

three fine specimens of a new species of *Porcellanaster*, remarkable for a series of long spines running along the centre of the back of each ray, two samples of *Brisinga*, broken, as usual, a few of *Ophioglypha bullata*, and a bryozoon had fortunately stuck to the outside of the net. From the temperature, and from the nature of the animals procured by the dredge, there could be little doubt that we had slipped off the ridge on its western side, and that the sounding was in the southern section of the western trough of the Atlantic. On the following day, after having made good 125 miles, we sounded in 2250 fathoms, with a bottom of ordinary globigerina ooze, and a bottom temperature of  $1^{\circ}.7$  C. In the interval we had passed over, or close to, the position where the *Gazelle* sounded in 1640 fathoms. It therefore appears, both from this and from the remarkable change in bottom temperature, that we had crossed the ridge, and that our sounding on the 7th was in the eastern basin of the Atlantic, where all experience led us to expect a considerably higher temperature than in the southwestern. We took a series of temperature soundings down to 1500 fathoms, and in the evening we crossed the equator for the sixth time since leaving home.

On the 9th we were close to our position on the 21st of August, 1873 (Station CII.), and we put over the dredge in 2450 fathoms. The dredge came up nearly empty, with only a small *Euplectella*, and a fragment of a large hexactinellid sponge. The bag contained a small quantity of globigerina ooze.

For the next few days we continued our course, sometimes stopping to take temperature soundings for the first couple of hundred fathoms. The weather was fine, with light northerly and north-westerly breezes, which somewhat retarded our progress. On the afternoon of the 16th, we sighted the peaks of Fogo and San Iago, and after dark the lights of Porto Praya; and as the night was remarkably fine, we went into Porto Praya Roads and anchored in twelve fathoms off the town. The next