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J. R. JOBIN.

APPARATUS FOR DISCHARGING BILGE WATER.

APPLICATION FILED OCT. 13, 1902.

NO MODEL.

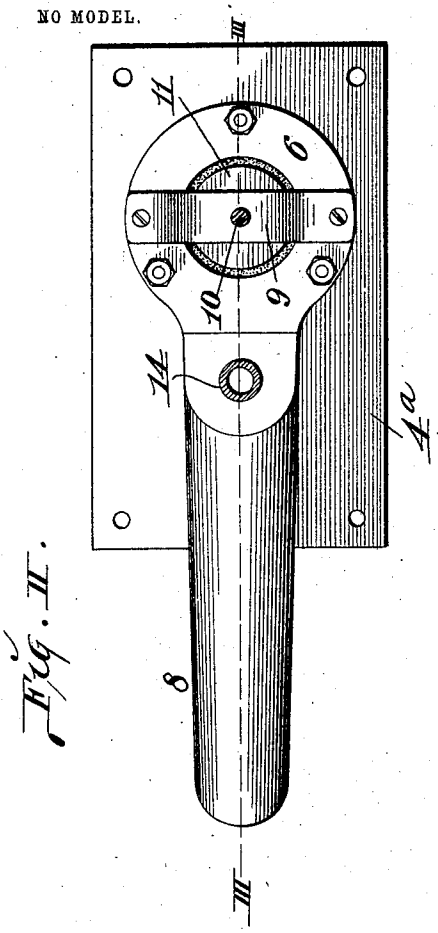


Fig. II.

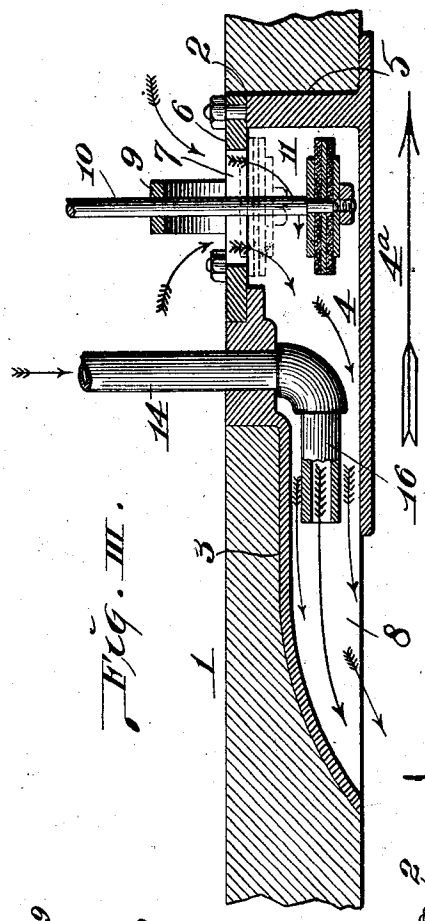


Fig. III.

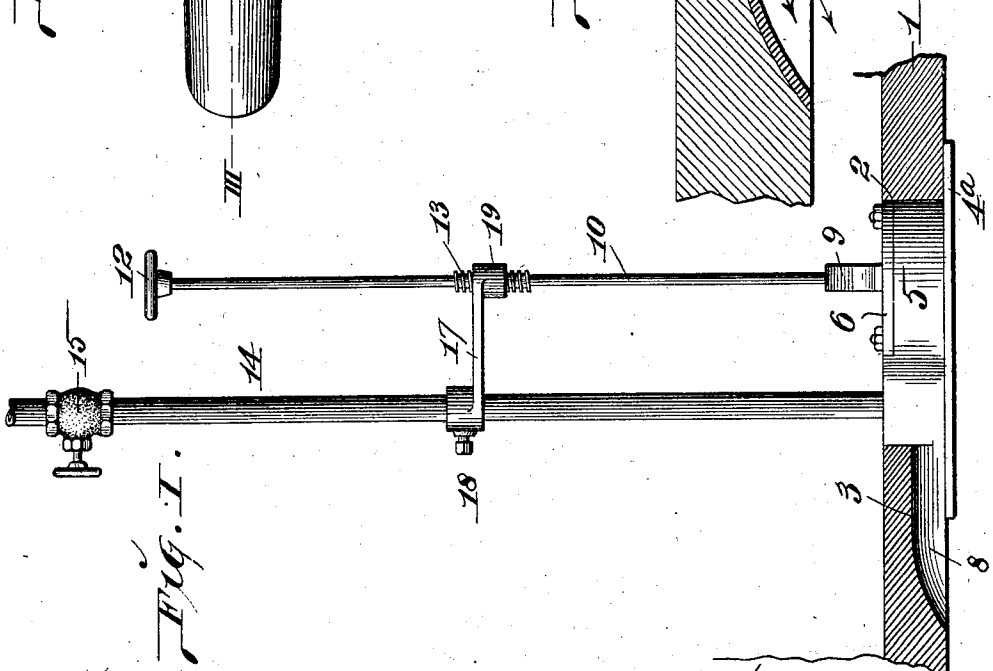


Fig. I.

Attest:—
M. L. Smith
W. S. Knight

Inventor:—
Joseph R. Jobin:—
By Knight Bros. atty's

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UNITED STATES PATENT OFFICE.

JOSEPH R. JOBIN, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-THIRD TO LOUIS E. MEYER, OF ST. LOUIS, MISSOURI.

APPARATUS FOR DISCHARGING BILGE-WATER.

SPECIFICATION forming part of Letters Patent No. 718,466, dated January 13, 1903.

Application filed October 13, 1902. Serial No. 127,081. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. JOBIN, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Apparatus for Discharging Bilge-Water, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to an apparatus for use in removing bilge-water from the holds of vessels.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a side elevation of my improved apparatus. Fig. II is a top or plan view of the apparatus. Fig. III is a vertical longitudinal section taken on line III III, Fig. II.

1 designates the bottom of the hull of a vessel in which is cut an aperture 2, that receives the housing of my apparatus, the hull also being undercut at 3 to receive the discharge-tube of the apparatus, which fits within the bottom face of the hull and is flush with its surface.

4 designates a housing supported by a plate 4^a and provided with a neck 5, which is fitted in the aperture 2.

6 is a valve-seat having a central orifice 7, through which communication may be had from the hold of the vessel interior of the housing 4 for the escape of bilge-water into said housing.

8 is a discharge-tube leading rearwardly from the neck of the housing 4 and open to the exterior of the hull, so that the bilge-water passing therethrough will be discharged into the body of water in which the hull of the vessel is floating.

9 designates a strap mounted on the valve-seat 6 and extending across the outlet-orifice 7.

10 is a valve-rod that passes through the strap 9, and 11 is a valve located in the housing 4 and adapted to be moved by said rod to the under side of the valve-seat 6 to close the outlet-orifice. The valve-rod 10 is provided with a hand-wheel 12, and intermediate of its ends is a screw-thread 13.

14 designates a steam-pipe that contains a valve 15 and leads from a suitable source of steam-supply to the interior of the apparatus-housing 4. This steam-pipe has applied to it a jet-tube 16, which projects rearwardly in the discharge-tube 8 and serves as an ejector for water passing through the housing and discharge-tube of the apparatus on the passage of steam through the steam-pipe.

17 is an arm mounted on the steam-pipe 14 and held by a set-screw 18. The arm 17 carries a sleeve 19, which is screw-threaded internally in correspondence to the screw-thread 13 on the valve-rod 10, which passes through the sleeve and is arranged to operate therein.

In the practical use of my apparatus the bilge-water within the hold of a vessel is discharged therefrom by operating the parts in the following manner: The valve 15 in the steam-pipe is first opened, thereby permitting steam to flow to the jet-tube 16 and discharge through the discharge-tube 8 of the apparatus. The valve 11, that controls the outlet-orifice 7 of the apparatus, is then opened by rotation of the valve-rod 10 through the medium of the hand-wheel 12. On rotation of the valve-rod the screw-thread 13 operates in the threaded sleeve 19 of the arm 17, and the valve-rod is lowered as a result of the downward travel of the screw-thread. The steam escaping from the jet-tube 16 then creates suction in the discharge-tube and housing of the apparatus, thereby withdrawing the bilge-water. A reverse movement of the hand-wheel 12 to rotate the valve-rod 10 in a direction contrary to its rotation in opening the valve causes the screw-thread 13 to travel upwardly in the sleeve 19, thereby lifting the valve 11 to its seat 6. The screw connection between the valve-rod and its support, provided by the thread 13 and threaded sleeve 19, forms a secure, efficient, and simple means of holding the valve 11 to its seat. If it is desired at any time to scuttle the vessel, it may be readily scuttled by merely opening the valve 11 and permitting water to enter through the discharge-tube and housing of

the apparatus to pass through the orifice 7, the steam-pipe remaining closed, so that suction action within the apparatus will not be present.

I claim as my invention—

1. In a bilge-water-discharging apparatus, the combination of a housing, a discharge-tube leading from said housing, a valve-seat mounted on said housing and provided with a discharge-orifice, a valve adapted for movement to said valve-seat, a steam-pipe leading into said housing, and a jet-tube carried by said steam-pipe and arranged in said discharge-tube, substantially as set forth.

2. In a bilge-water-discharging apparatus, the combination of a housing provided with a valve-seat containing an outlet-orifice, a discharge-tube leading from said housing, a steam-pipe leading into said housing, a valve arranged for movement to said valve-seat, a rod by which said valve is carried, a screw-thread on said rod, and a support for said rod having screw-threaded engagement with said screw-thread, substantially as set forth.

3. In a bilge-water-discharging apparatus, the combination of a housing provided with a valve-seat containing an outlet-orifice, a discharge-tube leading from said housing, a valve arranged for movement to said valve-seat, a rod by which said valve is carried, a screw-thread on said rod, a steam-pipe leading into said housing, an arm mounted on said steam-pipe, and an internally-threaded sleeve carried by said arm in which the screw-thread on said rod is arranged to operate, substantially as set forth.

JOSEPH R. JOBIN.

In presence of—
E. S. KNIGHT,
N. V. ALEXANDER.