

Australian 26, another 44, another 55 mm. behind the bregma. There are two factors which influence the relation of this point to the bregma, viz., the inclination of the plane of the foramen magnum and the relative length of the longitudinal arc of the frontal bone. This line I shall call the perpendicular radius, and the extent of cranial cavity which lies anterior to it, and in relation to the cranial vault, will approximately correspond to the frontal lobes of the cerebrum. I have constructed Table XVIII., in which is given the length of these different radii expressed in millimetres in the series of skulls which have been measured, and to them I have also added for convenience of reference the basi-nasal and basi-alveolar diameters obtained in the previous measurements by the callipers. The new radial measurements are as follows:—basi-occipital from basion to occipital point; basi-lambdoidal from basion to lambdoidal suture; perpendicular from basion to cranial vault perpendicular to plane of foramen magnum; basi-glabellar from basion to the most projecting part of the glabella; whilst the basi-coronal from basion to coronal suture, corresponds with the basi-bregmatic diameter.

From the perpendicular radius the distance was measured to both the most anterior and most posterior parts of the cranial cavity, and these measurements are also recorded in this Table. It will be seen that in the dolichocephalic Fuegian, Admiralty Islander, and Oahuan skulls, the extent of brain cavity behind the perpendicular radius exceeded that which was in front by several millimetres; in the mesaticephalic Bush, New Zealander, and Chatham Islander, and in the brachycephalic Hawaiian, on the other hand, a larger proportion of the cavity was in front of than behind the perpendicular radius.

It would seem therefore as if in the formation of some dolichocephalic skulls, the growth takes place backwards, behind the plane indicated by the perpendicular radius, to a greater extent than in front of the same plane. This remark, however, must not be made too absolutely, for, owing to the plane of the foramen magnum not always possessing the same definite relation to the horizontal plane of the head, the perpendicular radius may, as already stated, be moved forwards and backwards. Thus in two of the three dolichocephalic Australian skulls measured in the above Table, where the plane of the foramen magnum sloped backwards, the frontal division of the cavity exceeded the occipital by a number of millimetres; but in the dolichoplatycephalic Gippsland skull, where the perpendicular radius reached the cranial vault much closer to the bregma, the anterior and posterior divisions of the cranial cavity were nearly equal. It will also be seen that, in accordance with the development of the cranial cavity behind the perpendicular radius, the basi-occipital and basi-lambdoidal radii attained considerable magnitude in the dolichocephali, and in the brachycephalic and mesaticephalic skulls the basi-glabellar radius preponderated over the basi-occipital. The tapeinocephalic character of both the Bush and Gippsland crania is well shown by the shortness of both the perpendicular and basi-bregmatic radii.

Another relation to which my attention has been directed is the angle which a line