Amphipoda, p. 162, are included "a pair of mandibles with two palps," although on the same page, in the first family, the Orchestidæ, the mandibles are rightly said to be without palps. In the second family, the Gammaridæ, the mandibles are said to be provided with palps; but that is not the case with two of the genera here mentioned, Probolium and Dexamine. The only other family assigned to the Amphipoda is the Corophidæ. No new species are described or mentioned. Probolium polyprion, A. Costa, is given without explanation as a synonym of the later Probolium megacheles, Heller. Elasmopus rapax, A. Costa, is given as a synonym of Podocerus largimanus, Heller, although Heller himself points out that the last uropods and telson of Elasmopus rapax do not admit of its inclusion in the genus Podocerus, where nevertheless J. V. Carus has since placed it under the name Podocerus rapax.

In the Læmodipoda, according to the definition here given, "the mouth is furnished with a circular labrum, with two maxillæ strongly dentate and without palps, and with a pair of maxillipeds provided with palpiform branches." It is possible that by the "due mascelle fortemente dentate e prive di palpi," not maxillæ, but mandibles are intended, but "mandibole" is elsewhere used for mandibles, which in many of the Caprellidæ are furnished with palps, though not in the genus Caprella, which alone claims Stalio's notice. In the Caprellidæ he says "l'apparato orale ha la medesima conformazione dei Gammaridi saltatori," probably by this phraseology intending to intimate that in Caprella as in Orchestia the mandibles are palpless.

## 1877. STREETS, THOMAS H.

Contributions to the Natural History of the Hawaiian and Fanning Islands and Lower California, made in connection with the United States North Pacific Surveying Expedition, 1873-75. Bulletin of the United States National Museum. No. 7. Washington, 1877. Amphipoda, pp. 124-138.

The lower antennæ and "posterior stylets" which were missing in Dana's specimen of Clydonia longipes are here described. Lestrigonus rubescens, Dana, is reported. Hyperia tricuspidata, n. s., is described, in which the first gnathopods have "the meros produced antero-inferiorly," "carpus broad, produced inferiorly, but not anteriorly," while "the second pair has none of the joints produced." "When the animal is at rest, the inferior antennæ are evidently folded up, . . . . in the concavity in the front of the head." At the end of the description the opinion is urged that the genus Lestrigonus should be retained, instead of being regarded merely as the male sex of Hyperia, but the argument seems to rest entirely on the account given of the inferior antennæ in the male of the so-called Hyperia tricuspidata, which, however, with its folded antennæ, cannot be a Hyperia, but must belong to the Platyscelidæ. Phronima pacifica, n. s., is described from the "North Pacific Ocean. Latitudes 4" and 21° north; longitudes 127° and 151° west." "This species is distinguished from P. sedentaria by the broadly-quadrate form of the carpus of the third pair of thoracic feet, and by having the carpus of the gnathopoda less produced anteriorly. In other respects they are similar. The shape of the hand more nearly resembles the hands of P. custos and P. borneensis; but it is distinguished from both of the latter, by the character of the anterior surface of the carpus and of the propodus. In the latter both the carpus and propodus are furnished with a crenulated tubercle; in custos the tubercle is single and tooth-like. There is a striking resemblance between the propodus, and the anterior surface of the carpus of the third pair of thoracic feet, of the smaller specimens of pacifica, and the corresponding parts of P. atlantica, which is said to be the female of sedentaria; the broad hand. however, separates them. It is a remarkable fact, that in all the species of Phronima