



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

of an expedition which he made with a view to investigate the circumstances of this remarkable meteorological phenomenon, and proposes a theory for its explanation.

“A Meteorological Journal kept at Allenheads, 1400 feet above the level of the Sea, from the 1st of May to the 1st of November, 1836.” By the Rev. William Walton. Communicated by P. M. Roget, M.D., Sec. R.S.

January 26, 1837.

FRANCIS BAILY, Esq., V.P. and Treasurer, in the Chair.

A paper was read, “On the Structure of the Brain in Marsupial Animals.” By Richard Owen, Esq., F.R.S., Hunterian Professor of Anatomy to the Royal College of Surgeons.

The author describes a remarkable modification in the commissural apparatus, apparently provided with a view to establish communications between the cerebral hemispheres, which he has observed in the brains of marsupial animals, and which has hitherto been regarded as constituting the essential difference between the brains of oviparous and mammiferous vertebrata, but which he considers as indicating a certain relation between the greater perfection of that organ, resulting from the superior magnitude of the great commissure, or corpus callosum, and the placental mode of development in the true mammalia. In a former paper he adduced evidence tending to show that both a small development of the cerebral organ, and an inferiority of intelligence are the circumstances in the habits and structure of this singular tribe of animals most constantly associated with the peculiarities of their generative economy: and the repeated dissections he has since made, an account of which is given in the present paper, have afforded him the most satisfactory confirmation of this coincidence, between a brief intra-uterine existence, together with the absence of a placental connexion between the mother and the fœtus, and an inferior degree of cerebral development. Thus, on comparing the structure of the brain in the Beaver and in the Wombat, he finds that the corpus callosum, or great commissure which unites the supraventricular masses of the hemispheres in the former, as well as in all other placentally developed mammalia, and which exists in addition to the fornix, or hippocampal commissure, is wholly absent in the latter animal: and that a similar deficiency exists in the brain of the Great and Bush Kangaroos, of the Vulpine Phalanger, of the Ursine and Mange's *Dasyurus*, and of the Virginian Opossum; whence he infers that it is probably the characteristic feature of the structure of the marsupial division of mammalia. In this modification of the commissural apparatus, the Marsupialia present a structure of brain which is intermediate between that of the Placental Mammalia and Birds; and hence the Marsupialia, together with the Monotremata, may be regarded as constituting a distinct and peculiar group in the former of these classes, although they include forms, which typify the different orders of the ordinary Mammalia.