deposit are chiefly derived from the disintegration of continental land, and are similar in all respects to those found later on to prevail along the borders of the great continents.

Between Cape St. Vincent and the Straits of Gibraltar, it occurred to Captain Nares to use an ordinary beam trawl in place of the dredge. This was a very happy idea, for the trawl was found to answer admirably, and, as is well known, has since been almost exclusively used for deep-sea work.

## GIBRALTAR.

Gibraltar was reached on the 18th January at 8 A.M. The ship remained seven days, and during that time a plan of the anchorage inside the new mole was made on a large scale, by means of lines, marked at every 25 feet, stretched across from side to side of the space enclosed by the mole, at distances of 50 feet apart. The soundings were

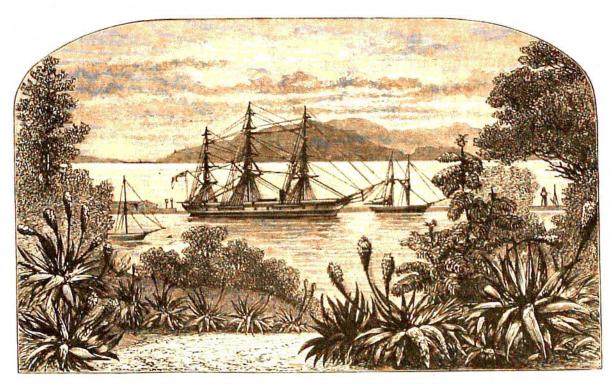
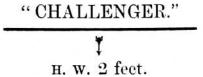


Fig. 9.—H. M.S. Challenger at the New Mole, Gibraltar.

reduced to 5 feet below the level of the mole in Rosia Bay, or to 6 feet below the level of a line cut in the masonry of the camber at the head of the dockyard mole, thus—



The mean level of high-water spring tides was found to be 2 feet below that line.

H.M. surveying sloop "Shearwater" being at Malta during the stay at Gibraltar, the surveying officers took the opportunity of determining the meridian distance between Gibraltar and Malta, by means of the telegraph cable kindly placed at their disposal for