

was 40·5 to 100, and the mean of two Maoris was 48 to 100. In the Negroes the proportion was 45·4 to 100, and in the Negresses 49 to 100. In the adult male Andaman Islander the proportion was 40·6 to 100, and the mean in the females was the same. In the male Bush the proportion was 53 to 100. The mean proportion in two male Hindoos was 45·6, and in a single female 43·6 to 100. In the Sikh it was 47·9, in the Malay 47, and in the Chinese 53·7 to 100. In the male Guanche the proportion was 44, and in the female 40·5; in the male Esquimaux 49, and in the female 38·8; in the male Lapp 54·9, and in the female 48 to 100. In not a single skeleton did the proportion of the breadth of the body of the 1st sacral vertebra to the entire breadth equal the mean proportion in the Europeans as given by Litzmann, and in the majority of cases fell much below it.

The changes in the form and proportions of the pelvis during its growth have been ascribed to various forces acting upon the bones when in a comparatively flexible and plastic condition, *e.g.*, the downward pressure of the weight of the trunk on the sacrum, the pressure of the heads of the femora on the cotyloid cavities when the body is standing erect, the action of the muscles attached to the bones, and the pressure on the pelvic walls of the viscera which are developed in the pelvic cavity. Of these forces the first two are without doubt those which operate most efficiently. It would be out of place to discuss in this Report their mode of operation as two opposing forces, and the more so as the argument has been stated with great clearness and force by Dr. J. Matthews Duncan in his *Researches in Obstetrics*.¹ I would merely add as corroborative of his statement that the heads of the thigh bones exercise an inward and upward pressure on the walls of the pelvis in the region of the acetabula, that in a number of pelvises, both European and exotic, I have seen a distinct bulging of the pelvic wall towards the cavity immediately internal to the acetabula, so that the transverse diameter of the cavity at this spot is diminished by several millimètres.

In the adult pelvis the greatest transverse diameter of the inlet is at a point between the anterior border of the base of the sacrum and a vertical transverse plane through the middle of the acetabula, but somewhat nearer the sacrum than the acetabula. If my tables of measurements of the various pelvises be examined, it will be seen that the transverse diameter of the brim exceeded the greatest breadth of the base of the sacrum in the great majority of the specimens. Sometimes, however, in a male pelvis the sacral breadth was more than that of the transverse diameter of the inlet. This was the case in one Australian, two Negroes, a young Andaman Islander, and one Bushman. In a male Hindoo the two dimensions were equal.

In all my adult pelvises in which the conjugate diameter exceeded, or was almost the same as the transverse, *i.e.*, in the dolichopellic and mesatipellic series, the pelvic inlet approximated more closely to the infantile form than was the case in the platypellic series; and in such black races as the Australians and the Bush, the pelvic inlet was

¹ Edinburgh, 1868. See especially his chapter on the Development of the Pelvis.