

de Brito Capello and Gama Lobo. The meteorological department is in telegraphic communication with the principal European observatories, and the Magnetic Observatory is similar in almost all respects to that at Kew. The building is insulated for temperature, and a very complete photographic registering apparatus is in constant use. Photographs of the sun, registering the form and position of the spots, are taken daily; and an Astronomical Observatory, which is to be used for the present chiefly for observations of the sun, is in process of completion.

We enjoyed greatly our few days in Lisbon. The British Minister, the Hon. Sir Charles Murray, was most courteous in his attention. The weather was delicious; we were in the middle of the orange and lemon harvest, and the air was redolent of the perfume of the golden fruit; and there was certainly little to remind us of the winter we had so lately left behind us, except the leafless planes, with their curious pendent bullet-like seed-vessels, ranged along the boulevards.

On the evening of the 12th of January we steamed out of the Tagus, and the next day we dredged in 470 fathoms off Setubal. The bottom was the ordinary gray ooze of the North Atlantic, and we sifted out of it many of our old acquaintances of the British area, such as *Limopsis borealis*, *Columbella haliæti*, *Dacrydium vitreum*, and many others, which confirmed us in our anticipation that we should find our deep-sea fauna very widely diffused.

We dredged again off Cape St. Vincent on the 15th, in fine light weather, in 525 fathoms, and brought up some of the dead coils of *Hyalonema*, each with its coating of *Palythoa*, but no perfect or living specimens; and on the following day, weary with the comparatively unproductive sifting of tons of tenacious mortar, we made our first attempt with the trawl at a depth of 600 fathoms. The experiment, as I have already said, was entirely successful. The number of individual specimens