

Pioneer Biological Work in Canada.

But the investigation of waters so vast as those of Canada might well appal even the most stout-hearted of the devotees of science. Difficulties exist, however, not to deter but to inspire effort and, looking back over the past history of biological progress in Canada, one may at times feel disappointed at the meagre efforts and sparse results often achieved but rightly estimated we may feel justifiably proud of the pioneers who worked alone and unappreciated, and under many disadvantages, and yet gathered such a store of scientific knowledge as we in Canada possess to-day. May the *prudens questio* which stimulated them stir us, their unworthy successors!

When a boy I saw much of the venerable and rightly venerated British zoologist, the Rev. Thomas Hincks, whose monographs on hydroid and polyzoon zoology are an imperishable element in the fabric of marine biology, and I well remember the glow of delight with which he received some bottles of specimens after their long and perilous voyage from Canada, which then seemed to Englishmen as distant as Mars. That was nearly 40 years ago, and zealous observers were at work in our land then, whose specimens I saw, as later in my scientific career, I saw bottles of Annelids sent to Dr. McIntosh¹ by Dr. Whiteaves after his early dredgings in the Gulf of St. Lawrence. Mr. Hincks like his Canadian *confrères* was a solitary worker—"I am going for a holiday, get me my boots from Carby, the shoemaker," he said one day to his servant. The servant found to his amazement that the parcel containing Mr. Hincks' pair of boots measured 36 inches by 12, and might have been a young calf wrapped up in paper. The holiday was to be spent at Tenby or Torquay or some favourite resort for marine zoologists, and the boots were huge sea boots for wading in tidal pools or, working on a fishing boat amidst dredges and nets.

Northern and Southern Species in the Gulf Waters.

European naturalists were under the impression that the fauna of the shores of Canada, at least the Atlantic waters, was really of a truly Boreal character: but, over an extent of ten thousand miles of coast on the east and seven thousand on the west, a variety of faunas might be

¹ I feel bound to mention that Professor McIntosh, in a recent letter, informs me of the approaching completion of the great Monograph of the British Annelids, with its wonderful series of superb coloured plates, the work of Professor McIntosh's lamented sister, the late Mrs. Roberta Günther. This splendid and monumental work, in course of publication for over thirty years by the Ray Society of London, is an honour to that famous Society, and the *magnum opus* of the greatest of living marine biologists.