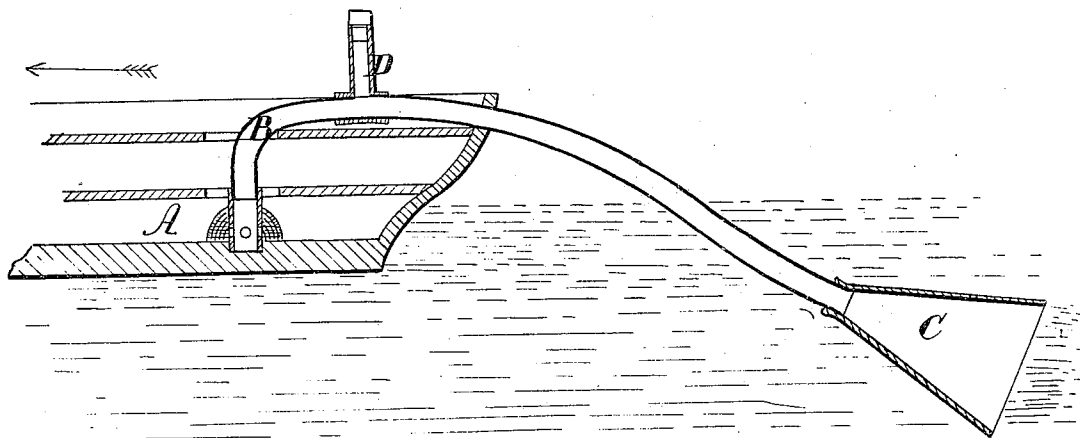


P. Pardee.
Bilge Water Discharge.
N^o 77,402. Patented Apr. 28, 1868.



Witnesses

A. J. Tibbitts
J. W. Shumway

Inventor.

Phineas Pardee

By his Attorney

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United States Patent Office.

PHINEAS PARDEE, OF NEW HAVEN, CONNECTICUT.

Letters Patent No. 77,402, dated April 28, 1868.

IMPROVEMENT IN APPARATUS FOR DISCHARGING BILGE-WATER.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, PHINEAS PARDEE, of New Haven, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Apparatus for Discharging Bilge-Water; and I do hereby declare the following, when taken in connection with the accompanying drawing, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents a sectional view of the stern of a boat, and my discharging-apparatus attached as in operation.

This invention is designed to discharge the bilge-water from vessels without the aid of machinery or labor, simply employing the movement of the vessel through the water, or, if the vessel be stationary, the tide or current passing the vessel.

In order to the clear understanding of my invention, I will proceed to describe the same, as illustrated in the accompanying drawing.

A represents the hold of a vessel sailing in the direction denoted by the arrow. When the water has leaked into the hold, a flexible tube, B, is passed down into the hold, so as to be held near the lowest point, and may be there connected to a strainer or other device to prevent the entrance of anything which would obstruct the tube. Passing up, the tube is dropped over the stern, having its end provided with an open, funnel-shaped mouth, C, and at some point on the tube I arrange an opening, D, through which air may be exhausted, so as to fill the tube with water, and when so filled the opening D is closed; then, the vessel moving, the open mouth, C, causes a vacuum to form in its rear, and, to fill this vacuum, the water passes from the hold out through the tube, and will so continue to run until all the water be discharged.

If the vessel be at anchor in the river or in tide-water, the current created by the passing water is sufficient to draw the bilge-water from the vessel in like manner as when the vessel is moving.

The mouth C should be attached to the vessel so as not to depend upon the tube for its support. It is not necessary in all cases that the plug D be arranged so as to exhaust the air therethrough, as the movement of the vessel or water would soon draw the air from the tube, followed by the water from the hold; but mechanically exhausting the air will facilitate the operation. Thus, by an extremely simple apparatus, and at a trifling cost, and without the employment of manual labor or mechanical means, the hold of the vessel may be emptied. If the leak be great, several tubes, with their respective mouths, may be arranged in like manner.

I do not broadly claim the fixing or attachment of a funnel-shaped draught-apparatus to a vessel, as such, I am aware, is not new.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

The combination of the flexible tube B, and its open mouth, C, together constituting a portable apparatus, and constructed and arranged so that the said tube will lead from the hold of the vessel out through any convenient opening, or over any convenient point above the water-line to the said open mouth, so as to suspend the said mouth from the vessel, and so that the vessel passing through the water, or the water passing the vessel, will create a draught through the said mouth and tube, and by such draught cause the water in the hold to pass through the said tube and out at the said mouth, all as herein set forth and described.

PHINEAS PARDEE.

Witnesses:

A. J. TIBBITS,
J. H. SHUMWAY.