the typical species, entire, but deeply cleft in the middle, the incision being rather narrow, and occupying about one-fourth of the length of the telson. The terminal lobes are pointed and densely spinulose at their inner edge, and also furnished at the tip with a few denticles of the same appearance as those occurring along the lateral edges.

The uropoda (see fig. 23) had the terminal part of both plates broken off in the specimen examined, and their respective lengths cannot therefore be given. The auditory apparatus within the base of the inner plate is well developed, with the otolith rather large and globular.

Habitat.—The above described specimen was taken at the entrance of Port Philip, South Australia, along with the specimens of Anchialus angustus. The locality is :—

Station 161, April 1, 1874; lat. 38° 22' S., long. 144° 36' E.; depth, 33 fathoms; sand.

Genus 7. Siriella, Dana, 1852.

Siriella, Dana, United States Exploring Expedition, Crustacea, pt. i. Cynthia, Thompson (male).

Generic Characters.—Form of body more or less slender. Carapace very small, not nearly covering the whole of the trunk; frontal margin produced in the middle. Eyes normally developed. Antennular peduncle rather elongate; male appendage but slightly prominent, issuing from lower face of terminal joint. Antennal scale with outer edge naked, and terminating in a small dentiform projection, apex obliquely truncate. Mandibles with molar protuberance imperfectly developed. Second pair of maxillæ having but two masticatory lobes; terminal joint of palp large and oblong, not incurved. Legs subequal, rather stout, with propodal joint entire or subdivided into two articulations only, and having a double row of densely crowded apical bristles; terminal joint forming a very strong falciform claw. Caudal limbs in male natatory, basal lobe of inner branch usually transformed into two gill-like, more or less spirally twisted stems. Telson elongate, densely spinose at the edges, apex entire, not incised. Outer plate of uropoda broader than inner, and having an imperfect articulation at apex, outer edge partly spinous. Auditory apparatus well developed.

Remarks.—The present genus is chiefly characterised by the structure of the legs, which are more decidedly unguiculate than in any other known genus of Mysidans, further by the caudal limbs in the male having the basal expansion of the inner branch converted into peculiar gill-like appendages, finally by the structure of the telson and the outer plate of the uropoda. The genus is represented in most tracts of the ocean, and comprises about ten different species, the greater part of which would seem to lead a true pelagic existence, being met with at the surface of the sea, far from the coasts. The