

The rhipidura is symmetrical, with broad and disc-shaped, foliaceous plates, the outer of which is marked with a diæresis.

This genus was first established to receive a species, *Nephropsis stewarti*, dredged by Mr. Wood-Mason, which that author, in the above work, as well as in the Ann. and Mag. Nat. Hist. (vol. xii. p. 60), described as the typical species, and was taken 25 miles off Ross Island, on the eastern coast of the Andamans. He says "That the specimen was really brought up from this great depth (260 to 300 fathoms) is certain from the unmistakable signs of crushing from contact with the lip of the dredge, from its position in the dredge-bag, and from its firmly adhering greenish coat, which appears to indicate that, like *Calocaris macandrewæ*, it is a burrower."

Mr. Wood-Mason further adds that, "The discovery in these warm seas of a very near, the nearest ally, in fact, of so characteristic a cold-water species, remarkable though it is, will not appear so surprising when I mention that my Crustacean lived and burrowed in the mud of the sea-bed at a depth of nearly 300 fathoms, in a temperature certainly not exceeding 50° Fahr."

The Challenger's specimen was taken at a depth of 800 fathoms, a few leagues south of New Guinea, at a temperature of 39°·5, which represents some 10°·5 of temperature still lower.

The same naturalist further remarks that "One of the chief points of interest attaching to this new form lies in the loss of its organs of vision by disuse, as in *Calocaris macandrewæ*, Bell, in *Cambarus pellucidus* (a member of the same family as that to which *Nephropsis* belongs), and in the other Crustaceans and animals inhabiting the caves of Carniola and Kentucky. I not only agree with Mr. Darwin in attributing the loss of the eyes to disuse, but I also regard the great length and delicacy of the antennæ, and the great development of the auditory organs, as modifications effected by natural selection."

It appears, both from Wood-Mason's own figures and from an examination of the Challenger specimens, that this genus cannot be described as being without organs of vision. That the ophthalmus does not occupy a greater space than the diameter of the peduncle, and the absence of the dark pigment, that generally gives colour to the eye may be evidences of degradation; but I have little doubt that the power of vision is equal to the animal's requirement. The ophthalmopoda are slender, but in Mr. Wood-Mason's figure they are about one-fourth the length of the rostrum, that is, equal to the average length. In *Calocaris macandrewæ*, to which he compares his species, the peduncle seems wanting, but the ophthalmus is figured by Bell as being quite equal in diameter to the eyes of similarly proportioned Crustacea, but the absence of colour prevents our readily detecting the form of the organ. In the genus *Alpheus* the peduncle of the eye is often shorter than in either *Calocaris* or *Nephropsis*, but since the organ is lined with black pigment no one would think of describing it as