Locality.—Station 346, April 6, 1876; Tropical Atlantic; lat. 2° 42′ S., long. 14° 41′ W.; surface; surface temperature, 82°.7. One specimen, female.

Remarks.—In this specimen the sinuous upper outline of the heart could be perceived extending along the first two (coalesced) segments and the three following, in the last of these descending with a steep incline to its narrowed termination in the sixth segment; the three lateral openings could also be seen respectively in the compound segment and the two following. In the third peræopods the first joint is of great length, much longer than the first joint in any of the other pairs, longer than the three following joints together, the second joint has four teeth on the front margin, the third has six, the fourth has the ninth tooth longest with four little teeth to the palmar margin, the fifth joint is little more than a third as long as the fourth; in the fourth peræopods the first joint widens gradually from the base and is subequal in length to the three following joints together, the third joint is rather longer than the fifth, the fourth being much longer than either; in the fifth peræopods the first joint is rather longer than in the fourth, longer than the following joints together; the third is as long as the fifth, the fourth much longer than either, but all of these three much shorter than in the preceding pair; the peduncles of the pleopods like the branchiæ are slender, as usual the latter set being successively longer, the former set successively shorter; of the second uropods I cannot see the least trace.

The tenuity of this pellucid specimen might well suggest the specific name filiformis, which Bovallius has given to a specimen from the South Atlantic. Among the characters which he assigns to his species he mentions that the second peræopods are longer than the third, and that the second uropods are well developed; these characters, however, I believe to be not specific, but merely sexual, belonging to the male; the other characters which he assigns are, that the second gnathopods are much longer than the first, the processes at the apex of the hand longer than half the finger, and that the first joint is of the same length in the fourth and fifth peræopods; of the value of these relative measurements as specific characters it is very difficult to judge without drawings of the parts and without comparison of numerous specimens.

Phronimella elongata. Specimen H.

Locality.—Station 348, April 9, 1876; Atlantic, off the African coast; lat. 3° 10′ N., long. 14° 51′ W.; surface to 200 fathoms; surface temperature, 84°. Two specimens, female.

Remarks.—The larger of these was in close agreement with the specimen from Station 346, but the body a little more inflated, the colour yellowish, the third peræopods less elongate, having on the second joint three teeth, on the third five teeth, on the