

was due to the diminished proportion in the lumbar region. The observations of the brothers Weber,¹ made many years ago on a European skeleton, gave to the series of anterior surfaces of the bodies of the five lumbar vertebræ a height of 6·7 mm. above the posterior surfaces, with which my measurements closely approximate; whilst the height of the anterior surfaces of the discs (including those from the 12th dorsal to the 5th lumbar vertebræ) was 11·9 mm. above the posterior, but if the disc between the 5th lumbar and 1st sacral be also taken into account, then the anterior surface of the collective series of discs was 21·1 mm. more than the posterior, so that the discs contributed about three times more to the anterior convexity than did the bodies. There can, indeed, be no doubt that it is the rule in the adult European spine for the disc between the 5th lumbar and the 1st sacral vertebra to be very materially thicker in front than behind. The existence of an anterior convexity in the lumbar spine shows that the growth proceeds more rapidly in front than behind, and in this growth, both the vertebral bodies collectively and the discs participate in the European spine.

If we were to assume that in the black races the lumbar spine possessed a forward convexity equal to the average convexity of Europeans, it would then be necessary, owing to the diminished depth of the anterior surfaces of the vertebral bodies as compared with the posterior, for the discs to be very much thicker in front than behind, either throughout the lumbar region or in a part of its extent, so as to throw the bodies forward. Were this the case then in the lumbar spine the elastic discs would make up an even larger proportion of this region of the column than in the white races, and their growth would necessarily have been much more active in front than behind. The brothers Weber pointed out long ago that whilst the form of the articular processes of the lumbar vertebræ interfered with lateral flexion and rotation in this region, yet that the lumbar spine had great flexibility from before backwards through the interposition of these elastic discs. But even should the lumbar region be less convex forwards in the black races than in the Europeans, it is not unlikely that the proportion of elastic disc to inelastic bone may be greater in the former than in the latter; greater flexibility would thus be given to the spine, and the body would more easily be enabled to assume those positions during rest and in motion which have been already referred to in the section on the age characters of the pelvis, as more frequently adopted by man in his wild and native state than when living under the influences of civilisation.

¹ *Mechanik der menschlichen Gehwerkzeuge*, pl. viii. p. 92, Göttingen, 1836.