## THE RESULTS OF DEEP SEA INVESTIGATION IN THE TASMAN SEA.

## II.—THE EXPEDITION OF THE "WOY WOY."

2.—Mollusca from Eight Hundred Fathoms, Thirty-five Miles East of Sydney.

By CHARLES HEDLEY.

(Plates lxvi.-lxvii.).

In continuation of the biological examination of the ocean floor off Sydney conducted by Professor W. A. Haswell with the aid of a grant from the Royal Society of London (as detailed ante p. 271) an excursion was made in the "Woy Woy," on October 26-27, 1906. We proceeded thirty-five miles from the coast, and lowered the bucket dredge in an estimated depth of 800 fathoms. It returned nearly full of green ooze. 1 When the whole load was washed through a sieve of thirty-four to the inch, hardly more than a cupful was retained of shells, foraminifera, or such solid bodies. The only thing alive was a Tubicolous Annelid. From shallower depths of about a hundred fathoms, ten times as much matter would be left in the sieves. So large a proportion of silt to shells seems to indicate that deposition is here proceeding rapidly. I should also have inferred that the deposit of such finely divided matter implied a perfect calm, but my friend Mr. G. H. Halligan who has given these problems special attention, does not consider such a deduction necessary.

On the other hand the flagella of the antennæ in an undetermined prawn from this horizon extended for more than three and a half times the length of its body. Mr. A. R. McCulloch suggests that this enormous developement would be manageable only in absolutely still water.

Both species and individuals were less abundant than in the samples of sea bottom previously examined. About sixty different kinds of shells were separated, about a third of which are new. From these the following are selected for description.

<sup>1</sup> For an account of our glauconite deposits, see Collet and Lee—Proc. Roy. Soc. Edinb., xxvi., 1906, p. 273.