

## CHAPTER XXI.

Falkland Islands to Monte Video—The Deep-Sea Fishes—Monte Video—The Gephyrea—Monte Video to Ascension—Description of the Deposits—On Deep-Sea Deposits in General—Ascension—Ascension to Porto Praya—Pelagic Diatoms—Infusoria—Pyrocystia—Coccospheres and Rhabdospheres—Bathybius—Cape Verde Islands to England—Synoptical Table of the Voyage—The Botany of the Expedition—Challenger Collections and Publications.

## THE FALKLAND ISLANDS TO MONTE VIDEO.

ON the 6th February, at 4 P.M., the ship left Port Stanley for Monte Video, arriving there on the 15th at 4 P.M.

The wind, as the vessel left the Falkland Islands, was blowing fresh with a falling barometer, but no bad weather ensued. On the 8th a strong breeze was experienced from the northward for four hours; a gale from the westward lasted from 10 P.M. on the 9th until 4 A.M. on the 11th; and on the 12th a strong breeze from the northward lasted ten hours. The weather was, on the whole, fine and dry.

In making the Rio de la Plata, it was noticed that the hill named Pan Azucar only looked like a sugar loaf when viewed from the southwest or northeast, for from the northwest or southeast it appears rounded.

In entering the estuary of the river several casts of 10 fathoms were obtained over a muddy bottom, with Maldonado Island N. 6° E., Lobos Island N. 46° E., and Cerro Chico N. 51° W.

In the section from the Falkland Islands to Lobos Island, four soundings, four serial temperature soundings, and three trawlings were obtained (see Sheet 42).

The bottom showed a descent to 2400 fathoms in the centre of the section, and a gradual rise on the one side to the Falkland Islands and on the other side to the River Plate.

The temperature at the bottom varied with the depth, falling to 32°·7 at the 2400 fathom sounding.

The surface temperature, which at the Falkland Islands was about 50°, fell to 46° just outside that group, after which it rose gradually, as the ship proceeded north, to 71° at Monte Video.

The serial temperature soundings showed a considerable change in the depth occupied by the upper isothermal lines, for whereas on the western side of the South American continent, between the same parallels, the isotherm of 40° maintained an average depth of 380 fathoms, only varying from 320 to 420 fathoms, it was found that between the Falkland Islands and Monte Video it varied from 50 to 430 fathoms in depth.