

was altered for the channel between Banton and Bantoncillo, and then to the southward of Dos Hermanos, after passing which the course lay along the northeast shore of Mindoro for Verde Island. A number of fishing lights were noticed on the shore of Simara and Banton Islands as they were passed.

On the 3rd, at 2 A.M., a breeze springing up from the N.N.E. allowed of sail being made, and the engines stopped. The wind gradually drew aft as Verde Island was near'd, and continued well to the eastward until the strait had been cleared at 7 P.M. At 11 P.M. the light on Corregidor Island, at the entrance of Manila Bay, was sighted.

The bearings of the points on Mindoro Island did not agree very well with those on Luzon. Considering, however, the small scale of the charts between Cape York, Australia, and Manila, and the few surveys that have been made, it is wonderful how accurately the position of the numerous islands are laid down, and although, doubtless, much is required to perfect the knowledge of these parts, he would be a very poor navigator who could not with their aid, and a little extra care in lookouts, traverse these seas with confidence.

On the 4th November, at 1 A.M., the ship passed Fortune Island, and proceeded north of Corregidor Island for Manila, anchoring there at 2.45 P.M. in  $4\frac{1}{4}$  fathoms.

Between Ilo Ilo and Manila the trawlings in 15, 100, and 115 fathoms were moderately productive, yielding among other things a considerable number of Mollusca. Mr. Edgar A. Smith, F.L.S., of the British Museum, has furnished the following notes on the Lamellibranchiata, on which group he is engaged in preparing a Report:—

*The Lamellibranchiata.*—"The collection of Bivalve Mollusca brought home by the Challenger is in some respects disappointing. Considering the appliances with which the vessel was furnished, and the able staff of scientific men on board, and the number of dredging Stations, it certainly does seem surprising that scarcely more than five hundred different species of Lamellibranchs should have been obtained. Then again this comparatively small number in very many, indeed I think I may say in the majority, of instances, is only poorly represented in specimens, of dozens of the species there being but single or a few odd valves, many in a bad state of preservation. This comparative paucity<sup>1</sup> of species is probably attributable to the scarcity of Molluscan life at great depths, for the chief part of the collection consists of species from rather shallow water, Torres Strait, the Arafura Sea, Port Jackson, and Kerguelen Island supplying a large number of species. At only about 100 out of the 282 Stations investigated were Lamellibranchs obtained, and 2900 fathoms (Station 244, in Mid North Pacific) was the greatest depth at which any species was found living.

"The single form from this spot is a small fragile shell which I have named *Callocardia pacifica*, and it is a very remarkable fact that a second species (*Callocardia atlantica*) was also brought up from a depth of 1000 fathoms off the Azores, which is all but identical with the Pacific shell. The habitats of these two species, although so remote, are almost on the same parallels. A third species of this genus (*Callocardia*

<sup>1</sup> The nearly exclusive use of the trawl in deep water may, possibly, to some extent account for the paucity of Deep Sea Molluscs obtained by the Expedition.—J. M.