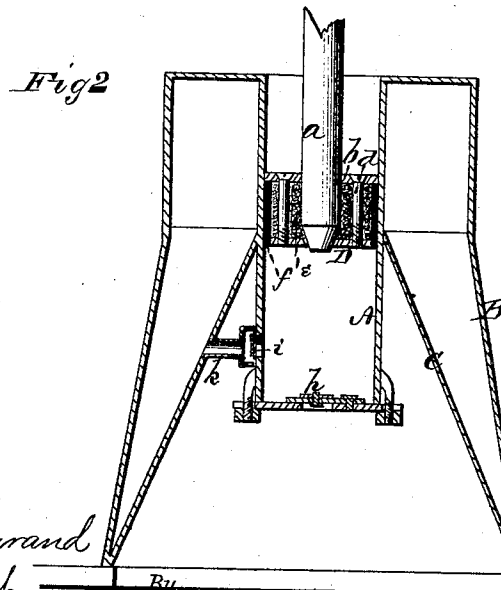
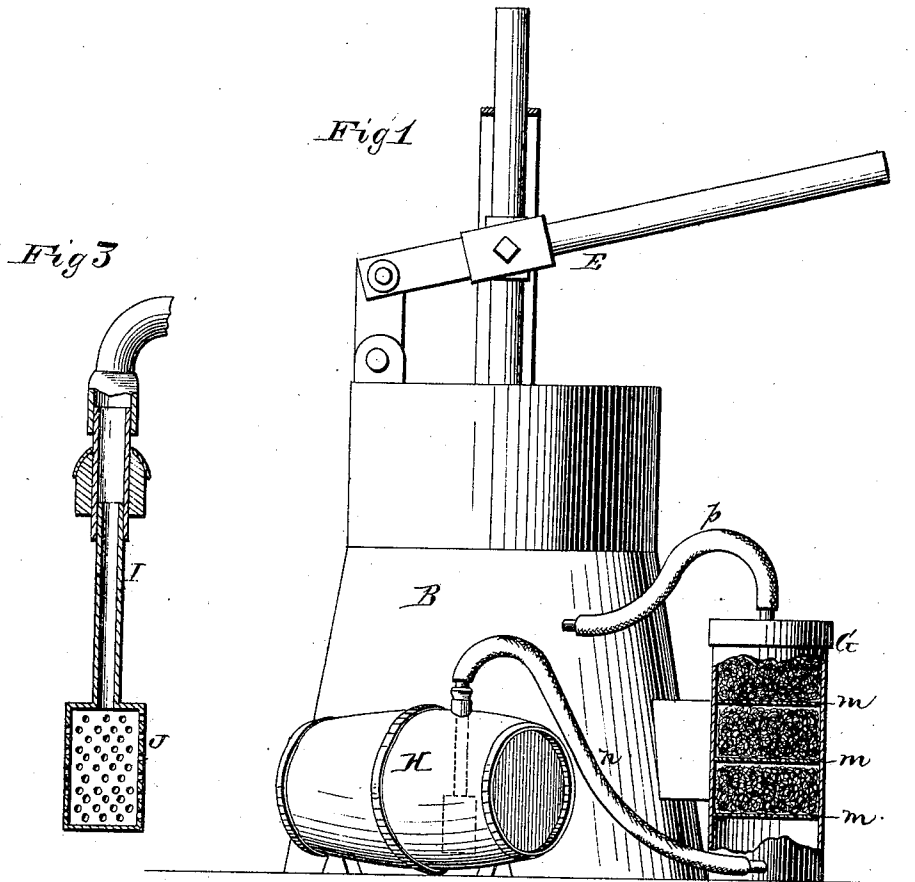


D. S. WHITMAN.

BEER-PUMPS, &C

No. 170,426.

Patented Nov. 23, 1875.



WITNESSES

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DAVID S. WHITMAN, OF READING, PENNSYLVANIA.

IMPROVEMENT IN BEER-PUMPS, &c.

Specification forming part of Letters Patent No. **170,426**, dated November 23, 1875; application filed July 19, 1875.

To all whom it may concern:

Be it known that I, DAVID S. WHITMAN, of Reading, in the county of Berks and in the State of Pennsylvania, have invented certain new and useful Improvements in Beer Pumps and Preservers; and do hereby declare that the following is a full, clear, 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.

The nature of my invention consists in the construction and arrangement of an apparatus for preserving beer, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my apparatus with the filter in vertical section. Fig. 2 is a vertical section of the pump. Fig. 3 is an enlarged vertical section of the device for distributing the air through the beer in the barrel.

A represents the pump-cylinder attached to and forming the center of an annular receiver, B, which spreads outward in conical form, and is also provided with an interior shell, c, making the lower part of the receiver in V form, and forming a compact and durable device. The piston-head D is secured on the piston-rod a, and a follower, b, is connected thereto by means of bolts d d, cotton or other suitable material, e, being placed between the piston-head and follower, so that when the bolts d are tightened it will expand the leather packing f surrounding it, and make the piston perfectly air-tight. The piston thus constructed is operated by means of a lever, E, to which the piston-rod a is connected. In the bottom of the pump-cylinder A is an ordinary check-valve, h, and the lower end of said cylinder is

connected with the receiver B C by a pipe, k, having an interior check-valve, i. The receiver incloses the pump, making a very compact and durable arrangement. The receiver is, by a pipe, p, connected with the air-purifier G, which is provided with interior perforated plates m m, having lime, cream of tartar, and charcoal placed thereon in the order mentioned from the top downward. The air is forced by the pump downward through these materials, which are deodorizers and disinfectants, thereby purifying the air thoroughly before it is forced down into the beer-barrel. From the lower portion of the purifier G the air is conducted through a pipe, n, into a tube, I, inserted in the bung of the barrel H, and extending down into the same. The tube I is at its lower end provided with a perforated vessel or cylinder, J, forming a distributor for the air. The air is thus conducted down to the bottom of the cask or barrel, where it is distributed and rises up through the beer, thereby agitating and livening up the liquor.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the pump A and receiver B with interior shell C, surrounding the pump, and connected together by a pipe, k, having valve i, substantially as and for the purposes herein set forth.

2. The combination of the air-pump A D, receiver B C, purifier G, and air-distributor J, constructed and arranged substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of July, 1875.

DAVID S. WHITMAN.

Witnesses:

MATTHIAS MENGEL,
E. E. HAFFER.