

THE RESULTS OF DEEP SEA INVESTIGATION IN THE  
TASMAN SEA.

II.—THE EXPEDITION OF THE “WOY WOY.”

I. FISHES AND CRUSTACEANS FROM EIGHT HUNDRED FATHOMS.

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(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 description. 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.