

THE
VOYAGE OF H.M.S. CHALLENGER.

ZOOLOGY.

REPORT on some points in the ANATOMY of the THYLACINE (*Thylacinus cynocephalus*), CUSCUS (*Phalangista maculata*), and PHASCOGALE (*Phascogale calura*), collected during the Voyage of H.M.S. Challenger in the years 1873–1876; with an account of the Comparative Anatomy of the Intrinsic Muscles and the Nerves of the MAMMALIAN PES. By D. J. CUNNINGHAM, M.D., F.R.S.E., Professor of Anatomy in the Royal College of Surgeons in Ireland.

IN March 1877 I received from Sir C. Wyville Thomson, for purposes of anatomical research, all the Marsupial animals brought home by the Challenger Expedition. The collection comprised the following specimens:—

Four specimens of the		<i>Phalangista vulpina</i> .
Three	„	„ <i>Dasyurus viverrinus</i> .
Two	„	„ <i>Thylacinus cynocephalus</i> .
One	„	„ <i>Phalangista maculata</i> .
One	„	„ <i>Phascogale calura</i> .

Of these I chose for special examination the *Thylacine*, the *Cuscus*, and the *Phascogale*. In this choice I was influenced by the fact that these three species are the least known, and represent types which differ widely from each other, both in physique and habits. The other specimens I merely used for purposes of comparison, and am not prepared, therefore, to give a detailed account of their anatomy even were this advisable.

Both specimens of *Thylacinus* were sent to the Challenger Expedition while at Sydney, by Sir Charles Du Cane, K.C.M.G., the then Governor of Tasmania. The one was a large male, the other a female very much smaller in size. The following were the measurements:—