

infraspinous length, by the following formula: $\frac{\text{breadth} \times 100}{\text{infraspinous length}}$. The product obtained is the infraspinous index of the scapula. M. Livon and Messrs. Flower and Garson have, in their inquiry into the scapular and infraspinous indices, adopted Broca's measurements.

As these measurements, with the indices derived from them, give the relations both of the entire length of the scapula and of its infraspinous length to the breadth of that bone, and thus fix certain important proportions, I have also employed them in this investigation. As Broca has shown, the scapular index is at its minimum in bipeds and at its maximum in quadrupeds, for whilst the length of the scapula exceeds the breadth in man, the reverse is the case in quadrupeds. An increase, therefore, of the scapular index in the human bone is an indication of a form of scapula more closely approaching to the ordinary mammalian type than when the index is low. The relation of the infraspinous index to the scapular index will vary with the variations in the relative length of the supra- (præ-) and infra- (post-) spinous fossæ. When the supraspinous fossa has a relatively great length to the infraspinous, then the infraspinous index is high, which is the normal mammalian proportion, but when the infraspinous index is low, as in the human scapula, then the infraspinous fossa dominates over the supraspinous.

Europeans.—The mean length of fourteen adult scapulæ of Frenchmen, measured by M. Broca, was 160·5 mm., the mean breadth was 105·7 mm., and the mean infraspinous length was 120·5 mm. M. Livon's measurements of seventy-three Frenchmen yielded a mean length of 168 mm., a mean breadth of 105·9, and a mean infraspinous length of 124·3 mm.; whilst in fifty-one Frenchwomen the corresponding dimensions were 135, 91·1 and 102·5. Messrs. Flower and Garson's measurements of 200 European scapulæ give the mean length 155·5 mm., mean breadth 101·4 mm., and mean infraspinous length 113·6 mm. These dimensions are smaller than those obtained by M. Broca, which is to be accounted for by their series containing a proportion of female scapulæ. In Broca's Frenchmen the mean scapular index was 65·9, and the mean infraspinous index was 87·7. The mean scapular index in M. Livon's Frenchmen was 63, and the mean infraspinous index was 85·4, whilst in the Frenchwomen the mean scapular index was 67·4, and the mean infraspinous index was 88·8, so that in women the scapula is broader in proportion to its length than in men. In Flower and Garson's Europeans of both sexes the mean scapular index was 65·2 and the mean infraspinous index was 89·4.

Australians.—I have examined twelve scapulæ belonging to six male skeletons. The maximum length of this bone was in the Queensland skeleton 168 mm., and the minimum in the West Australian from Perth 138 mm. In only one skeleton, that from Swan Hill, was the length of the right and left bones the same, and in the Perth skeleton they varied as much as 7 mm. The maximum breadth was, in the right scapula of the Riverina skeleton, 109 mm., and the minimum in the scapulæ of the Manly Cove