The single specimen is a female, and is considerably smaller than the single specimen of the last species, measuring about 2 mm. in length.

The head is small and is almost enclosed by the following segment of the thorax; the frontal margin is straighter than in the last species, and the articulation of the antennæ is not so near to the posterior boundary of the head; the hinder margin of the semicircular notch which encloses the basal joint of the antennules is prolonged further outwards, and uniting with the posterior margin of the head, forms a narrow pointed process which extends laterally nearly as far as to the spiny epimeron of the first segment of the thorax.

The thoracic segments are so very like the last species that no particular description appears to be necessary; the epimeral spine of the first segment, however, is much smaller in proportion to the following spines than it appears to be in *Pleurogonium albidum*.

The most characteristic and obvious difference between the two species is in the abdominal shield; this is preceded in the present species, as in *Pleurogonium albidum*, by a free abdominal segment, not produced laterally like the three posterior segments of the thorax. The general shape of the abdominal shield in *Pleurogonium serratum* is like that of *Pleurogonium albidum*, only the posterior termination is blunter; the lateral margins of the caudal shield as far back as the articulation of the uropoda are strongly serrate, the serrations commence gradually, and somewhat behind the boundary line between the abdominal shield and the free abdominal segments; they terminate, however, abruptly just before the articulation of the uropoda; there is no trace of such serrations in *Pleurogonium albidum* except along the posterior extremity of the abdominal shield.

The lengths of the antennules and the antennæ are as 5:6; these two pairs of appendages are in fact very nearly equal in length; there is not at any rate the great disproportion between them that has been referred to in *Pleurogonium albidum*; in this respect the present species not only differs from *Pleurogonium albidum*, but is a more typical species of the genus according to its definition by Sars.

The structure of the antennules presents no differences from the last species.

The antennæ differ from those of Pleurogonium albidum, not only in their smaller size, but in the fact that the flagellum is longer than the terminal joint of the peduncle instead of shorter; the two distal joints of the peduncle are also much more slender than the proximal joints. I cannot, however, lay any great stress upon the specific differences indicated by the antennary appendages. The appearance of these appendages was greatly altered by the mounting of the specimen in glycerine jelly.

The uropoda are biramose.

Station 149k, off Christmas Harbour, Kerguelen, January 29, 1874; depth, 120 fathoms; volcanic mud.