fathoms, but it s quite possible that less depths may be found in other places. The deepest cast, 2050 fathoms, was obtained in October 1873, 50 miles north of Tristan Island.

The bottom temperature in this section varied with the depth from 36° at 2050 fathoms to 40°·3 at 425 fathoms. The surface temperature increased from 64° on the 38th parallel to 80° at Ascension.

The serial temperatures showed that the isotherm of 40° occupied a mean depth of 450 fathoms, whilst those of 45°, 50°, and 55° were all lower 200 to 300 miles north of Tristan Island than they were at Ascension.

The general direction of the surface current was W.S.W. 14 miles per day.

The following anemometer observations were taken between Monte Video and Ascension :—

Date. 1876.	Station.	Velocity of Wind in Miles per Hour.	Force of Wind by Beaufort's Scale, as noted in Log.
March 9	331	23	4·5
„ 16	335	20	4·5
„ 24	340	16·5	3·4

The albatross and other southern birds followed the ship till the 16th March when in lat. 32° 24′ S., after which they were not again seen.[1]

In 1900 fathoms, off the mouth of the Rio de la Plata, the deposit was a blue mud containing about 5 per cent. of carbonate of lime, which consisted chiefly of a few shells of pelagic Foraminifera. The six following soundings showed depths ranging between 2650 and 2900 fathoms. In none of these did the deposit contain any carbonate of lime, and no remains of calcareous organisms were observed. The remains of siliceous organisms made up from 15 to 20 per cent. of the deposits. The mineral particles had a mean diameter of 0·1 mm. or less, and consisted of fragments of quartz, plagioclase, augite, grains of magnetite, mica, and a very large number of fragments of pumice and volcanic scoriæ. The fragments making up these deposits appear to have been mostly derived from the Rio de la Plata, whose influence on the deposits could be distinctly traced several hundred miles seawards.

When the depth diminished as the Tristan plateau was reached, the character of

[1] A number of external parasites obtained from *Diomedea exulans* in the South Atlantic and South Pacific Oceans were sent to Mr. W. F. Kirby of the British Museum for determination ; he found the following species among them :—*Docophorus dentatus*, Gieb., Atlantic and Pacific ; *Docophoroides brevis*, Burm., Atlantic and Pacific (a very widely ranging species, and one of the largest of the Mallophaga) ; *Lipeurus clypeatus*, Gieb., Atlantic ; *Nirmus angulicollis*, Gieb., Pacific *Colpocephalum* sp. (?), Atlantic.