Milne-Edwards describes the genus as having the second pair of gnathopoda small in size and very narrow. Dana describes it as being suboperculiform, which corresponds more nearly with the condition in our species.

Milne-Edwards also says that there are five well-developed branchial plumes on each side, and that those attached to the oral appendages are rudimentary. Dana says that in *Pontonia tyrrhena* there are but four branchiæ on either side of the pereion, and that there are none attached to the fifth pair of pereiopoda.

In our specimen there are four pairs of pleurobranchiæ, that belonging to the posterior somite being wanting.

This description may be reconciled with that of Milne-Edwards, since it is evident that what he describes as a branchia attached to the oral appendage, and therefore rudimentary, is what I have described as a mastigobranchial appendage connected with the posterior pair of siagnopoda (or maxillipede).

The branchial apparatus in this species consists of four pleurobranchial plumes on each side and may be tabulated as follows:—

Pleurobranchiæ,	•		•••	•••	1	1	1	1	•••
Arthrobranchiæ,			•••		•••	•••		•••	
Podobranchiæ, .		•	•••	•••		•••	•••	•••	•••
Mastigobranchiæ,	25 6		•••	• • •	•••	•••	•••	•••	
7			h	i	k	1	\mathbf{m}	n	0

The original description of Dr. W. Peters was communicated to the Academy of Berlin February 18, 1851, but so far as I can ascertain was not published until 1852, the same year that Dana published his description of *Pontonia tridacnæ*, which is probably the same species, and I am inclined to think from the description that *Conchodytes meleagrinæ*, Peters, taken at Ibo on the Mozambique coast, is probably the same species as the Challenger specimen, *Pontonia meleagrinæ*, from Torres Strait.

Our specific name was in type before I was aware of Peters' or Hilgendorf's memoirs. Peters' specimen was a female, 33 mm. long, and like ours was probably found in the pearl-oyster, hence the coincidence of its specific name.

Family PALEMONIDE.

Carapace dorsally rounded and laterally compressed. Rostrum long, laterally compressed, and generally armed with teeth. Pleon laterally compressed. Telson long and gradually narrowing to a truncated extremity. Ophthalmopoda well developed and pyriform. Antennæ long and slender; first pair having the first joint of the peduncle hollowed on the upper surface, carrying a well-developed stylocerite on the outer side, and terminating in two flagella, of which one is frequently branched; second pair furnished with a long and narrow foliaceous scaphocerite, the outer margin of which is