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IS LITTORINA LITOREA INTRODUCED OR INDIGENOUS?

BY W. F. GANONG.

IT is now nearly thirty years since *Littorina litorea* (Linn.), the English periwinkle, was first reported from American waters, but the question as to whether it has been recently introduced or was an original inhabitant of our shores is still unsettled. This mollusk, though not known by naturalists to occur upon the coast of Acadia and New England previous to its discovery at Halifax in 1857 by John Willis, is at present very abundant from the Gulf of St. Lawrence to Connecticut.

Professor Verrill (*Amer. Jour. Sci.*, iii, iv, p. 133, 1874) says of it: "It has been supposed by several writers that this shell (*L. litorea*) has been recently and accidentally introduced from Europe; but Dr. Dawson informs me that he collected it more than thirty years ago in the Gulf of St. Lawrence. It is abundant at Halifax, and we have other specimens from Kennebunkport, Me., Hampton Beach, N. H., and Provincetown, Mass. There is really no sufficient evidence that it was not an inhabitant of our shores before the advent of Europeans, but local in its habitats. It may have become more diffused in recent times by commerce, or it may have been overlooked formerly by collectors."

The causes determining the geographical distribution of animal and plant life are a subject of the greatest importance to naturalists, and any contribution to it has its value. So peculiar and