

or absence of a median septum in the branchial cavity. Verrill does not appear to have opened the siphon of his specimen, for he does not allude to a pad in its dorsal wall; in the Challenger specimen this pad was free at its anterior extremity, forming a valve, but I am not sure that the separation was not artificial.

Eledonella diaphana, Hoyle (Pl. IX. figs. 3-6).

1885. *Japetella diaphana*, Hoyle, Diagnoses I., p. 232.

1885. „ „ Hoyle, Prelim. Rep. I., p. 108.

Habitat.—Station 220, north of Papua, March 11, 1875; lat. 0° 42' S., long. 147° E.; 1100 fathoms (?); Globigerina ooze. One specimen, sex ?.

The Body is gelatinous and semitransparent; it is ovoid in form, and considerably longer than broad. The *mantle-opening* is very wide, extending up behind the eyes on either side. The *siphon* extends two-thirds of the distance to the umbrella margin, and is truncated at the extremity; it has a thick pad on its dorsal wall, which seems to form a valve by its free tip. There is a *median septum* in the branchial cavity (Pl. IX. fig. 4).

The Head is nearly as broad as the body, and the *eyes* are large and prominent; they consist of a larger, darkly pigmented spheroid, from which protrudes the opaque white, smaller, spheroidal lens.

The Arms are unequal; the longest (the third pair) are almost as long as the body, and are nearly twice as long as the fourth, which are the shortest, the order of length being 3, 2, 1, 4; they taper rapidly to fine points. The *umbrella* is very small, extending about one-fourth up the dorsal and ventral arms, a little further up the dorso-lateral and lateral arms, and being least developed in the space between the ventral and ventro-lateral arms (fig. 5). The *suckers* have assumed, probably owing to shrinking, a quadrangular or triangular form (fig. 6); they are prominent, and marked by two constrictions, one at the base, separating them from the arm, the other rather more than halfway up. There is no trace of any *hectocotylus*.

The Surface appears to have been smooth originally, but the epithelium has been to a great extent stripped off.

The Colour is very pale yellowish-grey, marked with numerous longitudinally disposed oblong chromatophores.

Dimensions.

Length, total,	36 mm.
End of body to mantle-margin,	16 „
End of body to eye,	18 „
Eye to edge of umbrella,	9 „
Length of third pair of arms,	18 „

In the Preliminary Report this specimen was recorded as being from the “surface,” firstly, on the ground that it was so noted in the manuscript Station Book, kept during