and uniformly clothed with short slender setæ; in the male (fig. 2) the right anterior antenna is swollen in the middle, and geniculated, the joints before and behind the The inner branch of the posterior hinge being armed with finely serrated plates. antenna (fig. 4) is five-jointed, the three median joints very small. The outer branches of the first four pairs of feet are, as a rule, three-jointed, but in the female those of the second, third, and fourth pairs are only two-jointed, and in the male that of the second pair is occasionally two-jointed; the inner branches are all two-jointed, except in the second and third feet of the female, where they are one-jointed (figs. 9, 10, 11). The terminal spines of the feet (fig. 15) are rather short and stout, their marginal teeth generally broad and distant. The fifth foot of the right side in the male (figs. 12, 13) is broad, its first joint produced laterally into a long twisted immobile claw-like finger, the last joint blunt, irregularly oval, and bearing a few small marginal setæ; the foot of the left side is simple, slender, and ends in a slender flexuous claw. Fifth pair in the *female* (fig. 14) simple, three-jointed, the last joint bearing one small marginal, and three unequal terminal, spines. Abdomen slender, in the female three-jointed, in the male (figs. 16, 17) five-jointed; caudal stylets very long and slender, about equal in length to the abdomen proper, and ten or twelve times as long as broad, bearing one long seta on the middle of the outer margin and four nearly equal apical setæ, which are about as long as the caudal stylet. The stylets themselves are frequently unequal in size and more or less distorted.

This species often occurs in great numbers, and seems peculiarly liable to "sports;" the caudal segments of the two sides are rarely quite alike, and are often very considerably distorted, and the build of the swimming feet is likewise extremely variable. The limb of one side may have a different number of joints from its fellow of the opposite side, so that the foregoing statement as to the normal arrangement of the joints must be taken as applying only to what appears to be the commonest condition, but subject, nevertheless, to very frequent variation.

Habitat.—Off Cape Howe, Australia; off Port Jackson; off Kandavu, Fiji; between Api and Cape York; in many localities off the Philippine Islands; lat. 37° 3' S., long. 44° 17' W. (Station 326); off Zamboanga; in the Arafura Sea; off the Ki Islands; in several Atlantic gatherings between lat. 3° N. and lat. 20° N.—very abundant in many of those gatherings.

## 2. Temora armata, Claus.

Temora armata, Claus, Die frei lebenden Copepoden, p. 195, Pl. xxxiv. figs, 12, 13.

A single specimen, agreeing closely with Dr. Claus's description of this species, but apparently immature, was taken off the west coast of Africa, in lat. 10° 55' N., long. 17° 46' W. One pair of swimming feet (fourth?) has both branches three-jointed, the rest