## STUDIES IN AUSTRALIAN ATHECATE HYDROIDS.

No. 1. Two New Species of the Genus Myriothela.

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(Plates xxxii-xxxiv and Figure 1.)

## INTRODUCTION.

Athecate Hydroids are very poorly represented among the marine Hydroid Zoophytes of Eastern Australia. In the following pages two new species of this interesting but little known group, belonging to the Genus Myriothela, are described and figured from the coastal waters of New South Wales. In their morphology and histology they present many striking points of difference from other Australian Athecata, and represent a genus not previously recorded from these latitudes of the Southern Hemisphere. My specimens were obtained from a mass of rapidly-drying seaweeds that had been thrown up on the sandy beach of Maroubra Bay, near Sydney, New South Wales. The large solitary hydranths of very remarkable appearance first attracted my attention, but an exhaustive search failed to reveal the presence of further specimens beyond those I had already secured. The hydranths were attached to the lobes of the thallus of a large seaweed and, on closer examination, proved to be representatives of the curious genus Myrio-Unfortunately the specimens already showed signs of thela. maceration, but after fixation in 70% alcohol, are sufficiently well preserved to permit of a detailed description of the external characters and some of the more salient features of the histology. Subsequently, the late Professor Launcelot Harrison discovered a second species of Myriothela on the undersides of rocks below low-water mark at Bulli, forty miles south of Sydney. These specimens, fixed in sublimate-acetic and transferred to 70% alcohol. are in an excellent state of preservation for histological purposes. Both species have been studied by means of this fixed material. Serial sections of the hydranths with their attached blastostyles and gonophores were cut in a transverse direction, and afterwards stained with Ehrlich's hæmatoxvlin followed by eosin. The sections were cut in thicknesses varying from 6 to 8  $\mu$ .

The genus *Myriothela* is represented in the Northern Hemisphere by six species, *M. cocksi*, *M. phrygia*, *M. gigantea*, *M. minuta*,