produced, the second, third, and fourth abdominal segments lunate, but not very strongly so ; first short, second, third, and fourth longer and nearly equal, fifth about half as long again as the preceding, and sharply truncated ; caudal lamellæ subovate, nearly thrice as long as broad, and equal in length to the last two abdominal segments, two short external lateral setæ and two longer ones on the apex. Anterior antennæ (fig. 7) five-jointed, the second joint as long as all the rest together ; setæ numerous and short; posterior antennæ (fig. 8) stout, the last two joints only about half as long as the second joint; terminal claws short, branches of the fourth pair of feet equal.

The male is in shape a long oval, about twice and a half as long as broad, and the last two joints of the posterior antennæ are long and slender, equalling in length the second joint.

Habitat.-South Atlantic, February 12, 1876 (Station 319); between Sydney and Wellington ; off Zamboanga ; and in the North Atlantic, April 27, 1876.

My description and drawing of the posterior antenna of the female differs altogether as regards the length of the "finger" from that given by Dana; but having verified it by the dissection of two specimens, I am obliged to let it stand; in all other respects Dana's observation agrees with mine, and in the male I find the posterior antenna to be of the slender type. Of course it is possible that I may be wrong in referring the female specimens to Saphirina gemma, but their accurate agreement with the types, except in this one particular, for the present at any rate, prevents my calling them by any other name. From the spirit-specimens I cannot say what the original colour may have been, except that some of the females are very opaque and dark-coloured, while Dana's were colourless. The number observed was altogether very small. The spines of the swimming feet (Pl. XLV. fig. 18) are peculiar, being very short and broad at the base, and strongly divaricate, while one side (especially in the case of the apical spines) merges into a finely serrated basal convexity.

## 9. Saphirina metallina, Dana (Pl. L. figs. 11-17).

Saphirina metallina, Dana, Crust. U. S. Expl. Exped. (1852), p. 1242, pl. lxxxvii. fig. 5.
" cylindrica, Lubbock, On some Oceanic Entomostraca collected by Capt. Toynbee, Trans. I.inn. Soc., vol. xxiii. p. 184, pl. xxix. figs. 13-15.
Female.-Length, 1-11th of an inch ( $2 \cdot 3 \mathrm{~mm}$.). Cephalothorax elongated, the last joint much narrower than the rest (one-third to one-fourth of the width); first segment incompletely divided into two; fourth produced behind into two broadly triangular wings; fifth as long as the preceding, but narrow and rounded at the angles; abdomen five-jointed, narrow, segments nearly equal in length; first very narrow, with rounded angles; second, third, and fourth wider and strongly lunate; fifth truncated, and very finely ciliated on the posterior margin. Caudal lamellæ quadrate, with nearly straight

