

101 mm. as the mean length of the sacrum in fourteen European women, and the mean breadth as 118·3, which yield an index of 116·8, slightly higher than that furnished by M. Verneau's measurements, but not so high as those of Görtz. But from Carl Martin's measurements of sixteen pelves, presumably German, the sacral length was 100 mm., the breadth 105 mm., and the index therefore only 105. Weisbach in his essay, already referred to, on the pelvis of the men of the Austrian empire, has given the dimensions of the sacrum. As he measures the breadth of that bone at its base, on the level of the ilio-pectineal line, he does not select that part of the base which has the greatest breadth, and consequently the sacral index computed from his measurements is less than if the widest part of the base had been chosen, wherever it may happen to be. The sacral index in his specimens, on his mode of measurement, is as follows:—Czechs 102·6, Italians 100·9, Ruthenians 100·8, Magyars 99·1, Gipsies 97·3, South Slavs 96·5, Germans 95, Poles 94·9, Roumanians 94·5, Slovaks 90. The index in all these cases is undoubtedly lower than would have been the case if the sacral breadth had been taken in the same way as that which I have employed, so that I have little doubt that the great bulk of these pelves had, according to my mode of measurement, a sacral index above 100.<sup>1</sup> In Europeans, therefore, both males and females, the mean diameter of the base of the sacrum was greater than that of its long axis; or in other words it was platyhieric.

In the Australians, again, an opposite relation prevails. In only one of the six adult males measured in Table I. was the breadth of the sacrum at the base greater than its length, in two these diameters were equal, and in the remaining three the length exceeded the breadth. The mean sacral index, therefore, of the males was only 98, and in the single adult female this index was only 101. In a male measured by Keferstein the index was 88, in one by Barnard Davis 90, and in five males measured by Spengel it was 111, 106, 97, 89, and 111 respectively. In the single male Australian measured by Verneau the sacral breadth at the base is stated to be 105 mm. and the length only 87 mm.; but the latter diameter is so small for an adult male of this race, that one is disposed to think there must be either some error in the table, or that the sacrum could not have been normal; the index furnished by these measurements, 120, is therefore exceptionally high. The sacral index of a female measured by Barnard Davis was 89, and the mean index computed from the two females measured by Verneau was 105·9, and the mean sacral index of the five women measured by Garson was 114. Excluding, therefore, M. Verneau's male pelvis for the reason given above, it is clear that in the Australian men the breadth of the sacrum was small in relation to its length, so that in a considerable proportion the index did not exceed 100, and the mean of the thirteen males was 98·5, *i.e.*, they were dolichohieric. In the women, again, the sacrum was

<sup>1</sup> I have tested this by the measurement of several pelves, both European and Australian. In the Europeans the greatest width of the sacrum was from 2 to 9 mm. more than the width opposite the iliopectineal lines; in the Australian pelves the greatest width varied from 5 to 8 mm. more than the width opposite these lines.