

forceps, and scalpels; reserves being rubbed over with mercurial ointment and stored away where they can be looked at from time to time.

The Deck-house.—When we got into hot weather, some of the operations carried on in the work-room, such as changing the spirit in which specimens had been steeped for some time, or skinning or preparing birds, in no way conduced to the comfort of the main-deck. A small deck-house was accordingly built abaft the screw-well, and there any processes which were likely to prove offensive was carried on under the control of Mr Murray, with Pearey as an assistant. The deck-house became also latterly the headquarters of the constant exercise of the tow-net, which in the hands of Mr Murray has produced such valuable results.

Preserving Media.—According to our experience, strong spirit of wine is by far the safest and most convenient medium for preserving marine animals in quantity. The ammunition was removed from the fore-magazine of the CHALLENGER, and about a hundred cylindrical iron vessels, each containing four gallons of 85 per cent. alcohol, were stowed in the racks. A cistern, holding about thirty gallons, was fitted into the nettings immediately above the work-room; a pipe led the spirit down to a tap in the work-room, and the spirit, which was under the charge of the gunner's mate, was handed up in the cylinders when required and emptied into the tank, which was, of course, kept carefully locked. The key of the spirit tap in the work-room I kept on my own bunch, and I may add, that under this simple arrangement we never had the least difficulty about spirit, although several thousand gallons passed in this way through the work-room during the voyage. Our first supply of spirit was soon exhausted, but we found no difficulty in having it renewed at all our principal stopping places.

A large number of cases of wide-mouthed bottles for preserving specimens in spirit were also stored in the magazine, and were filled as they were required. The cases were numbered and arranged in the racks in order, so that it was only necessary to give the rotation-number to the gunner's-mate in charge, and any case required was at once brought up to the work-room for inspection.

The bottles in which the greater number of the specimens were preserved were those known in the trade as "drop-bottles," manufactured for holding sweetmeats of various kinds, chiefly for exportation. They are of pale green glass, very transparent, and are closed by glass stoppers with cork rims. Three sizes were used, the diameters of the bottles being 6 inches, $4\frac{1}{2}$ inches, and $3\frac{3}{4}$ inches; with mouths $3\frac{3}{4}$, $2\frac{3}{4}$, and $1\frac{3}{4}$ inches wide respectively. The bottles were all 9 inches in height, and packed conveniently upright into cases with wooden partitions and hinged lids, and padded at the bottom with cork. These jars are extremely convenient, and are very moderate in price. 200 cases complete, containing 2300 bottles, were supplied by E. Breffit & Co., Upper Thames Street, at a