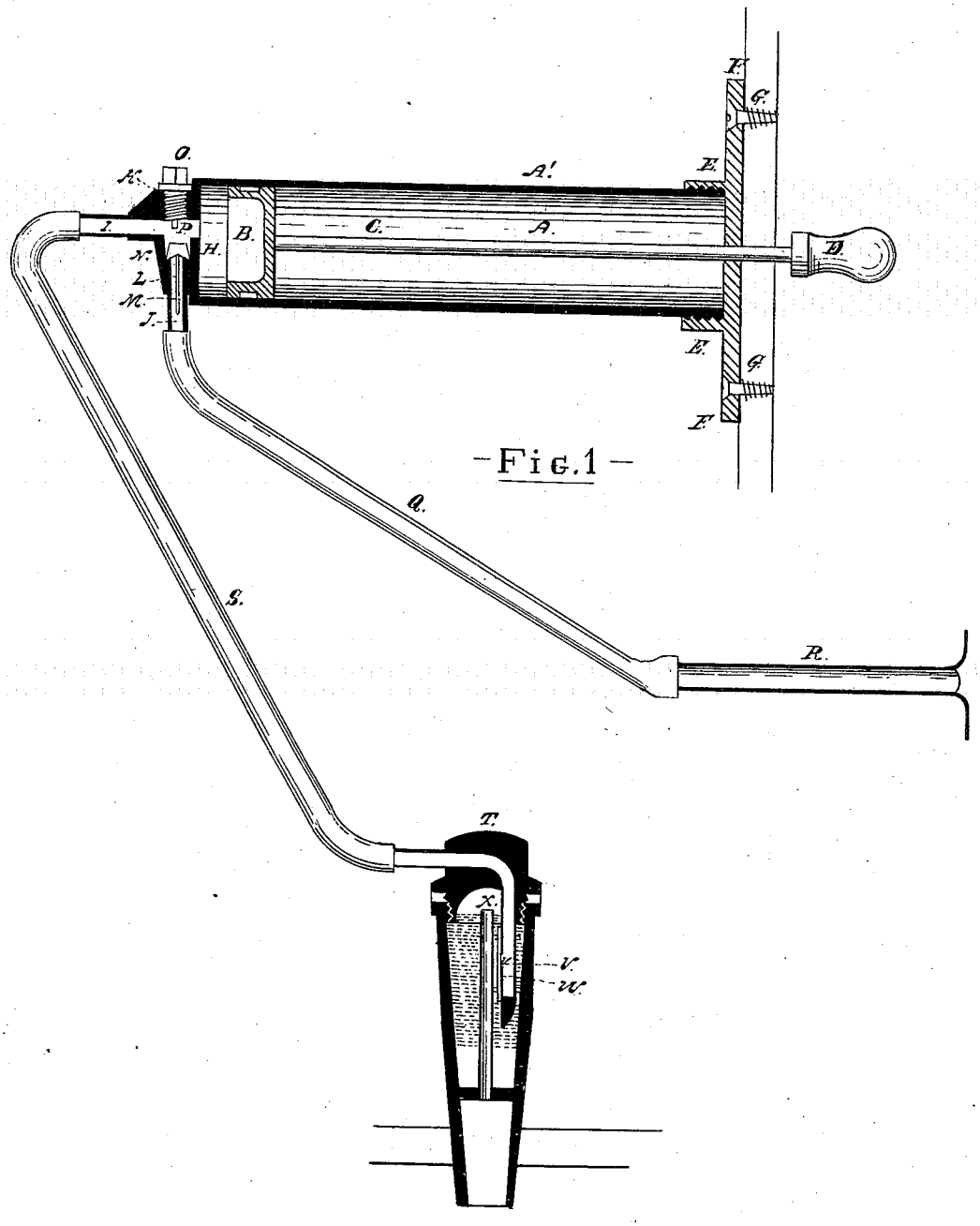
A. REDMAN.
BEER PRESERVER.

No. 193,550. Patented July 24, 1877.



-Fig.1-

WITNESSES:
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UNITED STATES PATENT OFFICE.

ANTON REDMAN, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN BEER-PRESERVERS.

Specification forming part of Letters Patent No. **193,550**, dated July 24, 1877; application filed April 7, 1877.

To all whom it may concern:

Be it known that I, ANTON REDMAN, of the city of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Beer-Preservers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The figure is a sectional view of my invention.

The object of my invention is to furnish a device for preserving beer when on draft, which object is accomplished with my device by giving the necessary vent to the cask as the beer is being drawn, without allowing the gas to escape or a change of air to take place in the cask, and by which cold air may be drawn from an ice-box and forced into the cask, and compressed to such an extent that the beer, when being drawn, is forced rapidly from the faucet; and the invention consists of a combined suction and force pump.

In the accompanying drawing, A is the cylinder. B is the piston. C is the piston-rod. D is the handle. E is a cylinder-head, which is screwed upon the periphery of the cylinder, and is provided with arms F F, by means of which the pump A′ is attached to the ice-box or other object, with screws G G or their equivalent. The head H is soldered or otherwise permanently secured to the inside of the cylinder A. The head H is provided with a tube, I, tube J, and opening K. There is a valve, L, which operates in tube J. The valve L is simple in its construction, consisting of a short rod, M, upon the end of which is secured a small ring or washer of leather, or its equivalent, N. O is a screw, upon the lower end of which is a small point or projection, P, the office of which is to arrest the valve L in its movement, as hereinafter described. Q is a rubber hose, which connects the pump with the ice-box. R is a metal mouth-piece or tube to the hose Q, by which it is attached to an ice-box, or affords communication with exterior air. S is a hose-pipe, which connects the force-pump A′ with the vent T, and through which the air is forced from the pump into the cask. U is a small tube, which passes through the head of the vent T, and extends downward to a point near the center of the vent. The pipe U has an opening, V, in its side, over which is secured a strip of thin rubber, W, or its equivalent. X is a tube, which affords a way of communication between the cask and the top of the vent.

My device is operated as follows: The vent T is driven into the top of the beer-cask in a vertical position, as shown, when it is filled with water to a point near the upper end of the tube X. The air-pump A′ is attached to the inside of an ice-box by screws G G, allowing the piston-rod C to project through the box to the outside, so that the operator may have access to the handle D. When thus arranged it is not necessary to attach the hose Q; but when the pump is operated outside of the ice-box, the tube R may be attached to an ice-box, or it may project through the wall of the building to the exterior air, when cold. The tube R is then connected with the pump by means of the hose Q, as shown, and the vent T is connected with the pump also, as shown, by the hose S. The piston B is then drawn, when the air passes through the tube R, hose Q, and against the valve L, which is forced upward against the projecting point P, when it follows up the piston B, filling the cylinder A. A reverse movement is then given to the piston B, when the air rushes out, closing the valve L, and is forced through the hose S and tube U into the vent T, when it passes out of the tube U through the opening V, below the surface of the water, when it rises to the surface and passes down the tube X into the cask.

By repeating the strokes of the piston, the air may be so compressed in the cask as to force even the last few glasses of beer rapidly from the cask.

It is obvious that this device prevents the gas escaping from the cask, as it can rise in the vent only to the surface of the water, as the water and the rubber W prevent it escaping through the opening V.

The head H may be cast with tubes I and

J and opening K, all in one piece. The valve L is placed in its socket and withdrawn therefrom through the opening K.

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

1. The cylinder-head E with arms F F, substantially as and for the purpose specified.

2. The vent T, with tube U, having an opening, V, rubber W, and tube X, substantially as and for the purpose specified.

3. The combination of the cylinder A, piston B, tubes I J, and valve L with vent-plug T and air-tube R, connected by suitable tubing, and operating substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ANTON REDMAN.

Witnesses:
J. ERWIN,
K. SHAWVAN.