

the 31st were spent in sounding and dredging on the south and southeastern sides, proceeding into harbour on the afternoon of the 31st.

The deposits between Bermuda and the coast of North America showed, irrespective of depth, a regular decrease in the quantity of carbonate of lime as the American shores were approached. While over 50 per cent. occurred at 2600 fathoms about 100 miles from Bermuda, only 15 and 16 per cent. was found in 1240 and 1250 fathoms near the American shores. The large pelagic Foraminifera made up the principal part of the carbonate of lime in the deposits around Bermuda, but they disappeared almost completely from the bottom when within the influence of the Labrador Current. Rhabdoliths likewise disappeared from the bottom along with the larger tropical pelagic Foraminifera, while Coccospheres were found in the deposits under the Labrador Current.

The mineral particles increased in size and number as the American continent was approached, where they consisted of fragments of quartz, monoclinic and triclinic felspars, hornblende, augite, magnetite, mica, and glauconite. On the 7th May a large block of syenite weighing 490 lbs., which had become jammed between the arms of the dredge, was brought up from 1340 fathoms. In this and the other dredgings within the influence of the Labrador Current, over 100 miles from the shore, many stones were dredged, most of these being rounded pebbles or large grains with rounded angles; nearly two-thirds of the smaller fragments were milky quartz, whilst the larger fragments were quartzite, compact limestone, dolomite, mica-schist, and serpentine rocks, some of them with glacial striations. The deposits along the American coast were blue muds with a reddish surface layer, in which quartz and fragments of ancient rocks were abundant, making up over 60 per cent. of the deposits in 1240 and 1350 fathoms, while these minerals were not detected in the deposits around Bermuda.

The dredgings and trawlings in very deep water around Bermuda were not very productive: in 2650 fathoms six *Ophioglypha bullata*, one *Amphiura verrilli*, two *Calymne relictæ*, some empty worm tubes and a few Shrimps were obtained; in 1075 fathoms there were *Bathyactis symmetrica*, *Deltocyathus italicus*, *Ophiacantha segesta*, *Amphiura duplicata*, several species of *Trochus* and other Molluscs, a Pagurid, Galatheids, several Shrimps and siliceous Sponges; in 435 fathoms *Caryophyllia cylindracea*, *Axohelia dumetosa*, *Cladocora arbuscula*, *Ophiomusium cancellatum*, *Ophiopyren longispinus*, *Ophiacantha troscheli*, *Ophiomitra chelys*, *Astroschema brachiatum*, a species of *Crania*, several Molluscs, Alcyonarians, Crustaceans, and Sponges. In depths of less than 50 fathoms a large number of genera and species were obtained.

The dredgings and trawlings in 1700, 1240, 1350, 1250 fathoms and lesser depths along the coast of North America yielded a very large number of genera and species, the fauna having a decidedly Arctic character, many of the species being identical with those