S. P. Gilbert's.

Piston for Pumps

73969

PATENTED
FEB 4 1868

Fig. 1.

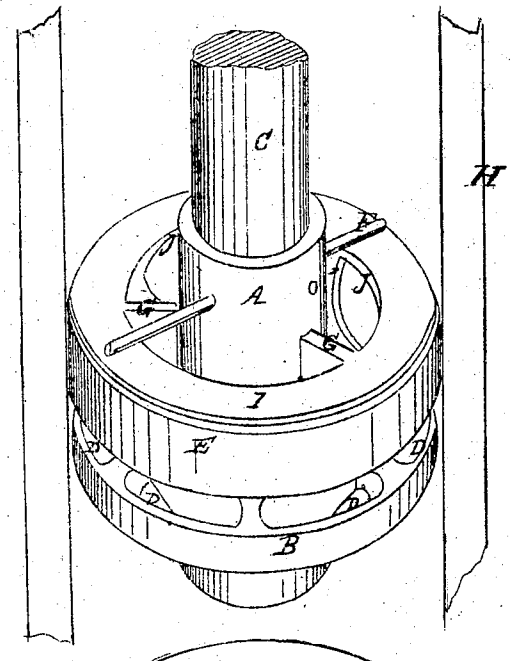
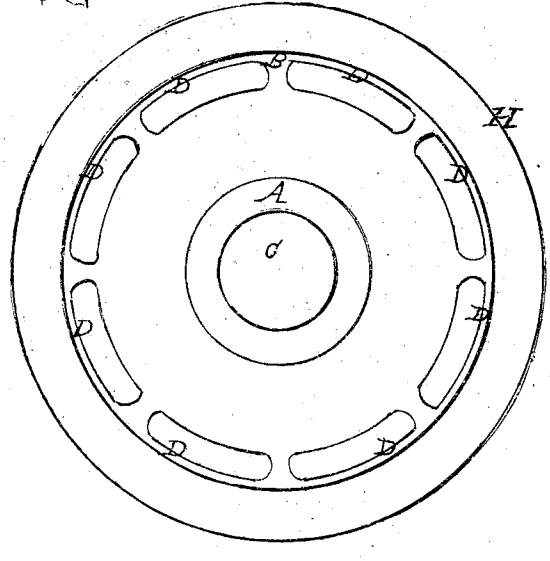


Fig. 2.



Witnesses.
Edwin English
C. E. Gilbert

INVENTOR
S. P. Gilbert
By his Atty
Geo. L. Chapin

United States Patent Office.

S. P. GILBERT, OF RACINE, WISCONSIN.

Letters Patent No. 73,969, *dated February* 4, 1868.

IMPROVEMENT IN PUMP-PISTONS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, S. P. GILBERT, of Racine, in the county of Racine, in the State of Wisconsin, have invented an Improved Piston for Pumps; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a perspective representation of my piston.

Figure 2, a plan view of the lower rim, in which are made the ports for water to pass through.

The nature of my invention consists in the use of a ring, having an annular space in its periphery for holding the packing, and also arranged to work up and down on the centre of the piston, and carry the packing with it.

This invention relates to an improvement in that class of pistons, which are arranged to admit water to pass through between the packing and the piston centre, and without the use of a centre-valve.

In order to give a correct understanding of my invention, I have marked corresponding parts with similar letters, and will now give a detailed description.

A represents the centre of the piston, having a vertical opening for supporting a piston-rod, C, as seen at figs. 1 and 2, and has rigidly attached to it a circular flange, B, in which is made a series of ports or openings, D D, &c., for the purpose of permitting water to pass through when the piston is forced downward. These ports, of themselves, I consider new, but do not claim them in connection with my device. A flange, I, is attached to the centre, A, by means of arms G, and is used to prevent the packing E from getting out of place, and also as a stop against the pin F, put through the centre A and piston-rod C. I use any suitable packing for filling the annular space in the ring I, and adjust it so that it may be expanded by means of water passing through holes J J made through the inside of the ring I.

The construction of the various parts is quite simple, but when arranged, as shown in the drawings, provides a piston which will operate to a good advantage, and not liable to get out of order, like those pistons whose packings are loose in annular spaces.

The piston should be made of cast iron, and the under side of ring I ground to fit the flange B, in order to prevent water from passing through the joint during the upward movement of the piston.

This invention differs materially from all others, in consequence of the ring I, which slides on the centre A, and therefore does not wear the packing, as when it operates loosely in an enlarged space.

Having thus described my device, what I claim, and desire to secure by Letters Patent, is—

The ring I, holding the packing E, and forming a valve for the ports D, all substantially as and for the purpose set forth.

S. P. GILBERT.

Witnesses:

EDWD. ENGLISH,

E. E. GILBERT.