosum and the transverse fissure of the cerebrum. Moreover it is continuous with the roots of the olfactory lobe, more especially through the lobus hippocampi, though the band of union varies materially in thickness in the brains of different orders. In the proper Carnivora, for example, the connecting band is large and very distinct, in the Pinnipedia it is less marked, and in Man and Apes it is reduced to a fine thread.

In the Carnivora proper the rhinal fissure is distinct and continued across the fissure of Sylvius into the postrhinal fissure, which again is prolonged towards the splenial fissure, though frequently the exact continuity is interrupted by a superficial retrolimbic convolution. In *Phoca* the rhinal and postrhinal fissures resemble those in the Carnivora proper, though relatively they are somewhat smaller. In *Macrorhinus* and *Trichechus* the retrolimbic convolution is nearer the lobus hippocampi, so that the postrhinal fissure is shorter. In Man and Apes, owing to the absolute and relative diminution in size of the olfactory apparatus, the rhinal fissure is scarcely recognisable, and the postrhinal fissure cannot be said to be continuous with it.

The limbic lobe is differentiated on its peripheral aspect by the fissure which has been named the splenial fissure in the brains of the Carnivora and Pinnipedia described in this Report. In Man and Apes the calloso-marginal fissure represents that part of the splenial fissure placed peripherally to the callosal convolution, whilst the collateral (occipito-temporal) fissure is apparently the representative of that part of the splenial fissure which forms the peripheral boundary of the hippocampal convolution.

In the larger Carnivora and the Pinnipedia the supraorbital area possesses an olfactory sulcus, a gyrus rectus, an intraorbital fissure, internal and external supraorbital convolutions; though in the brains of the smaller Carnivora, especially when the olfactory apparatus is relatively large, these fissures and convolutions are scarcely if at all differentiated. In Man and Apes these parts are also seen, and the intraorbital fissure, from so frequently trifurcating, was named by me the triradiate fissure.

The fissure of Sylvius forms a recognisable feature in the brains of the Carnivora, but where it begins as the Sylvian fossa on the under surface of the brain, it is usually shallow, owing to the thickness of the olfactory root which passes backwards to join the lobus hippocampi. In the Pinnipedia, and still more in Man and Apes, owing to the diminished size of this root, the Sylvian fossa is much deeper. In the Carnivora and Pinnipedia