much longer than the other pair; the second pair is not spine-like, but tubercular, blunt-ended, apparently forming the antennary gland-cone with its terminal channel.

Mouth Organs.—It is extremely difficult to say whether the small differences observed between the mouth organs of the present and those of larger specimens are of any specific value; here on the left mandible the cutting edge has nine teeth, and the secondary plate has ten, the cutting edge of the right mandible has nine teeth; the rows of denticles on the crown of the molar tubercle were here seen to number about twenty, forming a serried mass; the outer plate of the first maxillæ has on its inner margin four setæ, followed by three rather narrow spines; these are followed without interruption on the apical margin by a connected series of spines successively stouter, seven in number, to which succeeds the set of six or seven stout spines grouped round the outer apex; there are also several submarginal setæ; the outer plates of the maxillipeds have five teeth on the inner margin, the one nearest the apex being irregularly jagged.

First Gnathopods less than one-fifth of an inch long; Second Gnathopods a quarter of an inch; First Peræopods eleven-twentieths; Second Peræopods sixteen-twentieths; Third Peræopods a little over an inch; Fourth Peræopods eighteen-twentieths of an inch; Fifth Peræopods nine-twentieths; the relative lengths of the fourth and fifth joints of the various peræopods are like those described for Specimen F from Station 196; the First Uropods are six-twentieths of an inch long to the extremity of the narrow outer branch, the length of the branch being two-twentieths; the coalesced inner ramus is slightly shorter; the Second Uropods are five-twentieths of an inch long, the outer ramus almost two-twentieths.

Pleopods.—Peduncles as long as the rami; coupling spines very slender, joints of the rami numbering from ten to twelve, the first joint in each ramus very long.

Telson as usual very small and shallow, not so broad as the peduncles of the uropods, not so long as broad, its distal margin rounded.

Length.—The figure at the top of the Plate is intended to represent the natural size, and according to this it would not be more than an inch and a quarter long, but the specimen was in a crumpled flaccid condition, and might possibly have been in life rather longer.

Locality.—Station 170A, July 14, 1874; off the Kermadec Islands; lat. 29° 45′ S., long. 178° 11′ W.; depth, 630 fathoms; bottom, volcanic mud; bottom temperature, 39°·5; surface temperature, 65°·2. One specimen, male or young. Trawled.

Cystisoma spinosum (Fabricius). Specimen E.

This specimen of moderate size was taken comparatively near to specimen G, the distance between their respective localities being about 3 degrees of latitude and 17