

(see Sheet 4). At 8 P.M., when between the Dezertas and Madeira, the trawl was put over, it being too dark to continue sounding during the night; but at 2.30 A.M. on the 3rd, the trawl fouled something at the bottom, and the rope parted at 6 A.M., after four hours tedious labour in endeavouring to recover it. The ground being evidently unfit for trawling at this place, sounding operations were resumed towards Madeira, and were completed by 11 A.M., at which hour the anchor was let go in Funchal Bay. The deposits about the Dezertas and Madeira were volcanic sand and mud, with usually 30 to 40 per cent. of carbonate of lime. The mineral particles in the deposits were fragments of felspar, magnetite, lapilli, basaltic scorïæ, and glassy fragments.

At Madeira magnetic observations were taken at three places: (1) on the highest part of the rocky cliff forming the first point west of Pontinha Fort, after crossing the bridge over the valley, on some waste ground close on the seaward side of, and rising a little above, the main road, immediately opposite a garden gateway, in a wall on the opposite side of the road; (2) in Fort Pontinha; and (3) on the small almeida on the eastern side of the above mentioned bridge.

TENERIFE.

On the 5th the ship left Madeira for Tenerife, arriving at that island on the 7th, one sounding having been obtained on the passage (see Sheet 2). On the way from Madeira to Tenerife a very strong N.E. trade wind was experienced, which prevented dredging or any other deep-sea work at or near the Salvage Islands. Immediately after the ship anchored at Santa Cruz, a salute of 20 guns was fired from the shore, and on inquiry it was found to be in honour of a son born to King Amadeo, who by that date had abdicated the throne and left Spain.

The anchorage off the town of Santa Cruz being imperfectly known, the permission of the Governor of Tenerife was obtained to resurvey it, and that work was commenced at once. The usual magnetic observations were taken on a circular enlargement of the main road to Laguna outside the town south of the first bridge. The observations for rating chronometers were taken in Fort San Pedro, and during the operations it was noticed that the mercury in the artificial horizon occasionally vibrated considerably for a few seconds, without there being any apparent reason for its doing so. Whether this arose from seismic action or not is uncertain; it clearly did not arise from the movements of carts, or men in the vicinity, especially as it occurred in the afternoon, when every one on shore was enjoying the usual siesta.

On the 10th the ship left the anchorage at Santa Cruz for a sounding and dredging excursion round the island, obtaining twelve soundings and two dredgings (see Sheet 5). The weather was remarkably fine, and the Peak of Tenerife, capped with snow, distinctly visible.