

On the 30th we sounded in 2275 fathoms with a bottom temperature of $+0^{\circ}9$ C., at a distance of 265 miles to the east of Fernando Noronha; and on the 31st, at a distance of 132 miles from the island, in 2475 fathoms, with a bottom temperature of $+0^{\circ}2$ C. These were considerably the lowest temperatures which we had met with since the commencement of the voyage, and at first sight it seemed singular finding them almost directly on the equator. During our outward voyage circumstances prevented our tracing the source of this unusually cold water, and it was only on our return that we had an opportunity of determining that a deep indraught of cold water, passing up a channel roughly parallel with the coast-line of South America, is open without any intervening barrier from the Southern Sea to the equator.

Early in the morning of the 1st of September the island of Fernando Noronha was in sight, and all forenoon we approached it under steam, sounding at 8 A.M. in lat. $3^{\circ} 33'$ S., long. $32^{\circ} 16'$ W., in 2200 fathoms, with a bottom of globigerina ooze, and a bottom temperature of $+0^{\circ}5$ C., the island distant 21 miles. We took a series of temperature soundings at every ten fathoms, down to sixty fathoms—

Surface.....	25°·6 C.	50 fathoms	17°·3 C.
10 fathoms	23 ·9	60 “	15 ·0
20 “	25 ·6	75 “	13 ·6
30 “	25 ·3	100 “	12 ·4
40 “	22 ·9		

and at every hundred fathoms to 1500. At midday we sounded again about six miles from the island, with a depth of 1010 fathoms and a bottom temperature of $2^{\circ}8$ C., so that Fernando Noronha, like most of the ocean islands, rises abruptly from deep water.

It was a fresh, bright day, with a pleasant breeze from the south-east. At three o'clock we cast anchor in San Antonio Bay, just opposite the settlement and citadel. From this point