

# J. S. Barden Pump

No 75112

Patented Mar. 3. 1868

Fig. 2.

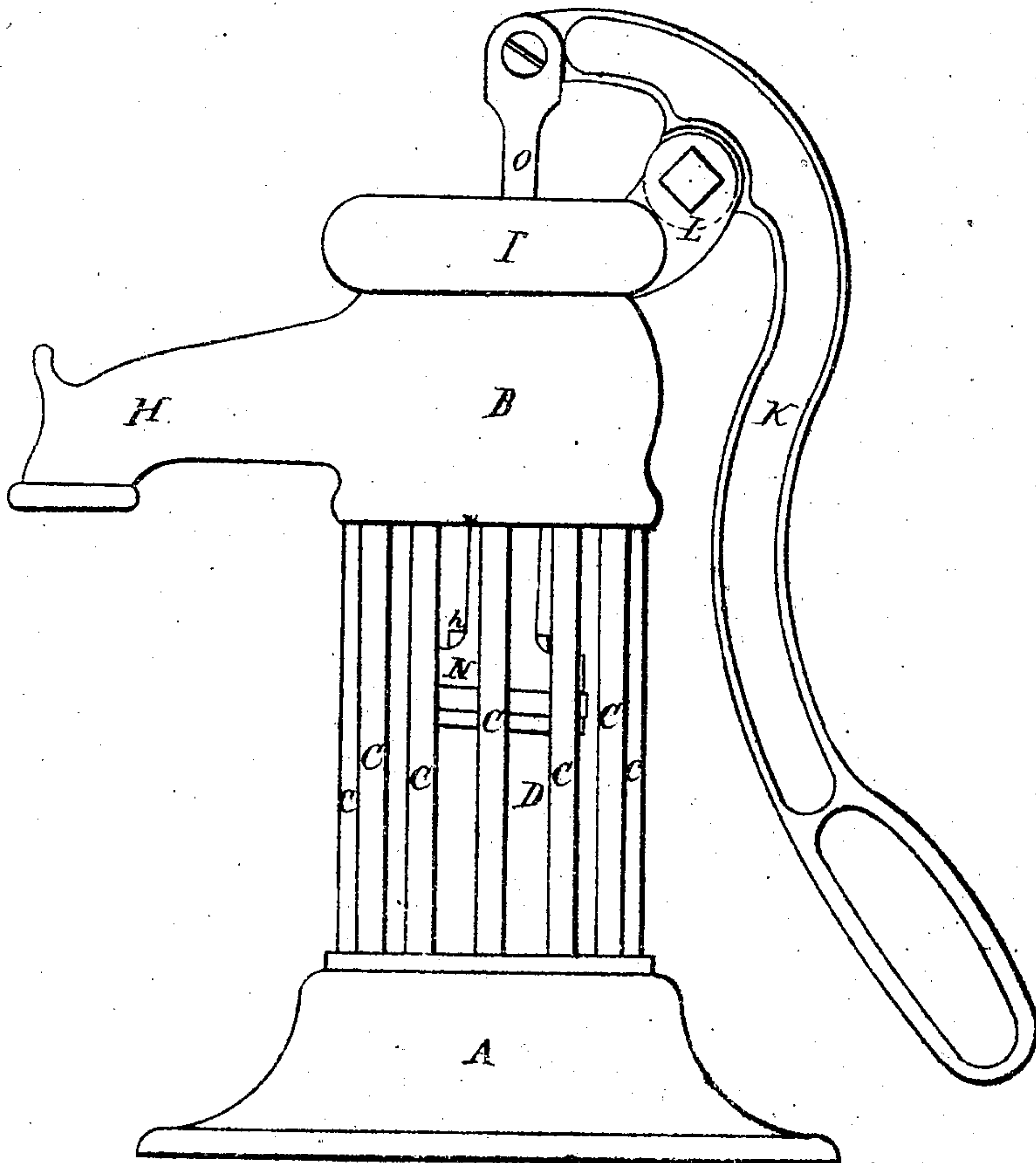
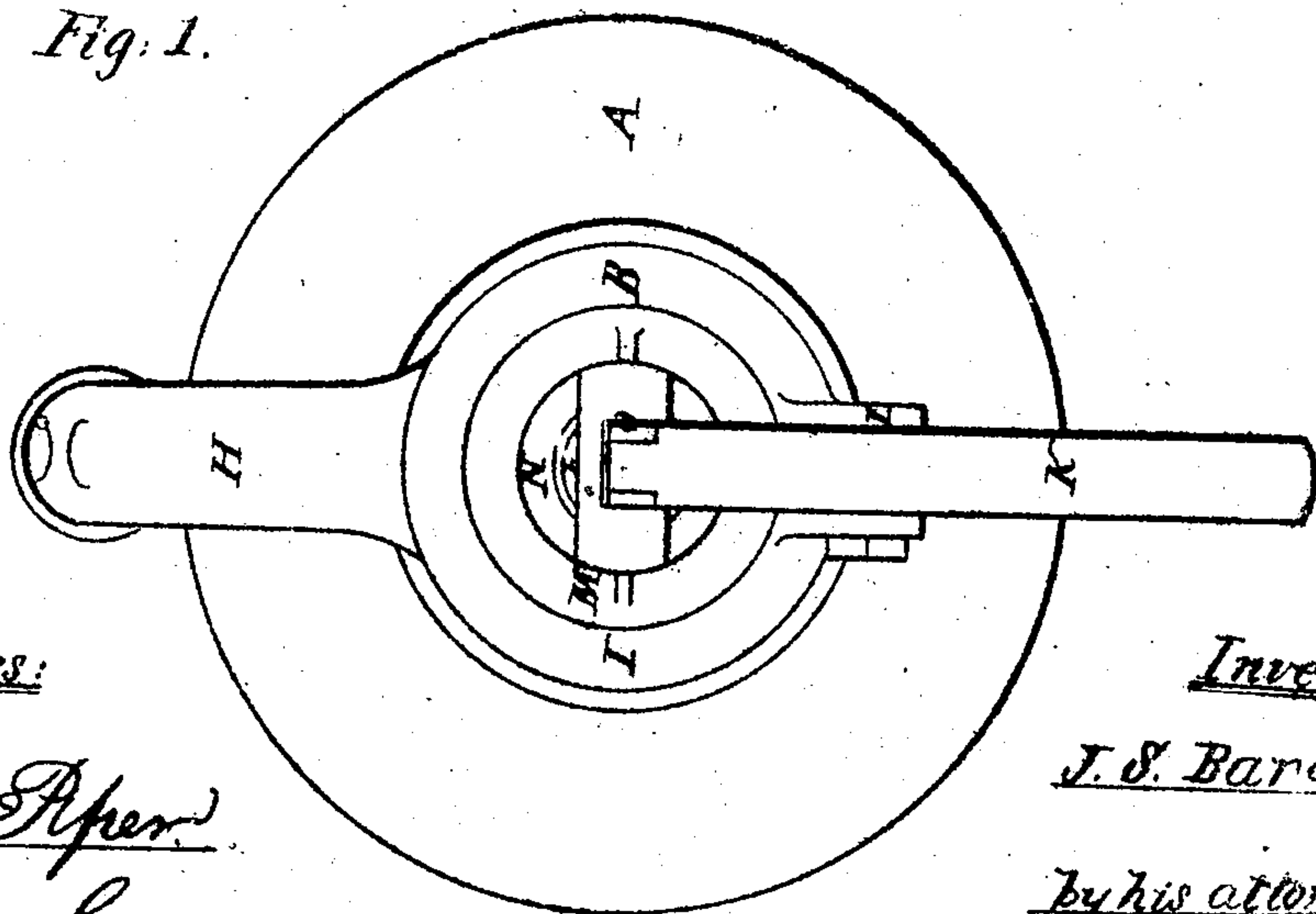


Fig. 1.



Witnesses:

S. V. Allen  
J. R. Snow

Inventor

J. S. Barden.

by his attorney

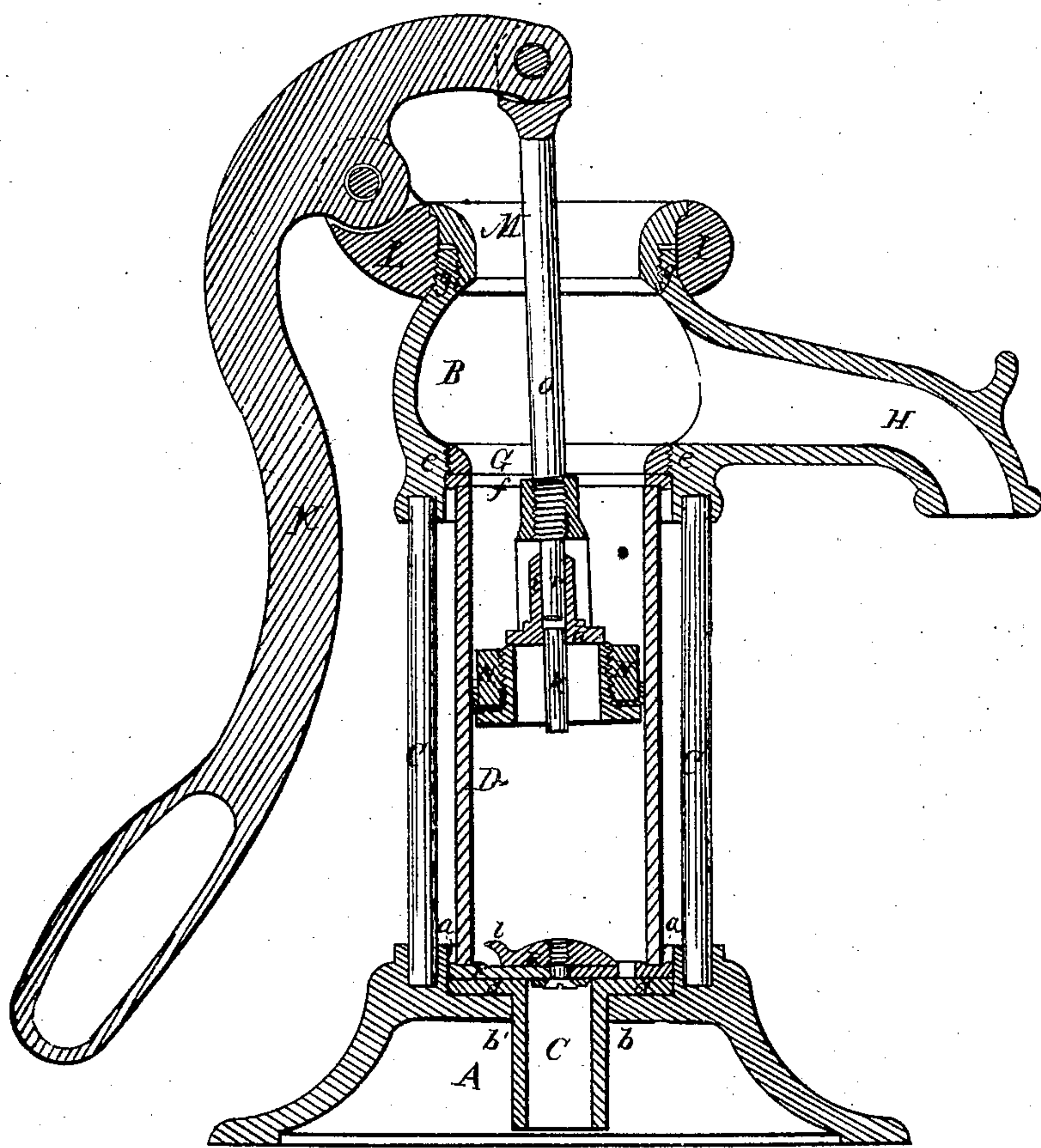
R. V. Maddy

*J. S. Barden*  
*Pump*

*No. 75112*

*Patented Mar 3. 1868*

*Fig. 3.*



Witnesses:

*S. A. Piper*  
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Inventor:

*J. S. Barden*

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*R. M. Hardy*



# United States Patent Office.

JOHN S. BARDEN, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO WILLIAM M. STONE, OF ATTLEBOROUGH, MASSACHUSETTS.

*Letters Patent No. 75,112, dated March 3, 1868.*

## IMPROVEMENT IN PUMPS.

*The Schedule referred to in these Letters Patent and making part of the same.*

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, JOHN S. BARDEN, of the city and county of Providence, and State of Rhode Island, have invented an Improved Pump; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view,

Figure 2 a side elevation, and

Figure 3 a vertical section of it.

In such drawings, A represents the metallic bell-shaped base of the pump, such base being connected with a hollow metallic nose-head, B, by means of a series of vertical rods, C C C, or the equivalent thereof. These rods are arranged in a circle at equal distances apart, in order that there may be spaces between them, through which the pump-barrel D, which is a transparent glass tube, may be seen, the same being in order to enable a person to observe the piston and the lower valve, as well as see into the pump while the piston may be in operation, as well as at other times, he being thus able to readily discover when there may be any foreign matter in the pump, or choking or interfering with the valve thereof. The base, A, is provided with a cylindrical socket, *a*, in its top, and also with a hole, *b*, made through the bottom of the socket. An induction-pipe coupling, *c*, provided with a circular head, *d*, is inserted in the hole *b*, and with the head *d* resting on the bottom of the socket *a*, and having a diameter equal to that of such socket. The upper face of the head *d* constitutes the seat of the lower valve E, which is hinged to or connected with a leather or rubber washer, F, within the socket *a*. The lower end of the glass barrel D rests directly upon the washer or packing F, and is forced down thereupon by an annular screw-nut, G, which is arranged within, and screwed into the nose-head B, in manner as represented in fig. 3, such head having a female screw, *e*, to receive the nut. An annular washer or packing, *f*, is placed between the nut G and the upper end of the tube D. Thus, by means of the nut G, the screw *e*, and the washer F, the glass barrel D may be held in place in the metallic frame of the pump, and with close joints at the ends of such barrel.

The head B, as well as the base, A, is to be of cast iron, or other suitable material. A discharging-spout or nose, H, is to project from and open out of the nose-head B, in manner as represented in fig. 3. The head B is open at top, and is there provided with a neck, *g*, to receive a ring, I, having a shape in transverse section, as shown in such fig. 3. The pump-handle or lever K is hinged or jointed to an arm, L, projecting from the ring I. An annular nut, M, constructed so as to overlap the ring I, screws into the neck *g*, and is arranged therein over it, in manner as shown in fig. 3. This nut serves to clamp the ring I down upon the head B, and thus fix the handle or lever K in any desirable position in which it may be arranged relatively to the nose H, and within a horizontal circle having its centre in the axis of the pump. The upper box or piston of the pump is shown at N, as connected to a rod, O, which at top is hinged to the lever K. The rod O screws into the bail of the box N and serves as a guide for the valve *h*, into a socketed projection, *i*, of which the extension *r* of the rod enters, or is arranged in manner as exhibited in fig. 3. The valve *h* also has a projection, *k*, extending down from it, and a short distance below the box N, when the valve is down upon its seat. There is also a small arm, *l*, projected from the lower valve E, in manner as shown in fig. 3. On depressing the box N upon the arm *l*, the valve E will be raised or elevated off its seat. As the arm *l* is to extend over and beyond the hinge of the valve in a manner to cause the valve to be thrown up or opened by depressing the box upon and so as to bear down the arm. As the valve may rise under such circumstances, it will strike against the projection *k*, and will thereby force the upper valve *h* off its seat. Thus both valves will be opened, so as to allow the water to escape from the pump-barrel, in order that in winter such water may not freeze within the pump-barrel and its induction-pipe.

I make no claim to a glass pump-barrel held between a metallic valve-case and a metallic nose-head, and made light at the joints by cushions or stuffing.

What I claim as my invention or improvements in the said pumps may be stated as follows:

I claim the combination and arrangement of the internal annular nut G and its screw *e* with the nose-head B, connected with the base, A, by the series of rods C C, such nut G serving to confine the glass barrel or tube D within the pump-frame, as specified.

Witnesses:

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JOHN S. BARDEN.