Four out of the five species known to Darwin live attached to Crustacea in the European and eastern warmer temperate and tropical oceans. One of these, *Pœcilasma kaempferi*, was found attached to *Inachus kaempferi*, de Haan (Japan), a crab probably from deep water; another, *Pœcilasma aurantium*, lives attached to *Homola cuvierii*, from Madeira, probably also a deep-water crab (Darwin); the third, *Pœcilasma crassum*, to the same *Homola cuvierii*; the fourth, *Pœcilasma fissum*, was found parasitic on a spinose crab under a stone at low water; the fifth, *Pœcilasma eburneum*, was found attached to broken off spines of an *Echinus* from New Guinea.

Of the two Challenger species, one comes from the Atlantic Ocean, the other from the Pacific; both species were found in the neighbourhood of the coast, and living at a depth of about 400 fathoms, attached to horny Corallines.

Two fossil species of this genus have been described by Reuss.[1] Good figures of the fossil remains are added to his description. The valve which represents the one species is considered by the author to be the carina. But as it does not resemble the carina of any of the known species of *Pœcilasma*, I think there are no reasons for accepting his determination. The other species is represented by a valve which is no doubt a scutum of a Lepadid. But this single valve is by no means sufficient to determine the genus.

The determination of the seven at present known species of the genus will be found easy by means of the following table:—

Pœcilasma, Darwin.[2]

Terga present.

1. Basal angles of the terga cut off.
   - (i.) Carina very narrow.
     - (*a*) Carina with a truncated and crested base, — *Pœcilasma kaempferi*, Darwin.
     - (*b*) Carina with a truncated base, ... — *Pœcilasma aurantium*, Darwin.
   - (ii.) Carina widens downwards considerably (enlarged).
     - (*a*) Carino-tergal margin of the scutum hollowed out downwards for the widened part of the carina, — *Pœcilasma carinatum*, n. sp.
     - (*b*) Carino-tergal margin rounded as usual, . . . — *Pœcilasma gracile*, n. sp.
2. Basal angles of the terga pointed.
   - (*a*) Scutum not divided into two segments, . . . — *Pœcilasma crassum*, Gray, sp.
   - (*b*) Scutum divided into two segments, . . . — *Pœcilasma fissum*, Darwin,

Terga wanting, . . . — *Pœcilasma eburneum*, Hinds, sp.

Pœcilasma carinatum, n. sp. (Pl. I. figs. 8–10; Pl. II. fig. 1; Pl. VII. figs. 6, 7).

Valves five; carina considerably enlarged downwards, terminating in an indistinct fork; umbonal teeth of the scutum not very strong; carino-tergal margin concave in the undermost half for the reception of the widened part of the carina; terga with the basal point

[1] Ueber fossile Lepadiden, *Sitzungsb. d. math.-naturw. Cl. d. k. Akad. d. Wiss. Wien*, Bd. xlix. 1864, pp. 215–246, with 3 plates

[2] Darwin regards *Pœcilasma* as feminine, though the Greek word ἴλλασμα is neuter.