Doliolum rarum, Grobben.
Doliolum krohni, n. sp.

These may be divided into two sections :—(1) With numerous stigmata extending along the greater part of the length of the branchial sac, including the first six species; and (2) with only a few stigmata at the posterior end of the branchial sac, including the remaining three species.

Doliolum denticulatum, Quoy and Gaimard.

Doliolum denticulatum, Quoy and Gaimard, Voyage de l'Astrolabe, Zoologie, tom. iii. part 2, p. 599, 1835.
Doliolum denticulatum, Q. and G., Huxley, Phil. Trans. 1851, part ii. p. 595.
Not *Doliolum denticulatum*, Q. and G., Krohn, Arch. f. Naturgesch., 1852, p. 57.
Not *Doliolum denticulatum*, Q. and G., Keferstein and Ehlers, Zoologische Beiträge, p. 65, 1861.
Not *Doliolum denticulatum*, Q. and G., Grobben, Arb. zool. Inst. Wien, Bd. iv. p. 55, 1882.
Not *Doliolum denticulatum*, Q. and G., Herdman, Trans. Roy. Soc. Edin., vol. xxxii. part i. p. 93, 1883.

This species, the oldest member of the genus, was found in 1827 on the surface of the Pacific Ocean, near the islands of Vanikoro and Amboina, by the French naturalists Quoy and Gaimard, during the voyage of the "Astrolabe." They described and figured it in the official account of the expedition published in 1835. The diagnosis given is as follows :—

"Doliolum, corpore minimo, hyalino, cylindrico-ovato subtruncato, in utroque apice perforato, antice crenulato; circulis octonis salientibus."

The short description which follows the diagnosis adds nothing of importance, but merely shows that the observers mistook the branchial sac for a pair of plume-like internal gills, the muscle bands for vessels, and the endostyle for an aorta. The figures[1] show two views of the entire animal, a representation of the (supposed) plume-like gills, and an end view of the anterior extremity. There appear from the figures to have been ten branchial lobes, if Quoy and Gaimard are correct in designating the end which they figure with denticulations as the anterior. The position of the endostyle in relation to the muscle bands would rather lead to the opposite conclusion, but probably it is represented too far back in the body. The second species of *Doliolum* described by Quoy and Gaimard, *Doliolum caudatum*, is an asexual form with nine muscle bands and a well-marked dorsal outgrowth. Possibly it is the Blastozooid belonging to the present species.

During the voyage of H.M.S. "Rattlesnake" in 1849, Huxley found specimens of *Doliolum* in the South Pacific, a little to the northward of Sydney, N.S.W., between Sydney and New Zealand, and in considerable numbers just at the entrance of the Bay of Islands. These he identified with the species *Doliolum denticulatum* described by Quoy and Gaimard, and he published a detailed anatomical account with figures in the

[1] Atlas, Mollusques, pl. 89, figs. 25–28.