ON A SPECIES OF MOTH (EPICROCIS TEREBRANS) DESTRUCTIVE TO RED CEDAR AND OTHER TIMBER TREES IN NEW SOUTH WALES.

By A. SIDNEY OLLIFF.

Early in March, 1889, the young Red Cedar trees (Cedrela toona, Roxb.) in the State Forest Nursery, at Gosford, were found to be suffering from the attack of some insect, which seriously interfered with their growth, and as the evil appeared to be upon the increase, the matter was brought before the notice of the Colonial Secretary's Office, to which Department the Forest Nursery is attached, with a view to obtaining accurate information as to the nature of the pest, and the best means of checking its ravages. For this purpose the Principal Under-Secretary, Mr. Critchett Walker, communicated with Dr. E. P. Ramsay, the Curator of the Australian Museum, forwarding specimens of a moth, and portions of the trees containing a number of larvæ or caterpillars, presumed to be the early stage of the accompanying moths, and the real cause of the injuries. Unfortunately these specimens could not be identified owing to their poor condition, but Dr. Ramsay recommended that the trees should be carefully examined, and all the infected parts cut off and burnt, and subsequently he handed the larvæ to me for investigation, with the request that I should endeavour to breed the moth. This I failed to do although I had more than one consignment of larvæ from the Nursery, owing to the dry condition in which the cedar twigs were received, so it was determined that I should visit Gosford, and if possible obtain a better supply of material. Accordingly on 22nd August I made a careful examination of the plantations, and with the assistance of Mr. J. McCoig, the Overseer of the Nursery, succeeded in obtaining a number of larvæ in various stages of growth. I found that the injury is caused by the larve burrowing into the main stems or "leaders" of the trees for the purpose of eating the pith and soft tissues, which has the effect of arresting the natural growth of the tree, and thus seriously affecting its value for forestry purposes. At the time of my visit to Gosford a large number of the infected trees had been freed from the pest by the energy of the Overseer, who had used the pruning-knife with excellent results, but a few of the larvæ were still to be found by careful searching in an outlying plantation at some distance from the Nursery. number of the "leaders" containing the burrows of these larvæ were cut and afterwards placed in a jar, partly filled with earth and sand which was kept moist to prevent the wood from