

working quite independently of each other, and on two distinct series of skeletons of various races of men, it is obvious that differences exist amongst them in the relative thickness of the bodies of the lumbar vertebræ anteriorly and posteriorly. The production of bone in the bodies of the lumbar vertebræ of these races has been so adjusted that they are collectively thicker in front than behind in the white races, and behind than in front in the black races. If the spinal column consisted only of the osseous vertebræ in direct articulation with each other, both by their articular processes and bodies, the lumbar region would then be concave forward in the black races, and convex forward in the white races. But the spine, in addition to the osseous vertebræ, contains an intercalated series of intervertebral elastic discs, and these discs may perhaps be so adjusted in the black races as to be collectively thicker in front than behind in the lumbar region, and thus to compensate for the want of development in depth of the anterior surface of the vertebral bodies, and to give to the column a forward convexity in that region as in the white races, although not perhaps in so well-marked a degree. Should this be the case, it would follow that in the course of the development and ossification of the spinal column in the lumbar region in these races, important differences would arise anteriorly and posteriorly in the proportion of that mesoblast tissue which becomes cartilage and bone, and that which becomes intervertebral disc. We have no information, however, on the thickness of the discs in the black races, either relatively or absolutely, so that this interesting question is not in a position to be definitely answered.

Putting on one side, therefore, for the present, the question of modifications in the relative thickness of the discs, and limiting ourselves to the consideration of the influence which the bodies of the vertebræ themselves would have on the curvature of the spine, we find a very considerable range of variation in the vertical diameter anteriorly and posteriorly of the series of five lumbar vertebræ. These differences are expressed numerically by the general lumbar index. In my series of skeletons the lowest index was in a Chinese, 84·8, and the highest both in a Bushman and in a male Hindoo, 106, but Dr. Cunningham has obtained, as the mean of two male Tasmanians, an index as high as 108·5, and of ten male Australians, 110·1. Without at present taking into consideration the compensatory arrangements in the living body which might modify these relative differences in thickness, the lumbar spine—so far as represented by the bodies of its vertebræ, and with the lower surface of the body of one vertebra in contact with the upper surface of the body of the vertebra next below—might present one or other of three forms in different races of men. It might be convex forwards, or straight, or concave forwards, and to each group an arbitrary numerical limit might be assigned, based on the general lumbar index. We might assume that such a series of vertebræ, with the general lumbar index calculated only from the vertical diameters of the lumbar bodies, and ranging from 98 to 102, both inclusive, formed a straight spine, *Orthorachic* (ὀρθός, straight, ῥάχις, spine); one with a general index