

groove runs across the arm between each two suckers (possibly due to contraction). The extremity of the *hectocotylised arm* is well-developed, short, and tapering rapidly to a blunt point; the median groove has about ten transverse bars (Pl. I. fig. 2). The *circumoral lip* is unusually thick (Pl. III. fig. 1).

The *Surface* appears to have been perfectly smooth,<sup>1</sup> but is now covered with wrinkles, due to the action of the spirit.

The *Colour* is a dull grey, inclining to stone-colour below.

The *Jaws* are shown in Pl. II. figs. 3, 4.

#### *Dimensions.*

Length, total, . . . . .	190 mm.	
End of body to mantle margin, . . . . .	43 "	
End of body to eye, . . . . .	50 "	
Breadth of body, . . . . .	40 "	
Breadth of head, . . . . .	35 "	
Eye to edge of umbrella, . . . . .	50 "	
Length of extremity of hectocotylised arm, . . . . .	7 "	
Breadth of extremity of hectocotylised arm, . . . . .	4 "	
Diameter of largest sucker, . . . . .	3 "	
	Right.	Left.
Length of first arm, <sup>2</sup> . . . . .	125 mm.	140 mm.
Length of second arm, . . . . .	130 "	140 "
Length of third arm, . . . . .	100 "	130 "
Length of fourth arm, . . . . .	135 "	130 "

The establishment of this species is more than usually satisfactory, being based upon no less than four specimens; and although three of these were of small size, yet they agree so well with the large one that there would be no doubt as to their identity even had they not been obtained at the same Station.

In some respects, for instance, in the absence of cirri, and in its smooth skin, it resembles *Octopus tehuelchus*, d'Orbigny, but the specimens differ from the latter so very markedly in colour (d'Orbigny's form being of a deep blackish-brown), and in some minor points, that there is no doubt they are distinct.

In its smoothness and in the form and dimensions of the extremity of its hectocotylised arm it also resembles *Octopus januarii*, Steenstrup, but it is certainly distinct. From *Octopus favonia*, Gray, it differs in the presence of a stout circumoral lip, and in the double row of cups reaching quite up to it (Pl. III. fig. 1); the latter is in most cases a comparatively insignificant character, but seems to be of more value in the present instance because the arms were strongly bent back from the mouth, a condition in which the suckers would naturally tend to form a single series.

<sup>1</sup> Hence the specific name.

<sup>2</sup> The lengths of the arms are measured from the margin of the mouth.