

1. *Undina vulgaris*, Dana (Pl. XV. figs. 11-15; and Pl. XVIII. fig. 6).

*Undina vulgaris*, Dana, Crustacea of U. S. Expl. Exped. (1852), p. 1092, pl. lxxvii. fig. 8, *a-d*.

(?) *Undina simplex*, idem, ibidem, p. 1094, pl. lxxvii. fig. 9, *a-b*.

*Undina inornata*, idem, ibidem, p. 1095, pl. lxxvii. fig. 11, *a-d*.

*Undina longipes*, Lubbock, On some Entomostraca collected by Dr. Sutherland, Trans. Entom. Soc., 1856, p. 17, pl. vi. figs. 1-5.

Length, 1-8th of an inch (3·1 mm.). Cephalothorax elongated, cylindrical, rounded in front; as seen from the side (Pl. XVIII. fig. 6); the posterior ventral angle is produced usually into two short divergent spines; seen from behind the angles of the cephalothorax are sub-acute and slightly produced downwards. Rostrum moderately long and furcate. Anterior antennæ (Pl. XV. figs. 11, 12) twenty-five-jointed in the *female*, twenty-four-jointed in the *male*, not much longer than the cephalothorax, fringed with short setæ, with at distant intervals—notably on the second or third, eighth and seventeenth joints—one considerably longer than the rest; the last joint in the *female* has three or four short apical setæ, the last but one has two, and the penultimate one, long apical seta; the antenna of the *male* is angulated at the eighth joint. The second swimming foot in both sexes (fig. 13) has the second joint of the outer branch deeply indented at the base, and produced downwards into a strong spine, the whole external margin having thus a somewhat hatchet-shaped outline; the terminal spines of the swimming feet are slender, with finely serrated outer margin and bent tip. In the *male*, the fifth pair of feet (fig. 14) are dissimilar on the two sides, that of the right side excessively long, and when extended reaching beyond the extremity of the tail; the two basal joints are long and slender, the third much shorter and giving attachment at its apex to a very long attenuated and irregularly flexed claw, and to an irregularly quadrate appendage from which spring a long falcate claw, and a curiously contorted two or three-jointed and flaccid process; the foot of the left side is two-branched, the inner branch extremely small, three-jointed and simple, the outer somewhat larger, fashioned in the normal manner but devoid of setæ, and bearing at the apex of the second joint a minute subulate process. The caudal segments (fig. 15) are about as broad as long, and equal in length to the last abdominal segment; the setæ much shorter than the abdomen, except the fourth (counting from the outside), which is much stouter than, and about twice as long as, the rest.

Sir John Lubbock's measurement is 1-10th of an inch, Dana's 1-12th of an inch.

*Habitat.*—Off Cape Howe and Port Jackson, Australia; between Sydney and Wellington; between Api and Cape York; between Arrou and Banda; in very many places amongst the Philippine Islands; off New Guinea and North Australia; in the Pacific north of the Sandwich Islands; at Zamboanga, in the Arafura Sea; off Kandavu, Fiji; and in all the gatherings that I have examined from the tropical Atlantic, ranging between lat. 10° S., and lat. 25° N.