

D. Deshon 2^d & E. Z. Webster,

Bellows Pump,

Patented Sep. 12, 1848.

N^o 5,770.

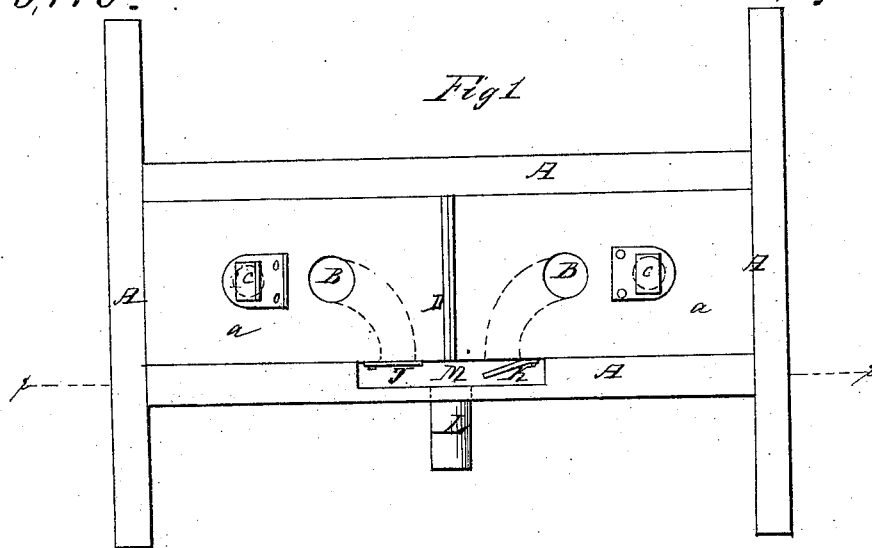


Fig 3.

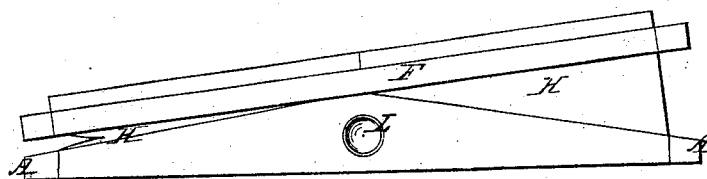
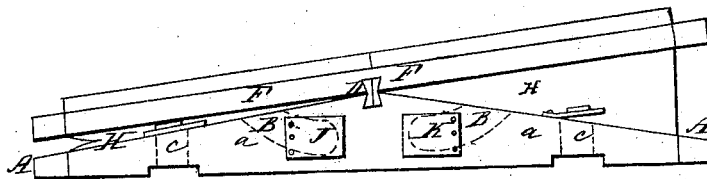


Fig 2.



UNITED STATES PATENT OFFICE.

DANIEL DESHON, 2D, AND E. Z. WEBSTER, OF NEW LONDON, CONNECTICUT.

DOUBLE-BELLOWS PUMP.

Specification of Letters Patent No. 5,770, dated September 12, 1848.

To all whom it may concern:

Be it known that we, DANIEL DESHON, 2d, and E. Z. WEBSTER, of New London, New London county, State of Connecticut, have made a new and useful Improvement in Apparatus for Raising Water for Supplying Shower-Baths, &c.; and we do hereby declare that the following is a full, clear, and exact description of its nature and construction, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a horizontal section showing the base and the water ways contained therein; Fig. 2, a vertical section in the line *x, x*, of Fig. 1; and Fig. 3, is a side elevation of the pump.

A difficulty has heretofore existed in constructing shower baths with pumps that are to be operated by the bather, in so arranging the parts as to have them compact and easily worked while they are so constructed as to be cheap and little liable to get out of order.

The nature of our invention is arranging and constructing the parts so as to obviate these difficulties, and form a cheap, permanent pump in a compact form and easily worked by the bather with a slight motion of his feet.

The construction is as follows: An oblong block (*a*, *a*) is formed and beveled off on its upper side from the center of its length either way to the ends; on each side of the center line there is a water way (*B*) that is made in the block obliquely coming out on one side as is clearly shown in the Figs. 1 and 2, by the dotted lines. At the side of the block these openings are covered by valves (*J*, *K*) which open into a chamber formed in the frame hereafter described that surrounds the block. Another hole or waterway (*c*) is made straight down through the block on each side the center, and these are also furnished with valves that open upward. This block is surrounded by a frame (*A*) the joints of which fit closely to the block all around except a portion on one side that is cut away opposite the water ways (*B*) to form a chamber (*M*) into which the water is forced from the pumps

when in operation as hereafter named. The center line or highest part of the base has a groove cut in it into which some elastic material (*D*) to form a hinge by which a platform (*F*) is hung by its center; this platform is about the size of the base and is allowed a vibrating motion at the ends equal to the bevel of the base. Between the block (*a*) and the frame (*A*) a leather, india-rubber or other suitable flexible substance (*H*) is fastened with a water tight joint by one edge, the other edge is fastened to the platform (*F*) above and thus makes a double bellows pump, all the waterways of which are compactly arranged in the angle which is necessarily formed for the vibration.

To operate this pump the bather bears his weight on the platform on one side of the center and forces it down thus collapsing one side and distending the other as shown in Figs. 2 and 3, by which the distended side is filled with water and all that is in the opposite one is forced out through the opening (*B*) into the chamber (*M*) and then through a pipe (*L*) in the side of said chamber to the reservoir above; when the other side is forced down the water in it is discharged in a similar manner.

Having thus fully described the nature of our improvements, we wish it to be understood that we do not claim forming a double bellows pump as that is a very old device but

What we do claim and desire to secure by Letters Patent is—

The construction and arrangement of the parts of the pump in the manner described, viz., by forming the base with a sufficient bevel each way for the motion of the platform and forming thereby a space sufficient for the introduction of the water ways substantially as above specified without occupying more room than is necessary for the working of the pump.

DANIEL DESHON, 2ND.
EDWARD Z. WEBSTER.

Witnesses:

CYRUS KING CORLIP,
MORRIS G. LOYD.