

**Article XII.—A CRANIAL VARIATION IN MACROPUS BENNETTI.**

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While examining a series of Marsupial skulls in the American Museum of Natural History my attention has been attracted to a skull of a Bennett's Wallaby which possesses a supernumerary bone in the anterior wall of each orbit. Professor Allen kindly loaned the skull (No. 6370) for description.

The accompanying diagram, which is taken from a photograph, represents the lateral aspect of the skull viewed slightly from above. Only the outline of the skull, the sutures, and the foramina are indicated.

It will be seen from this diagram that the anterior orbital bones exhibit an atypical arrangement, which



is brought about by the interposition of a supernumerary bone. The presence of the latter is seen to affect mainly the relations of the lacrimal bone, the other sutural connections in this region of the skull remaining normal. The lacrimal (l.) exhibits its usual relations with reference to the maxillary (m.) and jugal (j.) but is excluded from its usual contact with the frontal (f.), and to such an extent that only a very small portion of its upper border retains the frontal connection. This condition is entirely the result of the presence of the superadded bone, which forms a flattened plate closely set into the lachrymo-frontal suture. The supernumerary bone, as far as can be ascertained, is entirely separate; it does not appear to represent simply a portion of the lacrimal or of any other of the adjacent bones. On account of its encroachment, the lacrimal appears to be less extensive than it usually is, although it is impossible, from superficial examination,

to decide whether the lachrymal terminates at its posterior superficial suture or extends backwards underneath the supernumerary bone to connect with the frontal. Of the two foramina normally perforating the lachrymal, only one is in this case enclosed by it, the other occupying its posterior suture. The relations of the other cranial bones appear to be normal.

It is difficult, in this, as in most such cases, to decide as to what category of characters the atypical condition pertains. There are three possibilities,— the character may be simply the result of accident, or the result of abnormal development, or, again, it may be reversional. The fact that the supernumerary bone is present on both sides of the skull and that it bears similar relations to the adjacent bones seems to preclude the possibility of regarding the character as the result of injury done to the parts concerned. If, again, the suture between the lachrymal and the supernumerary bone were obliterated, the resultant bone would exhibit the typical relations of the lachrymal in this species, so that the supernumerary bone may represent simply a post-lachrymal structure of no morphological significance. On the other hand, it resembles, in its position, the prefrontal of the lower Vertebrata and might, on this account, be interpreted as homologous with it, in which case the condition would have to be regarded as reversional.