

REPORT

OF THE

FIFTIETH MEETING

OF THE

BRITISH ASSOCIATION

FOR THE

ADVANCEMENT OF SCIENCE;

HELD AT

SWANSEA IN AUGUST AND SEPTEMBER 1880.

LONDON:

JOHN MURRAY, ALBEMARLE STREET.

1880.

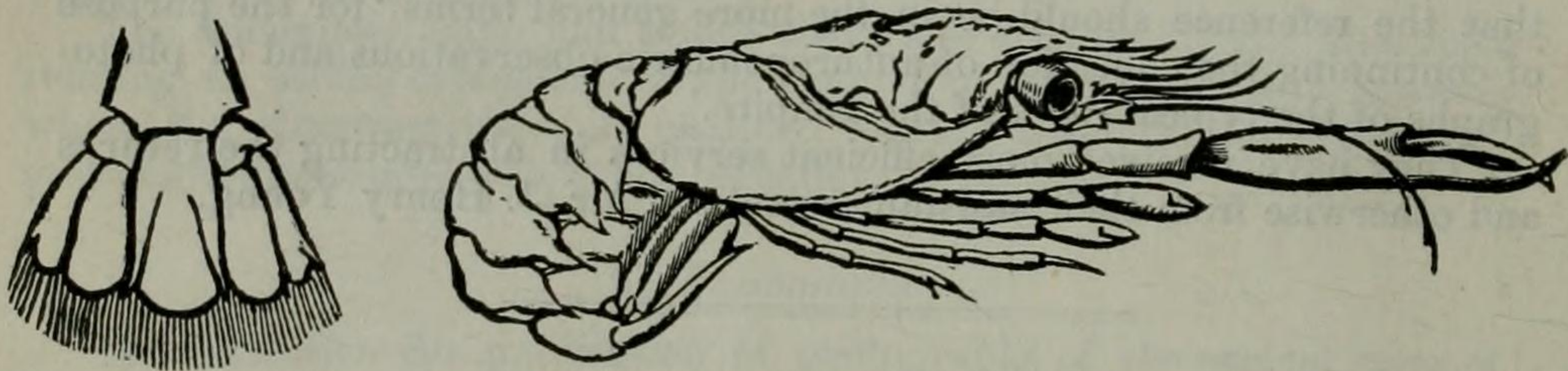
Office of the Association: 22 ALBEMARLE STREET, LONDON, W.

Second Report of the Committee, consisting of Mr. C. SPENCE BATE and Mr. J. BROOKING ROWE, appointed for the purpose of exploring the Marine Zoology of South Devon.

WE beg to report that we have had a series of dredgings, &c., from various parts of the coast of Devon and Cornwall, selecting more especially those localities that have been hitherto little explored, or which previous research has shown to be places of interest for the objects that have been found.

From off the Dudman we have received many animals, which, although not new, yet have been considered as being among the rarer of our British Crustacea. Among them are *Polybius henslowii*, and a macrura that is new to the coast, if not an undescribed species. It evidently belongs to the genus *Nephropsis*. *Nephropsis stewarti* was taken by Mr. Wood-Mason in the Indian Seas at a depth of 300 fathoms; another species has been taken during the *Challenger* Expedition at 700 fathoms, south of New Guinea; and another at 800, from off Bermuda: *N. Atlantic*. All these are remarkable for the depth at which they were taken, as well as for the rudimentary or depauperised condition of the eye-stalks; whereas the British form was taken floating on the surface of the sea, and has large and well-developed eyes.

The resemblance of all four species is very close, and the distinction of one from the other is dependent chiefly upon the modified forms of more or less important parts.



Nephropsis cornubiensis (new species).

We look upon the discovery with considerable interest, as it bears a near resemblance to the preserved fossil remains of *Hoploparia belli*, as figured by Woodward in his table of fossil Crustacea.

If we compare our newly-found form with *Nephrops norvegicus* of the Northern Ocean, we shall find many points of similarity and many also of definite separation—the latter so strong that were we assured that *Nephropsis cornubiensis*, the name by which we provisionally intend to recognise the newly-found species, were an adult or mature form, we should not hesitate to accept it as a distinct species. But as we know so little of the young of any of the macrura after they have passed the earliest forms in which they first appear, we are induced to believe it may be no other than an immature condition of *Nephrops*. If this be the case then all the species of the genus *Nephropsis* (Wood-Mason) must be recognised as in the same position, and probably the fossil *Hoploparia* also. There are conditions that make one hesitate to affirm this too hastily, and among these are the facts that, in the localities where *Nephropsis* has been taken, *Nephrops* has not been recorded. There has been no instance of *Nephrops* having been taken in the English Channel, or anywhere south of the

North-Irish and Scotch waters. And as far as we are aware, no specimen of the genus has been taken in New Guinea, the Philippine Islands, or Bermuda.

This is, however, but negative evidence, and only valuable until research has been perfected; and until it is more so than at present, it will be convenient to allow the genus *Nephropsis* to include the smaller forms.

We have also obtained specimens of *Arctus arctus*, and many others of interest. But the sudden and severe illness of our colleague Mr. J. Brooking Rowe, on whose assistance we had calculated, has precluded us from a complete examination of all our specimens, more especially in Annelids, Mollusca, &c. A box of offshore washings has been placed in the hands of Dr. Zenker, of Potsdam, for examination, more especially to ascertain the entomostracous forms of Crustacea that may exist in this locality.

When all liabilities have been paid, we expect to have some eight or nine pounds still in our possession, with which we hope to be able to complete our report at the next meeting of the Association.

The collections that we may secure we propose to deposit in the museum of the Athenæum at Plymouth, which is essentially of a local character, and the duplicates, more especially the edriophthalmous species of Crustacea, we intend forwarding to the Bristol Museum, to perfect the collection of British forms in that institution.

Report of the Committee, consisting of Dr. M. FOSTER, Professor ROLLESTON, Mr. DEW-SMITH, Professor HUXLEY, Dr. CARPENTER, Dr. GWYN JEFFREYS, Mr. SCLATER, Mr. F. M. BALFOUR, Sir C. WYVILLE THOMSON, Professor RAY LANKESTER, and Mr. PERCY SLADEN (Secretary), appointed for the purpose of arranging for the occupation of a Table at the Zoological Station at Naples.

YOUR Committee have to report that the Zoological Station at Naples continues in a most satisfactory state. Under the able management of Dr. Dohrn, no opportunity is left unemployed for promoting its efficiency and utility; and in these endeavours he is admirably seconded by his whole staff. During the past year the establishment has been placed upon a more secure footing than it has previously enjoyed, by the German Government having voted a grant equivalent to 1500*l.* towards the support of the Station, and which is understood to be an annual and permanent one. As a proof of the great interest taken in the undertaking in Germany, it may be mentioned that this grant was the result of a direct resolution of Parliament on a petition moved by Helmholtz, Dubois-Raymond, and Virchow; and that in the discussion that followed many of the chief men of the Reichstag took part. The money is bestowed as a donation from the Empire, for which no return is asked, each separate State paying for the hire of its table in the usual way; Prussia having three tables, and five other States one each. In addition to this Prussia votes 150*l.* annually towards the publications of the Station; and the Berlin Academy has this year granted 100*l.* for the first 1880.