THE RESULTS OF DEEP SEA INVESTIGATION IN THE
TASMAN SEA.

II.—THE EXPEDITION OF THE "WOY WOY."

1. FISHES AND CRUSTACEANS FROM EIGHT HUNDRED FATHOMS.

By ALLAN R. MCCULLOCH, Zoologist.

(Plates lxiii.-lxv.).

In continuation of the investigations carried on by means of a
grant from the Royal Society of London detailed on page 271 of
these Records, Professor W. A. Haswell, M.A., made a second
expedition on 26th to 27th October, 1906 in the "Woy Woy," a
boat that had already been engaged in this direction (ante p. 211)
He kindly invited me to accompany him and has further honoured
me by placing the Fishes and Crustacea in my hands for descrip-
tion. In the first instance, the Crustacea were undertaken by
my lamented friend Mr. F. E. Grant, but the untimely death
of that gentleman occurred before he had dealt with them.

The specimens here discussed were obtained in a single cast of
a small trawl which Professor Haswell had built on the principle
of one designed and successfully used by the Prince of Monaco.
It was lowered in 800 fathoms at a point thirty-five miles due
east of Sydney, on the 152nd Meridian.

Besides the subject of this paper, the trawl produced numerous
representatives of Echinodermata, conspicuous among which were
a hundred living specimens of Porocidaris elegans which choked
the net, and with their long spines scraped most of the scales off
the fishes that lay near them. Upon their arrival on deck fishes,
crustaceans, and echinoderms alike were quite paralysed and
rigid, while the stomachs and intestines protruded from the fishes' mouths and the eyes from their sockets. Only when they were
placed in formalin did they exhibit any traces of life and then
merely by erecting the fins and gill covers before they died.

At the suggestion of Professor Haswell, I examined the stomachs
of the fishes for any invertebrates that might be undigested, but
in every case they were quite empty, the fishes having probably
vomited the contents at an early stage of their ascent.