sides and abruptly truncated apex, nearly as long as the last three segments; one short seta on external margin, one at the angle, and two much longer at the apex; one small seta also attached to the face of the lamina, not far from the inner angle. Anterior antenna (fig. 13) six-jointed, setæ numerous and longer than the limb; finger of posterior antenna (fig. 14) equal in length to the second joint; basal joint produced at the inner distal angle, which is armed with two long but rigid setæ; second joint elongated, slender, its inner border slightly convex and bearing a short, almost lancet-shaped seta near the base; third joint rudimentary, oblique, and bearing two very small setæ; last joint very long, slender, and produced into a slightly curved, awl-shaped apex; its outer margin bears, near the middle, two very minute setæ. Branches of the fourth pair of feet nearly equal in size (fig. 15), marginal spines lancet-shaped and finely serrated; fifth pair almost obsolete (fig. 16, a,a), consisting of a tubercle with two setæ. Eyes (fig. 17) coalescent. The shape of the male (fig. 11) is oblong oval, about thrice as long as broad, almost equal in width throughout, and searcely at all tapered either in front or behind; the first four abdominal segments are lunated and very much imbricated.

Habitat.—Lat. 17° 54′ N., long. 117° 14′ E. (Station 206); lat. 3° 10′ N., long. 14° 51′ W. (Station 348); lat. 9° 9′ N., long. 16° 41′ W. (Station 351); lat. 5° 45′ S., long. 14° 25′ W. (Station 345); off south coast of Papua; in Mid-Atlantic, August 23, 1873, and in Mid-Pacific, September 1, 1875.

The characters of this species are so peculiar as to make it quite unmistakable amongst the known forms of Saphirina. The quite abnormal posterior antennæ and caudal lamellæ are of themselves sufficient, but the lancet-shaped spines of the swimming feet, and the unusually long setæ of the anterior antennæ are valuable subsidiary characters.

## 10. Saphirina sinuicauda, n. sp. (Pl. XLIX. figs. 7-10).

The female has a five-segmented abdomen (fig. 9), the first and last segments being small, with rounded angles; the second, third, and fourth lunate; caudal segments ovate, as long as the last four segments, broad at the base and tapered at the apex; inner angle strongly toothed, and deeply excavated behind the tooth; setæ very short and slender; posterior antenna slender, finger as long as the second joint; branches of the fourth pair of feet equal in length; conspicilla contiguous. The male has the abdominal segments (fig. 10) almost straight, and their posterior lateral angles very faintly mucronate; the inner branch of the second (?) swimning foot (fig. 8) is armed at the apex with several strong, curved spines, the innermost forming a hook; caudal lamellæ almost exactly as in the female.

Two specimens only of this species have been observed, both from the Philippine Islands. The characters of the caudal appendages seem to separate it quite conclusively from any other described species, nor have I seen elsewhere in this genus any structure