

<i>Male.</i>		Ft.	in.
From the tip of the nose along the back to the root of the tail,	.	3	3
Length of tail,	.	1	8½

<i>Female.</i>		Ft.	in.
From the tip of the nose along the back to the root of the tail,	.	2	7
Length of tail,	.	1	4

The male had manifestly been received in a very putrid state, but its long immersion in strong spirit had considerably improved its condition. The female was in an admirable state of preservation, and it is consequently from it that the majority of the drawings have been taken and the description framed. A special interest is attached to the anatomy of this animal, from the very prevalent belief that the genus of which it is the sole member is rapidly becoming extinct. Thus Owen,¹ writing in 1842, speaks of it as a species "whose term of existence seems fast waning to its close."

The *Cuscus* was obtained in New Guinea, and was presented to Sir Wyville Thomson, while on a visit to Queensland, by Mr. Sheridan of Maryborough.

In my examination of the intrinsic muscles of the marsupial manus and pes, I was met by a somewhat puzzling multiplication of the elements. To explain this, and at the same time connect the condition with that found in other animals, I was induced to extend my inquiries upon this point into Mammalia generally. The results of this investigation I have incorporated with the present report.

MYOLOGY OF THE ANTERIOR LIMB.

Shoulder and upper arm.—Before entering upon a description of the muscles of the shoulder, it is necessary to refer to the condition of the clavicle. In the *Cuscus* and *Phascogale* this bone is well developed, and, stretching from the sternum to the scapula, has a distinct attachment to both. In the *Thylacinus*, on the other hand, the clavicle is exceedingly rudimentary. It is merely represented by a narrow curved rod of bone, about two inches in length, embedded in the substance of the cephalo-humeral muscle, and in no way attached to the acromion. To the sternum it is joined indirectly by an ill-defined fibrous band or raphe.

Trapezius.—This muscle has a similar origin in the three animals. It springs from the occipital crest, from the spinous processes of all the cervical vertebræ, and from the spines of the seven anterior dorsal vertebræ. From this extensive origin its fibres extend in the form of one unbroken muscular sheet, and converge towards the shoulder. Here the posterior and greater part of the muscle is inserted into the spine of the scapula (Pl. I. fig. 5, *tr.*), and the root of the acromion process, whilst the anterior portion sweeps over

¹ Transactions of the Geological Society, 1842, vol. vi., 2nd series on the *Phascolotherium*.