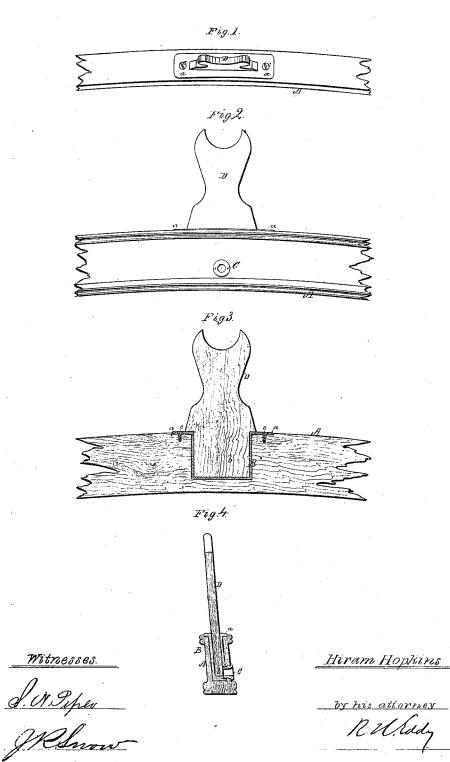
H. Hoppinins, Mast.

No. 100,822.

Patented Stug. 30.1870.



N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

United States Patent Office.

HIRAM HOPKINS. OF WELLFLEET, MASSACHUSETTS.

Letters Patent No. 106,822, dated August 30, 1870.

IMPROVEMENT IN BOOM-CROTCH SUPPORTERS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, HIRAM HOPKINS, of Wellfleet, of the county of Barnstable of the State of Massachusetts, have invented a new and useful Boom-crotch Supporter for Navigable Vessels; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which-

Figure 1 is a top view; Figure 2, a front elevation; Figure 3, a longitudinal section; and

Figure 4, a transverse section of a boom-crotch and its supporter of my improved kind, as applied to the taffrail of a vessel.

Heretofore, for the support of the boom-crotch in the taffrail, it has been customary to make a mortise in the latter to receive a tenon of the crotch. It being generally customary to have two such mortises in a taffrail, the boom-crotch being used in one only of them at a time, as occasion may require, the other, by being open, is liable to become more or less filled with water, either by reason of rain or snow, or by waves or spray coming in over the stern of the vessel. The water, by getting into the mortise, soon causes the wood in proximity thereof to decay, thereby not only damaging the taffrail, but rendering the mortise more or less unfit for supporting the boom-crotch. Besides, in winter, water is liable to collect in the mortise much , to the inconvenience of seamen.

In carrying out my invention I insert down in the taffrail a metallic socket, case, or box, and in the side of the taffrail a metallic tube to screw into the side of the said box, case, or socket, at or near the bottom

thereof. This said box I make open at top, and with a flange to rest upon the taffrail, the interior space of the box being like a mortise, and to receive the tenon of the boom crotch.

In the drawing-

A denotes the taffrail or a portion thereof;

B, the metallic socket or box;

a, its flange; and

C, the tubular screw which goes into the taffrail and screws into the box. This screw serves not only as an educt for the water that may fall into the socket, but as a means of holding the box in the taffrail.

The boom-crotch is represented at D as provided with a tenon, b, to fit the socket of the box.

Screws, ce, going down through the flange a, and screwed into the taffrail, also aid in holding the box thereto. In case of any water getting into the box it will be discharged therefrom by the tubular screw, and, therefore, cannot remain and freeze therein.

I claim-

The combination and arrangement of the metallic boom-crotch socket or supporter B, and its tubular vent-screw C.

Also, the combination and arrangement of the metallic boom-crotch socket B and the vent-screw C with the taffrail A of a navigable vessel, the whole being substantially and for the purpose as hereinbefore explained.

HIRAM HOPKINS.

Witnesses:

R. H. EDDY, J. R. Snow.