

G. Moulton, Jr.,
Ship Pump

N^o 55,147.

Patented May 29, 1866.

Fig. 1.

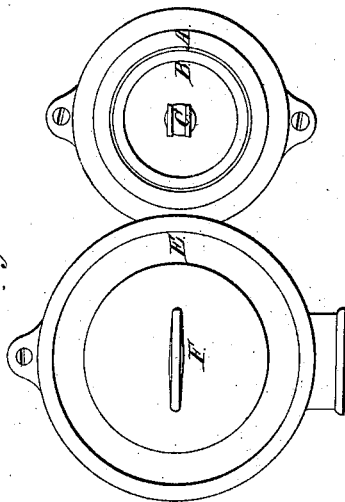


Fig. 2.

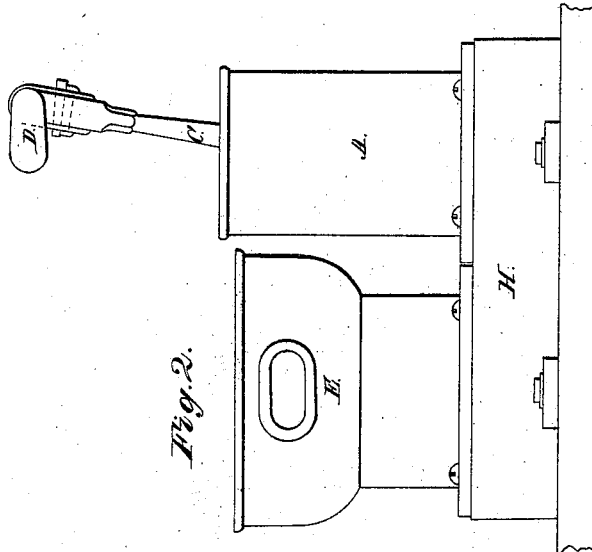


Fig. 3.

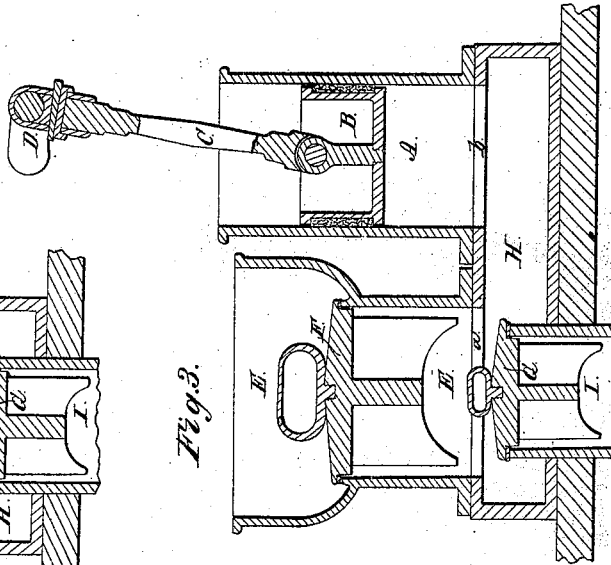
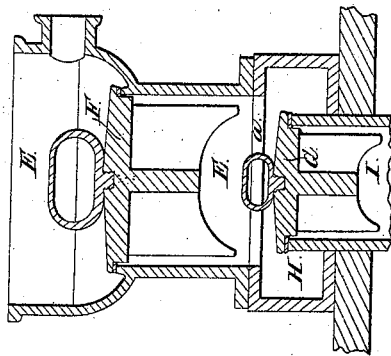


Fig. 4.



Witnesses.

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att'y.

UNITED STATES PATENT OFFICE.

GEORGE MOULTON, JR., OF BATH, MAINE.

IMPROVEMENT IN SHIPS' PUMPS.

Specification forming part of Letters Patent No. 55,147, dated May 29, 1866.

To all whom it may concern:

Be it known that I, GEORGE MOULTON, JR., of Bath, in the county of Sagadahoc and State of Maine, have invented a new Improvement in Ships' Pumps; and I do hereby declare that the following is a full and exact description thereof, reference being had to accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, of which—

Figure 1 is a top view of my invention. Fig. 2 is a side view of the same. Fig. 3 is a longitudinal section of the same. Fig. 4 is a transverse section of valve cylinder or chamber.

The letter A represents the pump-cylinder; B, its piston; C, its piston-rod; D, its crank; E, its valve chamber or cylinder; F, its upper valve; G, its lower valve; H, its base or chamber, connecting cylinder A with chamber E by openings *a* and *b*; I, its port or valve leading to well of vessel.

The nature of my invention consists in providing a ship's pump with cylinders or chambers connected together at the bottom, one the pump-cylinder and the other the valve-chamber, so that the piston may work aside from the valve-chamber, and a vessel may be sounded without drawing the piston, as in the ordinary mode, and also the pump operating with valves instead of boxes one above the other, as in the ordinary way.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Make a frame of any convenient size or shape, upon which place the pump, as seen in Figs. 1 and 2 in the drawings, and place this on any part of the vessel convenient for use, the object of the frame being partially to provide ways upon which the crank may be operated, and also for convenience in moving, &c. Make a pump-cylinder, A, operated by a piston, B, and piston-rod C, with a crank, D. The cylinder may be made of brass or other metal, and the crank-rod *r* of steel or iron or any suitable metal. By the side of this make a valve-chamber of similar material, but of size sufficient for the intended purpose, contain-

ing two valves, one above the other, as clearly represented in Figs. 4 and 3. The pump-cylinder is connected with the valve-chamber H at base, as seen in Figs. 2 and 3. Figs. 3 and 4 also show the port or pipe I, through which the water is drawn by a hose or pipe let down into the hold of the vessel.

To operate the pump use the crank D, which may be worked at both extremities by handles.

I do not confine myself, however, to this mode of working by crank, but claim any crank or mode of operating which will effect the intended purpose.

The ordinary ship's pump is like the common house-pump, the boxes being placed one above the other, so that in case of sounding a vessel it is necessary to draw the boxes or have an extra pipe alongside the pump for this purpose.

My invention is superior to this, in that the vessel may be sounded without drawing the boxes or having the extra pipe.

The valves F and G in the valve-chamber may be easily removed and the vessel sounded through the pipe Q. It has also a single plunger or piston, B, and the two valves F and G, and is less likely to choke up in working. These valves and the plunger are also above deck, and are easy of access in case of any accident to them, while the boxes in the ordinary pump are below deck and are more difficult of access; also, the hole through the deck need be only about two-thirds of the size with the same size of pump as in the ordinary pump.

What I claim as my invention and improvement in the above-described pump is—

Arranging the valves in or over the pump tube or pipe, in combination with an open top above the valves and a piston working in an auxiliary cylinder, substantially as described, so that the pump may be sounded by removing the valves without removing or disturbing the piston.

GEO. MOULTON, JR.

Witnesses:

JOHN P. FISHER,
GEO. MOULTON.