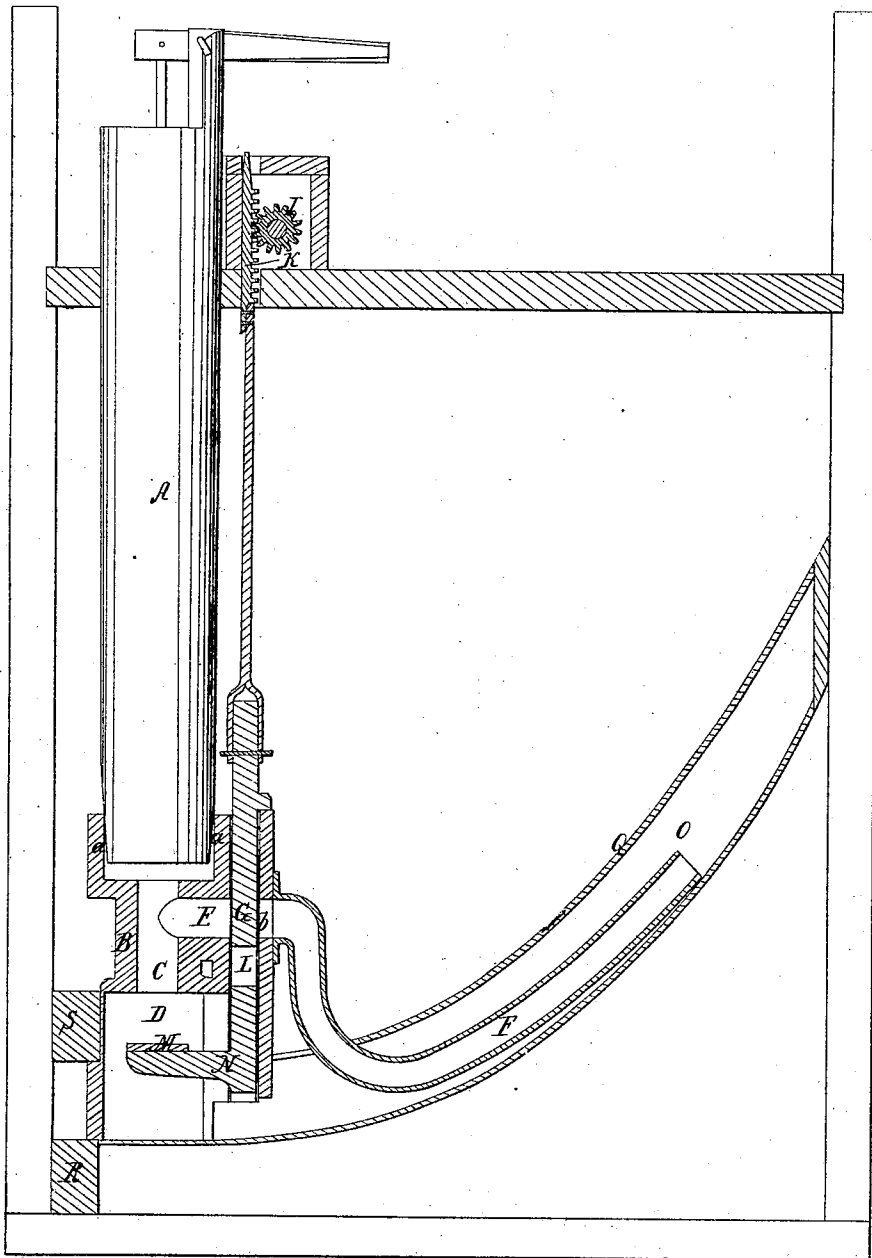


J. J. Heard,

Ship Pump.

N^o 13,219.

Patented July 10, 1855.



Inventor,

J. J. Heard

UNITED STATES PATENT OFFICE.

JNO. J. HEARD, OF BOSTON, MASSACHUSETTS.

SHIP-PUMP.

Specification of Letters Patent No. 13,219, dated July 10, 1855.

To all whom it may concern:

Be it known that I, JOHN J. HEARD, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Attachment to be Applied to Ships' Pumps, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making part of this specification.

10 When vessels are sailing on the wind and are much careened, a considerable depth of water will collect upon the bilge before it reaches the main pump well. It is then necessary to bring the vessel up into the wind
15 occasionally to throw the water into the well. This is however particularly to be avoided in times of danger, and separate pumps have been employed for the sole purpose of operating upon the water in the
20 bilge.

To avoid the necessity of these extra pumps is the object of my present invention which consists in the application of an attachment to the ordinary pump, by which
25 means it may be made to operate either upon the water in the well or upon that in the bilge as may be required.

To enable others skilled in the art to understand my invention I will proceed to
30 describe the manner in which I have carried it out.

In the accompanying drawing A is the main pump; B, the attachment into which the lower end of the pump is fitted, the joint
35 between the two being suitably packed at *a*.

C is the water way from the well D to the pump.

E is a passage from the water way C, which at times is made to communicate with
40 a pipe F that terminates in the bilge of the vessel.

G is a gate which may be raised or lowered upon the deck of the vessel by means of the pinion I and rack bar K. The gate

slides freely up and down within the attachment B and is packed with leather *b* to ensure a tight joint.

L is an opening in the gate which serves the purpose of opening a communication between the passage E and pipe F when the gate is raised; at such times a leather or other washer M upon the step N projecting from the gate B closes the bottom of the water way C, and effectually cuts off the communication between the pump and the
55 well.

If now the pump be operated water can only be admitted through the pipe F when the gate is lowered as seen in the drawing the passage E is closed; and the pump is
60 brought into communication with the well D.

It will thus be perceived that by the use of a single pump I am enabled to operate either upon the water in the well or in the bilge, bringing the whole capacity of the
65 main pump to bear upon the bilge, which has not heretofore been accomplished.

O are the timbers; P, the outer; Q, the inner, flooring; R the keel; S, the keelson.

In the accompanying drawing the bilge
70 pipe F is shown upon one side of the vessel only; it is evident however that a similar pipe would be required upon the opposite side, which would require a water passage and gate similar to those already described.
75

The pinion I may be operated by a wrench or crank on deck or in any other suitable manner.

What I claim as my invention and desire to secure by Letters Patent is—
80

The within described attachment B with its gate G operating in the manner and for the purpose herein set forth.

JOHN J. HEARD.

Witnesses:

SAM. COOPER,
JOHN S. CLOW.