

close to the window this effect was not felt, because the reflectors could be exposed directly to a wide range of illuminated sky, and did not cease to gather light from some part of it, unless the motion were very extreme indeed. The oblong table had its feet securely screwed to the deck, and the simple oval-topped wooden stools occupied by the microscopists were also screwed to the deck on each side of the window. They were so placed, and of such a height, that the sitter, by jamming his knees against the frame of the securely fixed table, could hold himself firm and motionless. The microscopes were secured to the table at will in any position by means of small brass holdfasts. With all these arrangements for steadiness it was found possible during a gale of wind, provided that the port had not to be closed altogether, to work comfortably, even with very high powers. A No. 10 immersion of Hartnack was used successfully under such circumstances with a drawn-out tube.

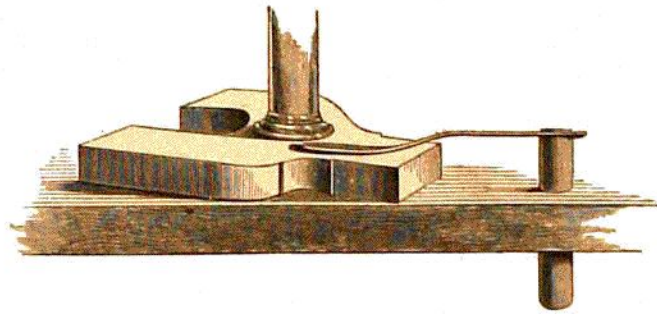


FIG. 3.—The Holdfast.

The holdfast is a simple instrument (fig. 3), well known to artificers of all kinds, but it was found so useful as a means of clamping microscopes on board ship, that it is as well to give some description of it here. It consisted of a piece of stout brass rod, about 4 inches long and $\frac{1}{3}$ of an inch in diameter, to which was fixed at right angles by one of its ends a stout flat strip of brass, about $\frac{1}{2}$ an inch broad. This strip is slightly bent downwards and again upwards a little at its free tip, as seen in the woodcut. A neat vertical hole, large enough to receive the rod freely, is bored in the table where the microscope is to be used. When the free end of the horizontal arm is placed upon any part of the foot of the microscope, a slight pressure on the rod downwards into the hole clamps it firmly in any position in which it may stand. A slight pull on the rod frees it instantly, and the microscope can thus be secured in any position round the hole with the greatest ease. There is no other method by which this can be effected so readily, and in working at sea, unless the instrument be thus fixed, it is often liable to be upset or thrown altogether off the table at any moment. Microscope lamps with ring feet may be conveniently secured to the table in the same manner.

The spirit in constant use for the preservation of specimens was stowed in one of the ship's powder magazines, specially retained for the purpose. From this store a tank