

The alimentary canal of the specimen collected on May 12, 1876, is shown in Pl. III. fig. 7.

Doliolum affine, n. sp. (Pl. III. fig. 6).

Body of the usual cask-like form.

Mantle having the usual eight muscle bands.

Branchial Sac large. Stigmata commencing dorsally midway between the first and second muscle bands, and extending back to midway between the fifth and sixth; ventrally they extend forwards nearly to the third muscle band.

Endostyle extending from the second to the fourth muscle band.

In this new species I place the following specimens collected during the Challenger Expedition:—

(1.) April 3, 1875; Pacific; surface; lat. $24^{\circ} 49' 0''$ N., long. $138^{\circ} 34' 0''$ E.; surf. temp. $71^{\circ} 5$; half a dozen specimens.

(2.) April 4, 1875; Pacific; surface; lat. $25^{\circ} 33' 0''$ N., long. $137^{\circ} 57' 0''$ E.; surf. temp. 69° ; two dozen specimens.

(3.) June 17, 1875; Station 237, North Pacific; surface; lat. $34^{\circ} 37' 0''$ N., long. $140^{\circ} 32' 0''$ E.; surf. temp. 73° ; one hundred specimens.

(4.) October 19, 1875; Station 287, South Pacific; surface; lat. $36^{\circ} 32' 0''$ S., long. $132^{\circ} 52' 0''$ W.; surf. temp. $57^{\circ} 8$; fifteen specimens.

Plate III. fig. 8, shows the dorsal surface of a specimen of this species from the South Pacific, October 19, 1875.

This species is closely related to *Doliolum chrenbergi* (Pl. III. fig. 5).

Doliolum tritonis, Herdman (Pl. III. fig. 3).

Doliolum denticulatum, Herdman, Trans. Roy. Soc. Edin., vol. xxxii. part i. p. 93, 1883.

Vast numbers of this species were obtained by Dr. John Murray in the summer of 1882 in the North Atlantic, during the cruise of H.M.S. "Triton." In reporting upon the Triton collection of Tunicata in 1883,¹ I described these specimens under the name of *Doliolum denticulatum*; but I am now convinced that they do not belong to that species, but to one which has not been previously described, so I take this opportunity of changing the name to *Doliolum tritonis*. For a detailed description and figures I refer to my "Triton" Report; but it may be useful to note here that the stigmata in the branchial sac commence dorsally behind the third muscle band and extend to the sixth; while the ventral series terminates anteriorly a little behind the fourth muscle

¹ Report on the Tunicata collected during the cruise of H.M.S. "Triton" in the summer of 1882, Trans. Roy. Soc. Edin., vol. xxxii. part i. p. 93.