

their movements by the temperature or other characteristics of the water, which may differ at different times. The depth at which the layer of coldest water occurs in the Gulf of St. Lawrence, found between 30 and 50 fathoms in the summer season, may have a bearing in this connection ; as the fish have usually a preference for cold water.

It may also be noted that at the greater depths of 150 to 250 fathoms the bottom, as shown by samples brought up by the anchor, is soft mud from brownish-blue to slate colour ; and the marine life there, judging by such specimens as came up, consists chiefly of sea-pens and other stalked creatures, which root themselves in the muddy bottom. There does not therefore appear to be at these depths much food of an inviting character for fish. An examination of such conditions might well prove useful, in view of the large annual value of the Canadian fisheries.