

point on the opposite side. I have not thought it necessary to give the inferior measurement below the base of the skull between the two supra-auricular points.

I have determined the relative projection of the zygomatic arches as compared with the transverse diameter of the cranium, by placing the skull, without the lower jaw, on a low table, resting it on the teeth and the most depending parts behind. Then, standing erect, I have looked down on the vertex with the right eye directed to the bregma and with the left closed. The terms phænozygous and cryptozygous employed by Mr. Busk have been used to express whether, from this point of view, the zygomata were visible or invisible.

The basi-nasal and basi-alveolar diameters have been taken from the basion, in the one case to the nasion, in the other to the alveolar point, and the gnathic index has been calculated from the $\frac{\text{basi-alveolar length} \times 100}{\text{basi-nasal length}}$. The classification employed by Flower into Orthognathous below 98; Mesognathous from 98 to 103; Prognathous above 103 has been adopted. The basion has therefore been taken as an important central point for determining the length in a straight line from it to the alveolar point, the nasion, and the bregma.

The length of the foramen magnum from basion to opisthion is given. This measurement, along with the basi-nasal length, and the longitudinal arc, also recorded in the tables, will enable the entire circumference of the cranial box mesially and antero-posteriorly to be computed.

The interzygomatic breadth is the distance between the most projecting parts of the zygomatic arches. The intermalar breadth has been taken on a line with the hinder border of the orbital process. The ophryo-alveolar length is measured from the ophryon to the alveolar point, and the naso-alveolar length from the nasion to the same point. The facial index expresses, according to the method of Broca, the relations of the interzygomatic breadth to the ophryo-alveolar length, and is arrived at by the following formula: $\frac{\text{Ophryo-alveolar length} \times 100}{\text{Bizygomatic diameter}}$. I do not attach much importance to a facial index based upon the ophryo-alveolar length; partly on account of the imperfect definition of the ophryon, and partly because the lower jaw is left out of consideration in the determination of the length of the face. The nasal and orbital measurements, with their respective indices, have been taken according to the methods of M. Broca, and the classification employed by Broca and by Flower has been adopted: *e.g.*, Nasal index, Leptorhine, below 48; Mesorhine, from 48 to 53; Platyrrhine, above 53; Orbital index, Microseme, below 84; Mesoseme, from 84 to 89; Megaseme, above 89.

Professor Broca also estimated¹ the dimensions of the hard palate without including the dentary arcade. Professor Flower modified and improved these measurements by

¹ Instructions Craniologiques, p. 77.