

conjunction with the rest. Amongst the Challenger species it will be seen that the six-jointed apex occurs not infrequently with a two-jointed inner branch of the first foot, though, as regards the character of the eyes, I am not able to speak certainly, owing to the action of spirit on the specimens.

\* Head without lateral spines; apex of posterior foot-jaw four-jointed.

1. *Pontella acuta*, Dana (Pl. XXXVI. figs. 1-12).

*Pontellina acuta*, Dana, Crust. U. S. Expl. Exped., p. 1150, pl. lxxx. fig. 12, a.-c.

Length, 1-6th of an inch (4.2 mm.). Cephalothorax stout, cylindrical, posterior angles strongly produced and spined, that of the right side in the *male* twisted (fig. 10); head transversely sulcate in the middle, rostrum trifid, the two lateral segments larger and curved slightly downwards, the central standing straight up, so as to appear single when seen in front or behind. Anterior antennæ (fig. 2) twenty-one-jointed, rather longer than the cephalothorax, densely setose towards the base; that of the right side (fig. 3) in the *male* has the central joints considerably swollen; the two denticulated plates produced at the extremities, teeth short and stout (figs. 4, 5), those of the upper plate acute, of the lower squared at the apices. Inner branches of all the swimming feet two-jointed. The terminal spines of the swimming feet are somewhat dagger-shaped, and have a wide pellucid outer border, which is very minutely pectinated; the marginal spines short, lancet-shaped, with pellucid, finely pectinated edges. Fifth pair of feet in the *female* two-branched (fig. 9), both branches one-jointed, the outer twice as long as the inner, with three strong spines on the outer margin, and three at the apex; inner branch divided apically into two teeth. The fifth feet in the *male* (fig. 8) are unbranched, that of the right side having the first two joints long and simple, the following joint fan-shaped, and ending in a large pear-shaped claw; the three joints of the left side are nearly simple, the third bearing three or four curved apical claws, and a stouter one on the outer margin; the inner margin is fringed with delicate hairs. Abdomen of the *female* three-jointed, of moderate length, not quite half as long as the cephalothorax, last joint about equal in length to the caudal stylets; last joint of the *male* abdomen scarcely half as long as the stylets. The first abdominal somite bears at the apex of the right margin two spine-like processes, one of which in the *female* is very large (fig. 11). Caudal segments about twice as long as broad; setæ subequal, shorter than the abdomen. In the *female* the basal halves of the second, third, and fourth setæ (counting from the outside) are much dilated (fig. 12), the dilated portion of the second gradually tapering away, those of the third and fourth ending abruptly; all the setæ in their slender portions are densely plumose; those of the *male* are all spatulate towards the base, but not abruptly dilated as in the *female*. The anterior eyes are