

The particular build of the *Challenger* gives her an immense advantage for her present purpose, as she has all the accommodation of a frigate, with the handiness and draught of water of a corvette. Sixteen of the eighteen large guns have been removed, and the main-deck is almost entirely set aside for the scientific work. The after-cabin is divided into two by a bulk-head, and the two very comfortable little rooms which are thus formed are occupied by Captain Nares and myself. The fore-cabin, a handsome room, 30 feet long by about 12 wide, into which these private cabins open, runs athwart-ships, and is lighted by a large port at either end and two cupola sky-lights. The captain and I use this as a sitting-room, the port-end, with writing-table and work-table, and book-cases packed with old home favorites, being appropriated to my use and that of my secretary, Mr. Wild, to whose facile pencil we are indebted for beautiful illustrations of our novelties, and who sits with me gathering in the various threads, which we combine into a symmetrical web as best we may.

Two sets of cabins have been specially built on the after-part of the main-deck for the different departments of the scientific work. The chart-room, the head-quarters of the naval scientific staff, is a commodious apartment on the starboard side, with ranges of shelves stocked with charts, and hydrographic, magnetic, and meteorological instruments. All the work in these departments, as well as the whole of the practical operations in dredging, sounding, and taking bottom and serial temperatures, is conducted by the naval officers. The natural history work-room corresponds with the chart-room on the port side; and as this is a novel addition to the equipment of a surveying ship, I will describe it somewhat in detail.

The room (Fig. 1) is 12 feet wide by 20 long, the height between-decks 6 feet 10 inches. It is lighted by a large square port, a small scuttle, and two cupola sky-lights, and the side toward the main-deck is closed by movable glazed sashes. At