

in the previous voyage of the *Fox* to Arctic Seas. But, exposed to the same tempestuous weather which impeded the astronomical expedition to the Coast of Labrador, the voyage of the *Bulldog* and *Fox* was accomplished under circumstances calculated to warn us that such triumphs are not to be won without toil and disappointment. Continuous bad weather retarded the survey, though it could not thwart the persevering energy of those entrusted with its execution; and they effected a series of soundings sufficient to demonstrate the practicability of an Atlantic cable carried from the north of Scotland to the Faroe Islands, thence to the east shore of Iceland, and from its western coast along a sea-bed over which the annual icebergs of the Arctic Ocean sweep southward their mighty hulks, like mountains torn from their foundations, to waste and perish as strange intruders in a southern clime.

But while we are thus encouraged to anticipate once more, with eager longing, the time when the ocean-buried coil shall emerge on our own British American coasts, and its wondrous freight of thought shall sweep across half a world, swift and noiseless as the stellar rays through the blue depths of space; we have meanwhile other results of interest and value to note, as products of this great enterprise. Dr. Wallich, the naturalist of the expedition, has recently published a valuable series of observations, having for their chief object to determine the depths to which animal life extends in the sea. The result of these is to establish beyond question that life exists in the vast depths of the ocean, under circumstances which have heretofore been deemed incompatible with any condition of vitality. The soundings in the bed of the Atlantic had previously made us familiar with the fact that the oozy deposits along its great basins are to a considerable extent made up of the minute calcareous shells of Foraminifera. But these have been obtained during the recent expedition, at depths of from fifty to nearly two thousand fathoms, with the cell-contents entire, and otherwise presenting satisfactory evidence of having been in a vital state when disturbed in their ocean habitats by the sounding line and lead. Nearly midway between Cape Farewell and Rockall, the deep-sea line brought up, along with numerous specimens of the Globigerinæ, several living star-fishes belonging to the genus *Ophiocoma*, recovered from a depth of upwards of twelve hundred fathoms. The facts are highly suggestive and replete with interest for us. That in the dark caverns of mid-ocean, the solid rock was in process