

1851. *Spirialis gouldii*, Stimpson, Description of two new species of shells of Massachusetts, Proc. Boston Soc. Nat. Hist., vol. iv. p. 8; and Shells of New England, p. 27, pl. i. fig. 4.
1857. *Heterofusus balea*, Mørch, in Rink, Grønland geographisk, statistisk og naturhistorisk beskrevet, p. 86.
1872. *Heterofusus alexandri*, Verrill, Recent Additions to the Molluscan Fauna of New England, &c., Amer. Journ. Sci. and Arts, ser. 3, vol. iii. p. 284.
1878. *Spirialis balea* and *Spirialis retroversa*, Sars, Mollusca regionis arcticæ Norvegiæ, pp. 329, 330, pl. 29, figs. 2, 3.

For description and figures see Sars, *loc. cit.*

Habitat.—North Atlantic, on the coast of America, from 63° N. (Davis Strait) to 39° 53' N. (Massachusetts Bay, Verrill); Iceland; coasts of Europe, from Lofoden Island to 50° N., though not yet recorded from Behring Straits.

All records which mention this species as having been found in more southerly localities, and notably in the Mediterranean, are erroneous, and ought to apply to *Limacina trochiformis*, with which *Limacina retroversa* has been confused by Jeffreys,¹ Weinkauff,² Costa,³ and other conchologists. *Limacina retroversa* is no longer found in the Mediterranean, though it occurs in circa-Mediterranean Pliocene and Quaternary deposits ("*Scæa stenogyra*").

In the deep-sea deposits this species is found in the North Atlantic over an area extending somewhat further south, and it has thus been dredged in the Bay of Biscay by the French "Travailleur" Expedition (1880).⁴

Observations.—I. Some authorities (Jeffreys, Gould, Sars, Verrill, &c.) regard *Heterofusus retroversa* and *Limacina balea* as two distinct forms.

Sars supports this in his descriptions and figures. According to him, the two forms differ, apart from size which cannot be regarded as distinctive, especially in the fact that in *Limacina balea* the surface is longitudinally striated (parallel to the axis of the shell) and that its spire is proportionally longer.

To the first of these two points, it may be answered that in *Limacina retroversa* the surface also exhibits longitudinal striæ, less marked, it is true, but distinctly recognisable,⁵ and that in *Scæa stenogyra*, Philippi,⁶ which Sars identifies with *Limacina balea*, the surface is on the contrary "lævissima." This point of distinction does not, therefore, appear conclusive.

¹ British Conchology, vol. v. p. 116.

² Die Conchylien des Mittelmeeres, Bd. ii. p. 486.

³ Pteropodi della fauna del Regno di Napoli, p. 19.

⁴ Jeffreys, The French Deep-sea Exploration in the Bay of Biscay, Rep. Brit. Assoc., 1880, p. 387.

⁵ Sars, Mollusca regionis arcticæ Norvegiæ, pl. 29, fig. 3e; Gould, Report on the Invertebrata of Massachusetts, ed. 2, pl. xxvii. figs. 345-348.

⁶ Philippi, Fauna Molluscorum utriusque Siciliæ, pl. xxv. fig. 20.