ESTRUS OVIS, OR GADFLY OF THE SHEEP. By A. Morton, Curator Royal Society's Museum.

[Read October 13, 1884.]

A few notes on the introduction of what I am led to believe to be a new grub or fly to Tasmania, may be of some use to the Fellows of the Royal Society. The above insect, I find, is not of any recent date, but is spoken of by a learned physician, Alexander Trallien, in the year 560. They are well-known in Europe, and have been met with at times in the Australian colonies.

About 10 days ago Mr. Maddox, who is connected with a butchering establishment in this city, brought me in a grub that is on the table, saying that in cutting open a sheep's head, near the brain, he found this grub. The sheep it was taken from was one recently introduced from the neighbouring colonies; in none of the Tasmanian sheep, he states, has he found anything like this. Several other gentlemen connected with sheep in this colony have also expressed similar opinions. On examination, and referring to some works on the disease of sheep, I find it to be the Estrus ovis, or Gadfly of the sheep, belonging to the Diptera order, so named from its larvæ inhabiting the nostrils or frontal sinuses of sheep in particular, although it has occasionally been found in goats and deer. In Europe, it assumes its perfect winged form in some uncertain period from May to July; it then becomes an intolerable nuisance to the sheep, especially in woody countries and in the neighbourhood of copses; so much so that if only one fly appears, the whole flock is in the greatest agitation. The larvæ or grub is composed of 10 or 11 rings; when young it is perfectly white, with the exception of two small brown patches by the side of each other at its tail. At some time between the middle of July these larvæ have attained their full growth and seek to escape from their prison. While this is taking place great annoyance is caused to the sheep, continually stamping their feet and sneezing violently. It is stated that the exit of the grub is seldom seen, owing probably to the impatience of the Very rarely are more than three of these lots found in a sheep's head; some instances have, however, been quoted where a head has contained nearly a dozen. M. Valisnieri, a French naturalist, states that a worm which he took on July the 5th underwent its final change at the expiration of 40 days, but 63 days passed before one which he found in April became a perfect fly. The fly is considerably smaller than the size of the larva would indicate, the length of the wings being nearly equal to that of the body, which they almost entirely cover; they are described as being prettily

striped and marked. It is a singular fact that the fly has never been seen to eat. M. Valisnieri repeatedly offered these insects sugar and syrup but they could not be induced to touch it, although he kept one of The flies, both male and them more than two months. female, seem to be inert and sleepy things, and are generally to be seen on the rails and walls in the neighbourhood of some flock of sheep. Both French and English writers give a fearful account of the mischief which the larva effects in its dark abode. Gasparian (Manuel d'Art Veterinarie, p. 468) speaks of frequent convulsions, giddiness, and half unconsciousness, distinguished from turn sick by the violent sneezing with which it is accompanied. I have been unable to find out in any of the works on the disease of sheep whether the insect causes death.

TENTATIVE LIST OF THE NAVIGATORS WHO VISITED VAN DIEMEN'S LAND PRIOR TO SEPTEMBER 1803.

By James Roxburgh McClymont, M.A. [Read October 13, 1884.]

My object in reading this list of early navigators is mainly to call attention to the paucity of information within our reach regarding geographical discovery in Tasmania—a defect which it is increasingly difficult to remedy, seeing that the works which contain such information are being eagerly bought up for the libraries of Europe, America, and the other colonies. For this reason the list I now submit is purely tentative. I trust that steps may be taken to supply the deficiency and that, meanwhile, those who possess works in this department of research in their private collections will make the fact known.

I choose September 1803 as a limit, partly because it is the date of arrival of the first colonization party* and is therefore a convenient historical landmark, partly because it approximates the period at which finality in the delineation of the Tasmanian coast-line was attained by the determination of the peninsular character of the Ile d'Abel-Tasman of Dentrecasteaux, and by the discovery of Géographe

^{*} Rusden's History of Australia. i. p. 336.