

506
4/3
PROCEEDINGS

OF THE

CALIFORNIA ACADEMY

OF

SCIENCES.

VOLUME VII.

~~PART I.~~

1876.

SAN FRANCISCO:

SPAULDING & BARTO, STEAM BOOK AND JOB PRINTERS,

414 Clay Street, below Sansome.

1877.

nate and short-sheathing, approximated or crowded, the final leaves colored, bracted and involucrate to the terminal fascicle of 3-6 flowers, besides a few axillary and solitary below. The calyx is tubular-campanulate 4-lines long, upper portion somewhat inflated, membranaceous, colored (blue, like the flowers); teeth unequal, about $\frac{1}{4}$ - $\frac{1}{3}$, the tube somewhat triangular, base thence acute, smaller segments linear-lance subulate; corolla tubular, slightly inflated above the calyx, but again a little constricted at the throat, lobes five, very short, $\frac{1}{4}$ - $\frac{1}{3}$ the flower, ovate, subacute, margins minutely denticulate, beardless within, infolded and entire at the sines, $\frac{1}{2}$ - $\frac{3}{4}$ -inch long, 2-lines broad; filaments from half a line becoming 4-6-lines long, anthers saggitate oblong acute; ovary elliptical, as long as the stipe; seeds minute, scarcely oblong, rough, very obscurely wing-girded.

Description of three New Species of Sessile-Eyed Crustacea, with remarks on *Ligia occidentalis*.

BY W. G. W. HARFORD.

Ligia occidentalis. Dana.

In some alcoholic miscellanea sent from Magdalena Bay, L. C., by Mr. W. J. Fisher, we found thirty to forty individuals of the above species, which agree sufficiently well with Prof. Dana's description of *L. occidentalis* to be readily referred to it, although some points of difference between our specimens and the Professor's definition of that species, may be of interest.

According to Dana's description, the number of joints in the flagellum of the outer antenna is from 16 to 18. I have counted the joints in the flagella of six individuals, with the following result: 28, 26, 28, 24, 24, 28. The specimens from Lower California do not clearly show the coloration often so conspicuous in individuals of the same species found on the shores of our bay, yet it is evident upon a close examination. The irregular black dots on the limbs of this species are very constant, and in form suggest Arabic characters.

Dexamine scitulus, n. sp.

Upper antenna longest, the short third joint of its peduncle extending to the middle of the third joint of the lower. Second joint of the lower antenna about one-third longer than the corresponding joint of the upper. Flagellum of lower antenna ciliate on lower side. Eyes small and indistinct. First gnathopoda weak, hand of second obovate, carpus slightly produced inferiorly with a bundle of setæ on the same edge. Telson single.

Length, 1 inch.

Dredged in six fathoms Magdalena Bay, Lower California, by Mr. W. J. Fisher. My description is made from a single specimen. It is the most beautiful amphipod I have yet met with, and when first taken from the water must have been a most attractive object. Color light purple, with deeper dottings of the same color on the epimera. I regret that more of this inter-

esting species were not received, that I could have furnished the Academy a good series.

Idotæa marmorata, n. sp.

Body rather slender; outer antenna about half the length of the body; fifth joint nearly equal to the united length of the third and fourth. The posterior margin of the cephalon and the anterior margin of second segment, dorsally contiguous. Four first segments of the pereion equal, and about one-third longer than either of the following. The emarginated caudal shield is longer than the four preceding segments.

Length, $\frac{1}{2}\frac{1}{6}$.

I place the above species in the genus *Idotæa*, in which Milne Edwards includes *Stenosomæ* and *Siduræ*, of Leach, and the *Leptosomæ*, *Hebe*, *Oiskæ*, *Zenobiæ*, and *Armidæ*, of Risso. Our specimen possesses the long antenna and somewhat slender form of *Stenosomæ*. The suture between the first and second segments of the pleon is just discernible at the lateral outline only, no trace of it being visible when viewing the caudal plate from above. Our specimen was collected and sent to us by Mr. W. J. Fisher, from the west coast of Lower California. It is a very pretty species, its marbled coloration suggesting the specific name we have given it.

Idotæa muricata, n. sp.

Outline elliptical. First four segments of the pereion equal, the last three decreasing gradually; each segment traversed by a transverse dorsal ridge, bearing three muricoid spines, between which and the lateral margin of each segment are from four to six small tubercles. Abdomen rapidly narrowed to an obtuse, horn-like point. Eyes prominent. Antenna not seen.

Length, $\frac{7}{16}$ in.

The species above described was obtained by Mr. W. J. Fisher, from Icy Cape, about three years ago. Its very rough dorsal surface clearly distinguishes it from all other members of the genus with which we are acquainted; in fact, it differs so greatly from all species of *Idotæa* we have hitherto seen, that we were inclined to form a new genus for its reception; but as no less than seven genera are included in *Idotæa* by M. Edwards (and subsequently by Bate and Westwood), of some of which we have not seen the descriptions, we have placed it as above. Our single specimen is without antenna, they having been broken off in transit.

The eyes are prominent, and in advance and above each is an irregular shaped and apparently hollow spine, posterior to the frontal outline of the head, at a distance equal to their height. The cephalon, like the body, possesses the same rough tuberculose character.

The Secretary read the introduction of a paper "On the Determination of the Constant *g*," communicated through the Corresponding Secretary by E. Dyer.