

*Measurements of the Bones.*

The length of the bones of the shaft of the upper limb was taken on a Broca's osteometric board, made by M. Collin, Paris. I measured the maximum length of each humerus from the top of the head to the most projecting part of the trochlear surface. In each radius I measured the length from the top of the radius to both the base and the tip of the styloid process, and in each ulna from the summit of the olecranon to both the inferior articular surface and the tip of the styloid process. The measurement to the tip of the styloid process in both radius and ulna gives the maximum length of each of those bones. In taking these measurements I was desirous of ascertaining the absolute length of each bone, the relative length of the corresponding bones in opposite limbs of the same skeleton, and the proportionate length which the bones of the forearm bore to the bone of the upper arm in the same limb.

The longest humerus was in the right arm of one of the Negro skeletons, in which it measured 372 mm.; the longest humerus in each of the two other Negros was 339 and 324 mm., and in the two Negresses 331 and 307 mm.<sup>1</sup> In the male skeleton, presented by Dr. Anderson as a Hindoo, the left humerus was 370 mm. long; in the other male Hindoo each humerus was 318 mm., and in the female the right humerus was 285 mm. In the Sikh the right humerus was 354 mm., in the Chinese 298 mm., and in the Malay the left humerus was 307 mm. In the male Australians the maximum humerus was 352 mm., in the Riverina skeleton; then followed 348 mm. in the Queensland, 335 in the Manly Cove, 334 in the Eucla, 330 in the Perth, and 325 mm. in the Swan Hill skeleton; whilst in the female from West Victoria the right humerus was only 287 mm. The right humerus of the male New Zealander from Te Aroha was 335 mm., and the left in the Otago skeleton was 326 mm. In the one female Oahuan the maximum humerus was 311 mm., in the other 267 mm. In the male Esquimaux the right humerus was 343 mm., in the female 326 mm. In the male Lapp the right humerus was 299 mm., in the female 280 mm. In the Bushman the right humerus was 288 mm. long. The longest humerus in the Andaman Islanders was 281 mm. in one skeleton, 278 in another, 253 in a third, and 248 in a fourth.

The longest radius, the length of which was 287 mm., was in the right arm of the Negro skeleton which also had the longest humerus. In the other Negros the maximum radius was 273 and 258 mm., and in the Negresses 245 and 242 mm. In Dr. Anderson's male Hindoo the maximum radius was 282 mm., in the other male Hindoo 257, and in the female 233 mm. In the Sikh the longest radius was 267, in the Malay 250, and in the Chinese 227 mm. Both radii of the Queensland and the left radius of the Riverina skeleton measured 270 mm., and the maximum radius in the

<sup>1</sup> In Table XIV., p. 109, the maximum lengths of the humerus and radius in thirty of the skeletons which I have measured is recorded.