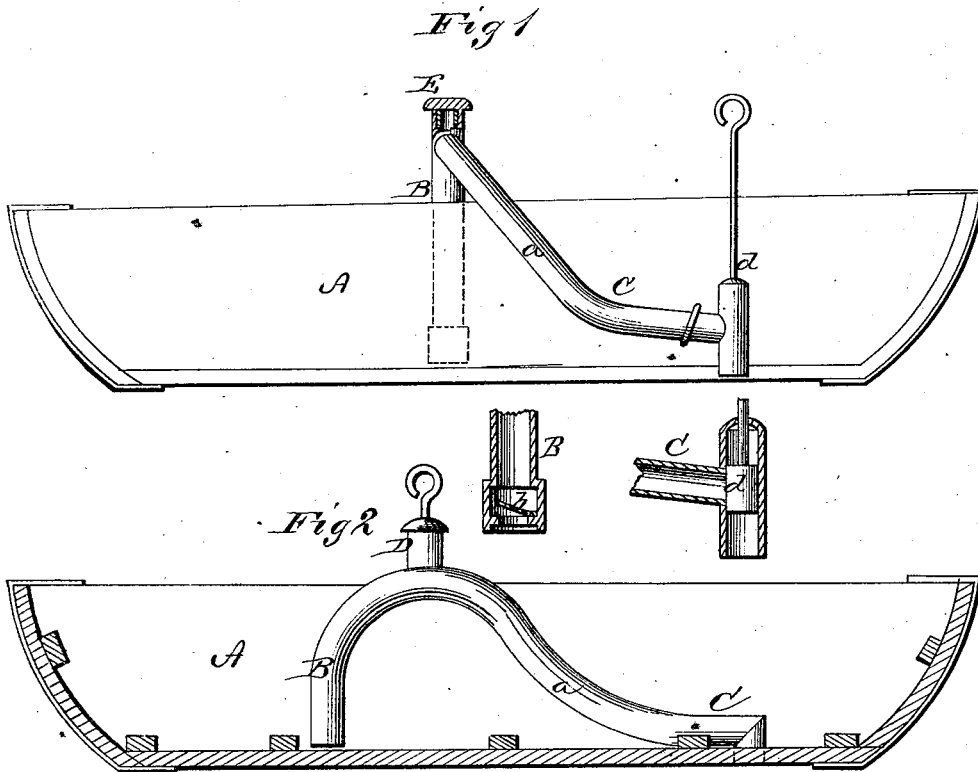


C. M. GEARING.

Means for Discharging Bilge-Water from Vessels.

No. 161,775.

Patented April 6, 1875.



WITNESSES

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CHARLES M. GEARING, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN MEANS FOR DISCHARGING BILGE-WATER FROM VESSELS.

Specification forming part of Letters Patent No. **161,775**, dated April 6, 1875; application filed
November 21, 1874.

To all whom it may concern:

Be it known that I, CHARLES M. GEARING, of Pittsburg, in the county of Allegheny and in the State of Pennsylvania, have invented certain new and useful Improvements in Device for Removing Bilge-Water from Vessels; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the application of one or more siphons of suitable construction to a vessel or boat for the purpose of emptying the same of all water that has leaked or otherwise entered therein, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of a boat or vessel embodying my invention, and Fig. 2 is a longitudinal section of the same.

A represents the hull of a boat or vessel of any construction. B C represent a siphon, arranged in such a manner that the short leg B opens near the bottom of the boat or vessel, or at any desired height from the same. The long leg C of the siphon is preferably made with a steep fall or incline, as shown at *a*, and its lower end passes through the bottom of the boat or vessel; or it may be arranged on the side of the boat, as shown in Fig. 1.

The siphon B C may be provided at the junction of the two legs with an ordinary vacuum-pump, D, which, by being operated, will start

the siphon; or it may have a screw-cap, as shown at E, for the attachment of a pump, or for pouring in water to exhaust the air.

In the end of the short leg B is arranged an upwardly-opening valve, *b*, and in the end of the long leg C is a valve, *d*, to be operated by hand.

The valve *d* may be dispensed with, if desired. In all cases the curve or top portion of the siphon B must be above the water-line.

In operation, especially if the boat is moving or in a current, there will be more or less of suction at the mouth of the siphon, and, in case the boat springs a leak, the siphon or siphons will cause the water to flow from the well and empty out the water, provided the area of the siphon or siphons is equal to the leak in the hold.

The siphons may be arranged in any part of the vessel, and in any convenient manner, so as to be easily and quickly started when desired.

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

The combination, with a boat, of a siphon, B, leading from the well, with its upper part extended above the water-line, and passing through the bottom or side of the boat, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of November, 1874.

CHARLES M. GEARING.

Witnesses:

C. L. EVERT,
C. M. ALEXANDER.