

and three turns of the rope round the drum), it was possible by leading it abaft through two blocks, and then forward again as shown in the plan, to take three additional turns round the drum on the other side of the ship, and thus prevent it slipping.

On the after part of the upper deck, just before the mizenmast, four small circular skylights were fitted, two on each side, to give the necessary light to the naturalists' workroom and the chartroom, on the main deck. Before the mizenmast, level with the hammock nettings, was the usual pilotage bridge, on which stood the standard compass, from which all observations for variation taken on board were made, and under this bridge, on the port side, a screen was built for the thermometers used in ascertaining the temperature of the air. A few feet abaft the mizenmast, in the centre of the ship, was a stand for the Fox dipping needle, from which all observations for inclination taken on board were made. Projecting outwards on each side over the quarter were two small sounding platforms for the ordinary sounding work of a surveying vessel, and over these platforms were small davits, with snatch blocks, to facilitate hauling in the ordinary sounding lines, log lines, &c.

*Deck House for use of Naturalists.*—Abaft the screw well was situated a deck house, 7 feet fore and aft, by 8 feet athwart ships, built after the departure of the ship from England, in order to give increased accommodation to the naturalists. The work connected with the preservation of birds, mammals, fish, deep-sea deposits, and the examination of tow-net gatherings, was usually conducted in this house.

A door opened on the port side, and sash-windows extended the whole width of the house at a height of four feet from the deck. A dresser, 2 feet wide, ran across the house abaft, at the height of the lower part of the sash-windows, and was furnished all round with racks for small bottles. A Hartnack microscope was always at hand on this dresser, and in rough weather was fixed to it by a clamp. Three large holes were cut in the dresser for holding glass globes, into which the contents of the surface nets were usually emptied, and as the tow-nets were hauled in abaft, just at the door of the house, this arrangement was very convenient. Underneath this dresser was another, about two feet above the deck, fitted completely with racks for large bottles. Underneath this again were several boxes with zinc cases, in which fish and other animals were stored; here also was a locker, in which all the apparatus and materials connected with the skinning and preservation of birds were kept. In the fore part of the house was a table, which could be raised or lowered at will, and on which the bird-skinning and other operations were conducted.

On the starboard side of the house was a small table, one foot square, with one stout leg firmly fixed into the deck of the ship so as to render it steady. On this a binocular microscope was permanently clamped, which was found to be very convenient for working with low magnifying powers, and for ascertaining the general character of the surface