

intermediate fauna inhabiting the seas of Labrador and Newfoundland.

A large portion of the polar species have not yet been discovered south of Greenland; and the following species are characteristic of Labrador and the Banks of Newfoundland:

<i>Cyrtodaria siliqua.</i>	<i>Machæra nitida.</i>
<i>Asterias n. sp?</i>	<i>Margarita acuminata.</i>
<i>Anaperus cigaro.</i>	" <i>varicosa.</i>
<i>Orcula Barthii.</i>	<i>Natica flava.</i>
<i>Terebratella Labradorensis.</i>	<i>Aporrhais occidentalis.</i>
<i>Pecten tenuicostatus.</i>	<i>Fasciolaria ligata.</i>
<i>Alasmodonta arcuata.</i>	<i>Buccinum cretaceum.</i>
<i>Mesodesma Jauresii.</i>	<i>Fusus ventricosus.</i>
<i>Ommastrephes todarus.</i>	

The littoral species of south-eastern Labrador agree well with those of Maine. The two species of *Littorina* present the same variations, and the *Macoma fusca* occurs in the same abundance. These three mollusks are replaced in Greenland by representative species; as regards the latter, Dr. Stimpson has separated this species from *Tellina Groenlandica* Beck; and my own specimens from Greenland are plainly distinct. The genus *Mesodesma*, which does not occur in Greenland, is represented by two species in Labrador and the Grand Banks. The fresh water *Alasmodonta arcuata*, which is so abundant throughout Newfoundland, and in Nova Scotia, New Brunswick, and the eastern half of Maine, which is included in what was formerly called "Acadia," also characterizes this fauna. In the deep water species there is a greater similarity to the polar fauna, but many species of *Buccinum* and *Fusus* described from the frozen seas, which have not been found to the southward, show plainly a different fauna adapted to those climatic conditions. Most of the species enumerated in the preceding list extend around Cape Breton to Halifax and the Banks lying off Nova Scotia, and predominate at the mouth of the Bay of Fundy; but along the coast of Maine they become reduced in size and numbers before reaching the mouth of the Penobscot. The fauna also reappears on St. George's Banks, and very probably on Jeffries Bank, and the occurrence of *Eupagurus pubescens*\* and *Cardita borealis*, a very abundant Labrador and Greenland shell, off the coast of New Jersey, indicates that the cold arctic current impinges upon that coast. How far northward of Newfoundland this fauna extends is not now known. The charts show the existence of an im-

\* Forbes' Natural History of the European seas, p. 53.