J. CARVER.

Port-Stopper Fastenings.

No. 141,113. Patented July 22, 1873.

Fig. 1.

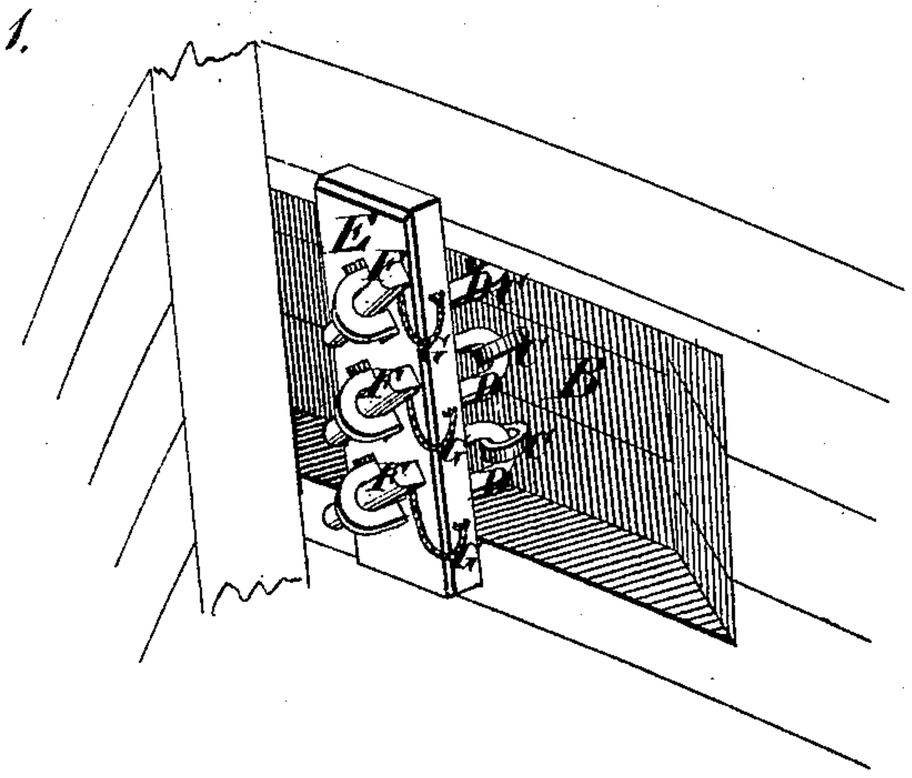
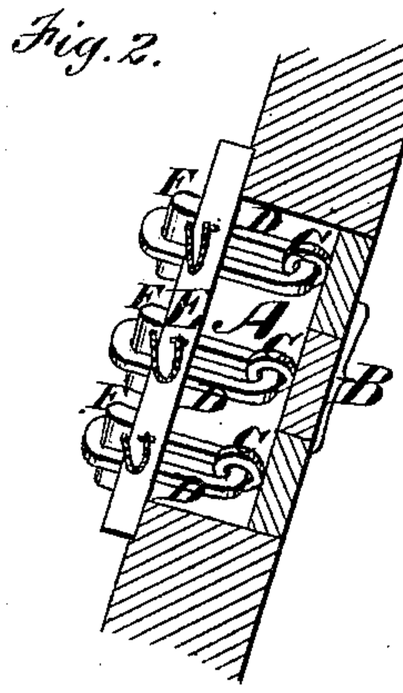


Fig. 2.



Witnesses.
C. F. Brown.
Melville Church.

Inventor.
John Carver
by his Attys.
Hill & Ellsworth.

UNITED STATES PATENT OFFICE.

JOHN CARVER, OF LINCOLNVILLE, ASSIGNOR OF ONE-HALF HIS RIGHT TO JONATHAN P. CILLEY, OF ROCKLAND, MAINE.

IMPROVEMENT IN PORT-STOPPER FASTENINGS.

Specification forming part of Letters Patent No. **141,113**, dated July 22, 1873; application filed May 10, 1873.

To all whom it may concern:

Be it known that I, JOHN CARVER, of Lincolnville, in the county of Waldo and State of Maine, have invented a new and Improved Port-Stopper for Vessels; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view, and Fig. 2 a transverse section.

Similar letters of reference in the accompanying drawings denote the same parts.

This invention has for its object to provide an improved device for stopping, in merchant vessels, the ports or orifices in the bows or sides of the vessel through which freight is taken into the hold; the invention having especial reference to ports for taking in lumber, but being applicable to all kinds of ports; and being designed to furnish an apparatus therefor which will take up little room, and be out of the way when the stopper is out of the port, and which will securely fasten the stopper in the port in a very simple and convenient manner. To this end the invention consists in the construction and combination of parts which I will now proceed to describe.

In the accompanying drawings, A represents a lumber-port in the bow of a vessel, and B are sections of the planking, which together constitute the port-stopper. To the inside of each of these planks is secured a staple, C, which holds a link, D. E is the cross-bar of the port, extending across the same on the inside of the vessel, said bar having slots made transversely through it of sufficient size to receive the links D, which are made long enough to pass through said slots and extend inside the cross-bar so far as to form eyes to receive the beveled keys F, which, when passed through said eyes, fasten the cross-bar and planks B securely together, drawing the cross-bar tightly against the inside of the vessel, and also drawing the port-stopper tightly against the outside of the vessel. Lanyards G connect the keys F with the cross-bar E, so as to prevent the loss of the keys.

On knocking the keys out of the links the planks B are free to be removed from the port, and, when so removed, the links D lie flat on the planks, and, consequently, stow snugly, and are also convenient to move with the planks.

I am aware that a port-stopper, consisting of a single piece, and attached, by chains, to an eye-bolt passing through a cross-bar, the eye-bolt having a nut with arms to secure the bolt, has heretofore been employed; but, in this construction the nut with arms is liable to be turned by the movements of the vessel actuating the deck-lumber, or otherwise; and it is found, also, impossible to load the vessel through the port when the vessel is heavily loaded.

I am also aware that a port-stopper has heretofore been employed in which two horizontal pieces have been used; but, in this case a horizontal cross-bar has been employed for each piece of the stopper employed, while I use but one cross-bar for any number of horizontal pieces used to make up the port-stopper.

Having thus described my invention, what I claim is—

A port-stopper, consisting of a plurality of horizontal pieces, B B, each provided with a staple, C, for the reception of a link, D, in combination with a single vertical cross-bar, E, having diagonal slots to receive the inner ends of the links, through which wedge-shaped keys are inserted, as and for the purpose set forth.

JOHN CARVER.

Witnesses:

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