Puncturella noachina, Jeffreys, Journ. Linn. Soc. Lond., 1878, vol. xiv. p. 422.

" Sars, Moll. Arct. Norv., p. 124, No. 21, pl. iii. fig. 3 (radula).

", Seguenza, Form. Terz. Calabria, p. 273.

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"Jeffreys, "Lightning" and "Porcupine" Moll., Proc. Zool. Soc. Lond., 1882, p. 676, No. 2.

Rimula noachina, Leche, Novaja Semlja o. Jenissei Hafs-Moll., pp. 40, 79, 82.

Station 144A. December 26, 1873. Lat. 46° 48' S., long. 37° 49' 30" E. Off Marion Island. 69 fathoms. Volcanic sand. (Var. princeps, Migh.)

Station 145. December 27, 1873. Lat. 46° 43' S., long. 38° 4' 30" E. Between Marion Island and Prince Edward Island. 140 fathoms. Volcanic sand. (Var. princeps, Migh.)

Station 145A. December 27, 1873. Lat. 46° 41' S., long. 38° 10' E. Off Prince Edward Island. 310 fathoms. Volcanic sand. (Var. princeps, Migh.)

Station 149c. January 19, 1874. Lat. 49° 32' S., long. 70° E. Balfour Bay, Royal Sound, Kerguelen. 60 fathoms. Volcanic mud. (Var. princeps, Migh.)

Station 312. January 13, 1876. Lat. 53° 37' 30" S., long. 70° 56' W. Port Famine, Strait of Magellan. Blue mud. (Var. galeata, Gd.)

Habitat.—The North Atlantic, from North Greenland (Torell) to Cape Cod on the W. (Gould), and from Scarborough in England to Spitzbergen and Nova Zembla (Leche), to the Sea of Okhotsk, Northern Japan, and Corea (Jeffr.) Dredged by the "Lightning" Expedition off the Færæs in 189 fathoms; by the "Porcupine" Expedition in from 73 to 1095 fathoms (Jeffr.); by the Swedish Expedition off Nova Zembla in from 5 to 150 fathoms. *Puncturella galeata* is from Puget Sound, Oregon.

Fossil: From the Miocene? (Jeffr.) in Sicily, and from the Pliocene onwards in Calabria (Seguenza), England, Scotland, Sweden and Norway, Labrador (Jeffr.), Nova Zembla (Leche).

After careful study, I have found it impossible to separate the Southern form, which is unquestionably the *Puncturella princeps*, from the species of Linne. Mighels, in publishing *Puncturella princeps*, says that it differs from *Puncturella noachina*, Linne, in that the latter has the ribs more elevated (these in *Puncturella princeps* being slight and obtuse), the corresponding interior sulci much more obvious, the posterior slope much and regularly curved (while in *Puncturella princeps* it is subrectilinear); shell smaller, proportionately longer, not so high; interior arch without wings; while in *Puncturella princeps* the flattened arch which covers the cleft is strengthened by a plate uniting it with the sides of the shell. All these are variable features. Carpenter (*loc. cit.*) says of *Puncturella galeata* that "it scarcely differs from *noachina*, but tripartite process more strongly marked." My own examination of the British Museum specimens convinced me of their identity with *Puncturella noachina*, Linne. Mr E. A. Smith kindly examined them anew for me, and writes (July 21, 1882): "My opinion agrees with Carpenter's. . . Judging from our two specimens of *Puncturella galeata*, the pits on each side of the fissure seen within are certainly deeper than in