near the apex on the inner margin is a short and robust stylamblys, tipped with The outer branch is also short, rigid, and fringed with hairs that are cincinnuli. planted in lateral rows. The second pair of pleopoda (fig. 1q) is subequal; the outer branch is long, ovate, foliaceous, and fringed with hairs, and the inner is nearly as long but having the margin straight, and the basal portion supports a transversely broad disc-like process that is matted with curved spines on the distal surface, from the centre of which there springs a short but well-developed stylamblys tipped with The third pair of pleopoda is long, ovate, foliaceous, and fringed with hairs ; cincinnuli. on the distal margin of the inner branch there is a short stylamblys. The fourth and fifth pairs resemble the third, but are a little shorter; the stylamblydes in our specimen have the cincinnuli on either side hooked together, thus holding the two appendages in contact, and demonstrating their use. The sixth pair of pleopoda (Pl. CXVIII. v, v), which helps to form the rhipidura, has the basal joint short, with two clefts, one upon the outer side into which the outer ramus falls, the other on the upper surface in which the inner ramus rests when the tail-fan is extended. The outer margin of the external ramus is robust and rigid for a considerable distance, where it terminates in a small tooth and an obliquely transverse row of regular bead-like points, marking the line of the diæresis, which is separated or free for one-third of its extent. The distal extremity of both the branches is rounded and broader than their base. On the posterior ventral surface of the somite between the basal joints of the pleopoda there is a small longitudinally compressed tooth, and on each side an elevated lunate process, separated from the outer wall by a cleft and acting as a rest or support to the inward pressure of the rhipidura.

There are eight pairs of branchial plumes, six of which are pleurobranchial and two podobranchial, as shown in the following table :----

| Pleurobranchiæ, | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
|------------------|----|--------|---|---|---|---|---|---|---|---|
| Arthrobranchiæ, | • | С., с. | | | | | | | | |
| Podobranchiæ, | •2 | • | • | 1 | 1 | | | | | |
| Mastigobranchiæ, | | | | | 1 | 1 | 1 | 1 | 1 | |
| | | | | b | i | k | ī | m | n | 0 |

Observations.—A. Milne-Edwards considers this species to be a variety of Atya sçabra, Leach, and says that "it appears to differ only in the feet, which are slightly grooved, by the median piece of the tail (telson) presenting a more marked triangular depression, and by the antennæ not being more than half the length of the body."

The original drawing, which is now in my possession, of Dr. Leach's figure in the Zoological Miscellany, shows that in *Atya scabra* the second antennæ are not so long as the carapace, whereas in our specimen they reach to the sixth somite of the pleon, or more than three-fourths the length of the animal, but I cannot discover any grooving along the legs to correspond with Newport's description.