long. 35° 50' W.; depth, 1675 fathoms; surface temperature, 70°0; Globigerina ooze. Station 133 (near Tristan da Cunha, in the middle of the South Atlantic), October 11, 1873; lat. 35° 41' S., long. 20° 55' W.; depth, 1900 fathoms; bottom temperature 35°4, surface temperature 58°0; Globigerina ooze. Station 146 (to the east of Prince Edward Island), December 29, 1873; lat. 46° 46' S., long. 45° 31' E.; depth, 1375 fathoms; bottom temperature 35°6, surface temperature 43°0; Globigerina ooze. Station 169 (off the north-east point of the northern island of New Zealand), July 10, 1874; lat. 37° 34' S., long. 179° 22' E.; depth, 700 fathoms; bottom temperature 40°0, surface temperature 58°2; Globigerina ooze. Station 184 (off the north-eastern shores of Australia), August 29, 1874; lat. 12° 8' S., long. 145° 10' E.; depth, 1400 fathoms; bottom temperature 36°0, surface temperature 77°5; Globigerina ooze.

This species closely approaches *Lætmonice producta*, var. *benthaliana* in external appearance, except that minute brownish papillæ on the scales render the dorsum somewhat dusky, and that the palpi are much longer. The number of segments is about thirty-five; the length of one of the larger examples is 33 mm., and the breadth (exclusive of bristles) 13 mm.

The head differs from the preceding in having large ocular peduncles, which are quite globular. The distinction is evident when two specimens of equal size are placed together. The ocular peduncles, indeed, are so large that the median tentacle is thrust backward, whereas in the former it lies between the peduncles. In the north Australian example the ocular peduncles are somewhat smaller and more distinctly separated from the tentacle. The peduncles in all are devoid of pigment. The median tentacle and all the cirri are decidedly longer. The palpi also exceed very considerably those of *Lætmonice producta*, var. *benthaliana* in length, show both a dorsal and a ventral ridge in the preparation, and have their surface covered with cuticular papillæ. There is no visible papilla behind the ocular peduncles. The palpi have a similar (triangular) papillose mass between their bases, and the oral margins of the ventral eminence are papillose. Small papillæ occur on the cuticle of the ventral surface.

The extruded proboscis extends outwards nearly three fourths the length of the animal. It is terminated dorsally and ventrally by a densely papillose fringe, and the inner surface is produced above and below into firm almost cartilage-like protuberances. The villous condition is due to an immense number of papillæ arising from isolated processes. The papillæ are simple, bifid, or multifid structures, and show at least two rows of cells. The basal region of the papillæ is peculiarly wrinkled.

The scales are fifteen pairs, and differ from those of *Lætmonice producta*, var. *benthaliana*, in showing a few minute brownish papillæ on the dorsal surface. The latter are absent in one example, viz., that from Station 70.