

## SPINAL COLUMN.

In the chapter on the pelvis I have described the characters of the sacrum in forty specimens. In thirty of the skeletons tabulated in that chapter, the portion of the spine formed by the movable vertebræ was, with few exceptions, complete, so that I have been enabled to examine the vertebræ in the cervical, dorsal and lumbar regions, with the view of ascertaining if they presented any peculiarities either in form, arrangement, or manner of development. I shall now summarize the results of this examination.

*Peculiarities of Individual Vertebræ.*

The cervical region was to a large extent free from variations from the recognised arrangements based on the study of the skeletons of Europeans as described in the text books, but occasional departures from the usual description were met with. To these I shall now refer. In the Otago skeleton, the Chinese, two Hindoos, two Negros and two Andaman Islanders, the spine of the 6th cervical approximated in length to that of the 7th, and like it was not bifid. In the female Hindoo it was not bifid, but had no unusual length; in the female Lapp it was rudimentary and not bifid. In the Bushman the spines of the 3d, 6th, and 7th cervicals were not bifid, those of the 3d and 6th were short and stunted, that of the 7th as usual prominent. In a Negress only the spine of the axis was bifid and in a Negro the 3d, 4th, and 7th cervical spines were not bifid. In one of the Oahuan skeletons the 7th cervical spine was bifid. That in the lower races of men a tendency exists for the spines of the cervical vertebra to be more simple than in Europeans was recognised by Sir Richard Owen, who refers to the non-bifid character of the five lower spines in the skeletons of a Bushman and an Australian.<sup>1</sup> M. Hamy, in his memoir on the skeleton of a Negrito, states<sup>2</sup> that the spine was not bifid in the 6th cervical in some skeletons of the Oceanic and African black races, and that in an Australian a similar condition was met with as high as the 4th cervical: moreover, the skeletons of a Bushwoman, a Hottentot, and a Negress had only the spine of the axis bifid, and in the Aëta Negrito an almost similar arrangement was present.<sup>3</sup> The lengthening of the spine of the 6th cervical in many skeletons of the lower races of men has not had much attention given to it, though Owen states that in an Australian the 6th cervical spine was of greater length than the 5th.

In the Sikh skeleton the right vertebral groove on the atlas was bridged over by a bar of bone, and in two Hindoos and a Negress this groove was deepened by a pro-

<sup>1</sup> See his Memoir on the Vertebral Column of *Troglodytes* and *Pithecus*, in *Trans. Zool. Soc. Lond.*, vol. iv.

<sup>2</sup> *Nouv. Archives du Muséum*, ser. 2, tom. ii. 1879.

<sup>3</sup> Since this Report was in type Dr. D. J. Cunningham has published (*Journ. of Anat. and Phys.*, July 1886), observations on the comparative frequency of want of bifidity in the cervical spines in different races of men.