CRUSTACEA.

PART I.

By Thomas Whitelegge,

Zoologist, Australian Museum.

(Plates xxxii.-xxxv.)

The collection of Crustacea obtained during the cruise of the "Thetis" proves to be exceptionally rich in forms either new to science or to the fauna of New South Wales.

Of the forty-five species herein dealt with, twenty are additions to the fauna; nine of which are described as new.

The above remarks apply to the higher Crustacea only; the lower, when thoroughly worked out, will I believe yield a far larger proportion of novelties. Although the "Thetis" collection shows the coastal waters to be so rich, it probably includes but a small portion of our Crustacean fauna. It must be remembered that the "Thetis" Trawling Expedition was fitted out to test the deeper waters off the coast for fish alone; all other organisms were considered of secondary importance. Still Mr. Waite on several occasions contrived means to secure representatives of the smaller forms of life, and succeeded in preserving a very large quantity of material which will yield a rich harvest when fully investigated.

The extreme richness of the fauna of Port Jackson is now generally acknowledged, but many still entertain the idea that the waters off the coast are deficient in fish food, and that there is a scarcity of minute living organisms such as abound in other parts of the ocean. Considering our limited knowledge of the fauna of the deeper waters of the coast, there seems to be some justification for this idea; but if the fauna as at present known is taken into account it is evident that it is scarcely correct, and when the coastal area has been thoroughly explored, there cannot be the least doubt that its waters will be found as richly endowed with life as in any part of the world. In support of this view mention may be made of the vast streams of Pelagic