(No Model.)

J. FOWLER.

BEER PUMP.

No. 266,126. Patented Oct. 17, 1882.

Fig. 1.

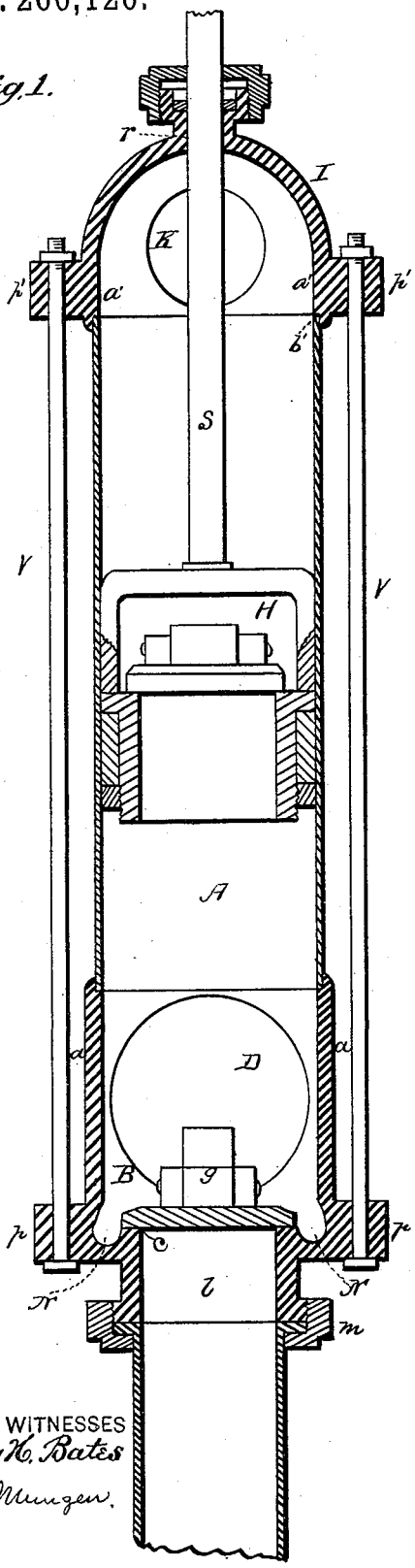
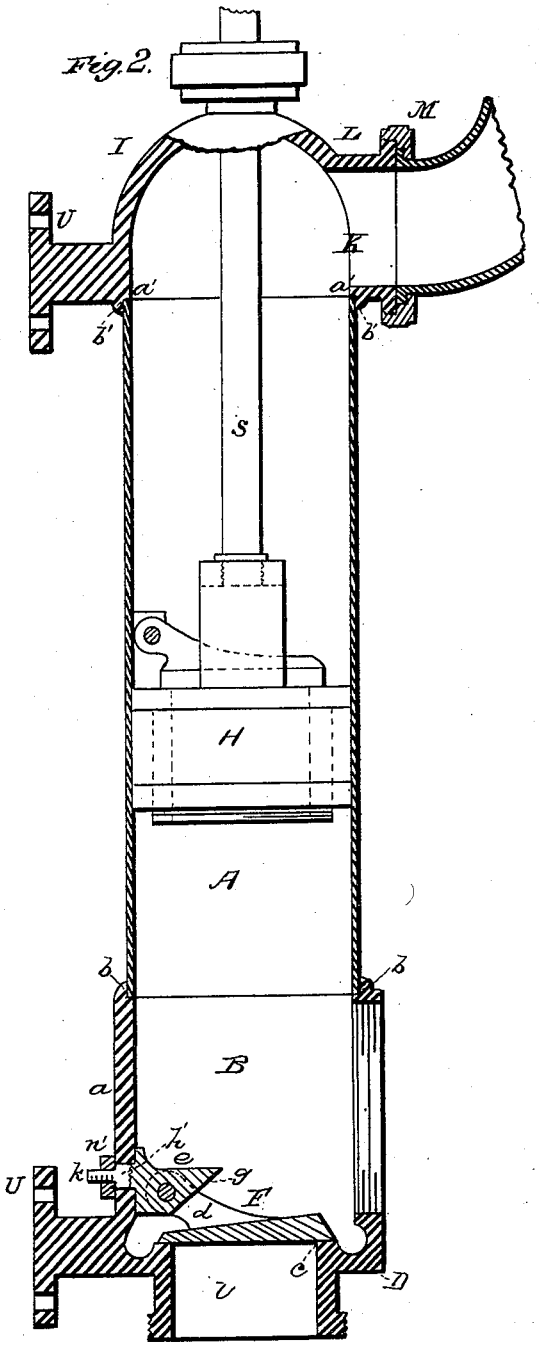


Fig. 2.



WITNESSES

Emory N. Bates

Thos. Munger.

INVENTOR

John Fowler

By Anderson & Smith ATTORNEYS

UNITED STATES PATENT OFFICE.

JOHN FOWLER, OF LOUISVILLE, KENTUCKY.

BEER-PUMP.

SPECIFICATION forming part of Letters Patent No. 266,126, dated October 17, 1882.

Application filed December 24, 1881. (No model.)

To all whom it may concern:

Be it known that I, JOHN FOWLER, a citizen of the United States, and a resident of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and valuable Improvement in Beer-Pumps; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical longitudinal section of my device, and Fig. 2 is a vertical transverse section of the same.

This invention has relation to beer-pumps used in distilleries for pumping beer and mash; and it consists in the novel construction and arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings, the letter A designates the piston-tube or working-barrel of the pump-cylinder, which is formed or cut in lengths from tubing, so as to suit the different lengths of stroke required in different pumps.

B indicates the hollow bottom part or base of the pump, which is cast with a cylindrical wall, *a*, extending upward, and formed at its upper edge with an annular recess, *b*, which is designed to receive the lower end of the working-barrel A. The hollow base is provided on one side with a hand-opening, D, which is threaded to receive a screw cap or plug, C. In the lower part of the base B is formed the raised valve-seat *c*, around which is an annular depression or enlarged way, N, designed to keep the valve free and allow room for the passage upward of the material being lifted.

F is the valve, having on its back the perforated lugs *d*, which are pivoted by means of the pin *e* to the wall-lug *f*, which is formed with an inner overhanging oblique face, *g*, which serves as a stop to keep the valve from rising too high. The lug *f* is provided with a squared projection, *h*, on its back, having a threaded end, *k*, to receive a nut, *n*. The squared portion is seated in a square opening, *h'*, in the wall *a*, opposite the hand-hole D. This construction serves to keep the hinge-lug and valve true, and enables either of these parts, or both, to be removed through the hand-hole when desirable for cleaning or other purposes.

From the bottom of the base B extends downward the threaded inlet-neck *l*, to which the swivel-coupling *m* is connected. Exterior perforated lugs *p* on the base serve to receive the lower ends of the long bolts V, which connect the base and head I of the pump-cylinder, joining them securely to the working-barrel A. The head I is a hollow casting having its cavity downward, and its wall *a'* formed with an annular recess, *b'*, in its lower edge to receive the upper end of the tube-section which forms the working-barrel. The head I is provided with exterior perforated lugs *p'* for the long bolts, and is formed with an opening, *r*, in its top for the passage of the piston-rod *s*, said opening being formed with a threaded exterior neck, which is fitted with a suitable packing and gland. In the side of the head is formed the exhaust-opening or outlet K, having the threaded neck L and swivel-coupling M.

H represents the piston.

The working-barrel A is a simple tube without projection or opening. When worn out it can be readily and cheaply replaced, and as the other portions of the pump do not wear it can in this way be made as good as new at any time. When the head I is taken off to pack the piston or plunger, this can be easily done, because there is no opening in the working-barrel to interfere with the movement of the packing. Should it be necessary to clean the piston or its valve, the piston-rod may be unfastened at its upper end and the piston dropped into the hollow base, when it can be readily reached through the hand-hole.

Fastening-arms U may be cast on the head and base of the pump, these arms being provided with bolt-holes through vertical or horizontal bearing portions, according to the design, the bearings being vertical if the pump is to be secured to a post or to a wall, and horizontal if the pump is to be fastened to the floor or other horizontal support.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a beer-pump, the hollow base B, having a vertical wall, *a*, formed with an annular

recess, *b*, in its upper edge, a hand-hole, D, in said wall, a raised valve-seat, *c*, and annular depressed way N around said seat, and threaded inlet-neck *l* extending downward, substantially as specified.

2. The hollow base B, having a hand-hole, D, in its vertical wall *a*, and opposite said hole a squared aperture, *h'*, in combination with the hinge-lug *f*, its squared projection *h*, threaded end *k*, and nut *n*, substantially as specified.

3. The combination, with the base-valve F, of the hinge-lug *f*, having the oblique overhanging stop-face *g*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN FOWLER.

Witnesses:

ROBERT H. MCCLEARY,

JOSEPH HASLETT.