

ART. IV.—*Account of an Earthquake at Sea, felt in the Mediterranean, on the 29th November 1810, in his Majesty's frigate Salsette.* In a letter from CAPTAIN BEAUFORT R.N. F.R.S. to Dr BREWSTER.

SIR,

As it appears from a passage in your last *Journal*, that you are desirous of putting on record notices of earthquakes that have been felt at sea, the following account of one which I witnessed in the Mediterranean is at your service.

On the 29th of November 1810, at 7 A. M., his Majesty's frigate Salsette being about nine leagues S.W. by W. (true) from the island of Cerigo, and ten leagues south from Cape Matapan, the sky suddenly assumed a remarkably black and threatening appearance, which, however, spent itself before eight o'clock in heavy rain. The wind had changed during the shower from E.S.E. to N.W., where it continued the rest of the day, and very faint, with the exception of one gust, which will be again mentioned. At 11 A. M., solar time, while tranquilly standing to the southward, the ship was felt to quiver violently from stem to stern,—the masts, yards, and rigging partaking of the general tremor, and even the guns being strongly affected. The agitation, which commenced with considerable force, seemed rather to increase for about two-thirds of its duration, and then gradually subsided till it became insensible. According to the general opinion, it lasted between two and three minutes; but, when allowance is made for the surprise occasioned by such an unusual phenomenon, a minute and a half will probably be the safer estimate. The sensation it produced will be accurately recognized by any person who has been launched in a boat over a rough beach of gravel; indeed, the resemblance was so alarmingly manifest, that the leads were instantly thrown overboard; but no bottom was found with seventy fathoms of line, and I have since sounded nearly in the same spot with 500 fathoms without reaching the ground. No peculiar smell was detected in the air, nor was there any ebullition in the sea, nor tremor on its surface, nor change of color; yet the water alongside had something of a fretful unnatural appearance, not easy to describe,—the little waves suddenly rising and dropping as if their motion was arrested by some unseen impulse acting in a direction contrary to their course. It did not appear that any change had taken place in either the barometer or thermometer; but circumstances unfortunately prevented their being examined for ten or twelve minutes. Many persons afterwards asserted that this singular scene was accompanied by a hollow indistinct noise; but nothing of the kind was heard by the officers, who with me had been attentive observers of all that passed.

In about five minutes after it had ceased, we were assailed by a very sharp squall, accompanied by large hail, and by repeated flashes of forked lightning, with thunder, at the distance of a few seconds of time. The squall was transient, the musky appearance of the sky quickly vanished, and the afternoon was peculiarly serene and clear. We afterwards ascertained that, on the same day, earthquakes had taken place both in Candia and in the Morea; and as the ship was nearly in a line connecting the extremities of those countries, it was probably the same great convulsion which had extended throughout that space. The only accounts, however, that could be obtained were too loose to identify the shocks, much less to discover in which direction they had been propagated. It is remarkable that

from two officers of the English garrison at Cerigo, who came on board the following morning, we learned that no earthquake had been felt in that island, though it forms such a connecting link between the above places, and though that which we had experienced must have been of very considerable violence, to be transmitted through a mass of water of at least 500 fathoms in depth. Slight shocks, I imagine, are seldom communicated, even through shallow water; for it has twice happened to me in Smyrna to have been wakened at night by smart vibrations of the bed, when nothing was felt on board, though the ship was at anchor only one-third of a mile from the house in which I slept, and though officers and sentinels were upon deck, by all of whom such an occurrence could not have been unobserved.

Though very unlikely to have been connected with the earthquake which was felt on board the Salsette, it may not be uninteresting to mention that, on the preceding evening, between 9 and 10 o'clock, several meteors, of different degrees of brilliancy, were seen; and that one of them, which emitted a long train of sparks, passed so near the ship that I heard the whizzing sound of its flight through the air, and, immediately after its disappearance, the fall of a ponderous body into the water. I am, Stc. F. B.

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