

There can be little doubt, I think, that this specimen, which is a male about nine inches in length, belongs to this species. It possesses the chief character given by Milne-Edwards. "Anneau antennulaire armé de quatre dents coniques très grosses, divergentes et réunies à leur base en faisceau." It also corresponds much in colour, for although our specimen has been several years in spirits, it is still beautifully marked with purple, blue, green, brown, and yellow, as in Lamark's description of *Palinurus versicolor*, which Milne-Edwards considers to be identical, and the legs are marked with longitudinal stripes.

Though the geographical distribution of this species appears to be very extensive, it seems to be chiefly limited to the southern and warmer seas. In the British Museum there is a specimen supposed to be from the Red Sea, but this perhaps may be *Palinurus ehrenbergi*, Heller, to which it bears some resemblance.

The branchial arrangement of this species corresponds more nearly with that of the European form *Palinurus vulgaris* than with that of *Palinostus (Palinurus) lalandii*, a circumstance showing that small branchial variation has generic value.

The mastigobranchiæ are without the peculiar curve or notch that exists in those of *Palinostus (Palinurus) lalandii*, except in the case of the third siagnopod, which is longitudinally rigid and bent or notched at the extremity, folds backwards through its whole length and enfolds the podobranchial plume, as may be seen in Pl. XII. fig. 2.

The arrangement of the branchiæ is shown in the following table:—

Pleurobranchiæ,	.	.	.	...	...	...	1	1	1	1
Arthrobranchiæ,	.	.	.	1	1	2	2	2	2	...
Podobranchiæ,	.	.	.	1	1	1	1	1	1	...
Mastigobranchiæ,	.	.	.	1	1	1	1	1	1	...
				h	i	k	l	m	n	o

*Observations.*—It is in this species that the interesting transformation of the ophthalmopod into an appendage resembling an antenna was observed by Prof. A. Milne-Edwards and described by him.<sup>1</sup> He says, "guided by theoretical considerations, zoologists regard the movable eye-stalks, the appendages of the mouth, and the legs of Crustacea, as being analogous organs (*organes analogues*), resulting from secondary modifications, impressed on different members of a series of appendages of the same order which represent each other mutually in the organism as a whole; but hitherto these ideas were not supported by any fact which could be brought as evidence of the possibility of the production of these various physiological instruments from one and the same anatomical element.

"One such teratological case which I have observed in a Langoustes, *Palinurus penicillatus* (Olivier), demonstrates the truthfulness of these ideas introduced into science by Savigny, and developed by M. H. Milne-Edwards."

<sup>1</sup> *Comptes rendus*, t. lix. p. 710.