J. A. MOFFITT.

Self-Closing Valve for Barrels, &c.

No. 207,432. Patented Aug. 27, 1878.

Fig. 1.

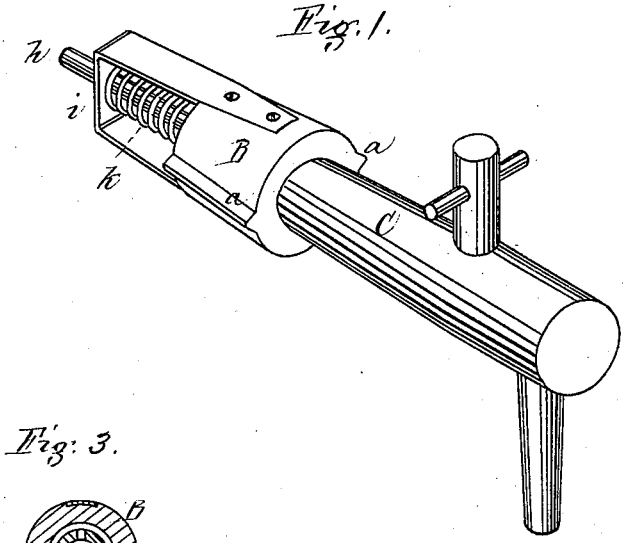


Fig. 3.

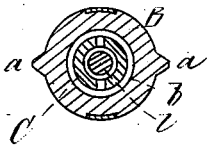
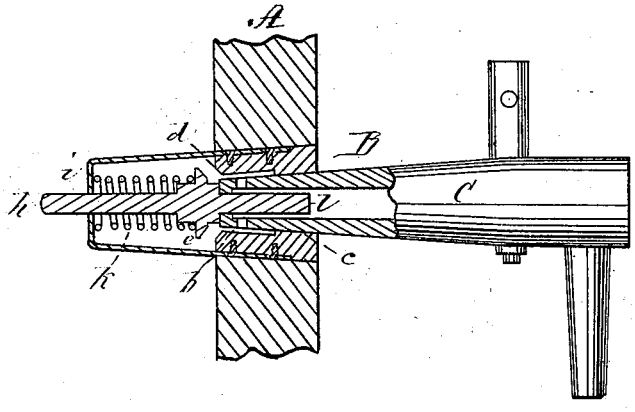


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN A. MOFFITT, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND THOMAS GURNEY, OF SAME PLACE.

IMPROVEMENT IN SELF-CLOSING VALVES FOR BARRELS, &c.

Specification forming part of Letters Patent No. **207,432**, dated August 27, 1878; application filed July 12, 1878.

To all whom it may concern:

Be it known that I, JOHN A. MOFFITT, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Self-Closing Valves for Barrels, Kegs, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a faucet and a self-closing valve constructed in accordance with my invention. Fig. 2 is a section through the valve applied to a barrel, a portion only of the faucet being represented in section; Fig. 3, a transverse section.

To obviate the necessity of constantly removing and replacing bungs in the draft-outlet of a barrel, and the driving in and removal of the faucet and the waste of the liquid contents incident thereto, is the object of my present invention, which consists in a hollow tapering bung or plug, the inner end of which is automatically closed by a valve actuated by a spring surrounding its spindle, a portion of which extends in front of the valve and passes centrally through the plug, this extended front portion of the spindle entering the aperture in the tapering end of the faucet when introduced within the plug, and serving as a guide to insure the proper return of the valve to its seat to close the outlet when the faucet is withdrawn, the plug being provided on its outside with one or more suitable ribs or projections to prevent it from turning when driven into the barrel, by which construction access may be had to the contents of the barrel at all times by simply introducing a faucet into the tapering outer end of the plug until it comes in contact with and forces back the valve against the resistance of the spring, the removal of the faucet allowing the valve to instantly close the discharge-outlet.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the head of a barrel, and B a conical plug, provided with ribs or projections *a* on its outside, to prevent it from turning when driven therein. This plug is bored out centrally in the direction of its axis, the inner portion, *b*, of the aperture *c* thus formed being enlarged, so as to allow of the free flow of the liquid.

The edge of the circular aperture *c* at the rear end of the plug is slightly tapered or beveled off, so as to form a seat, *d*, for a conical valve, *e*, secured to a spindle, *h*, which passes through a guide-piece, *i*, extending inwardly from the outside of the plug, the spindle being surrounded by a spiral spring, *k*, one end of which bears on the valve and the other end against the inside of the guide, the resistance of the spring serving to keep the valve closed upon its seat.

The valve is opened when a supply of the contents of the barrel is to be drawn by simply driving the tapering faucet C into the plug until the end of the faucet comes into contact with and presses the valve off its seat.

Longitudinally through the center of the aperture *c* extends a cylindrical pin, *l*, forming a prolongation of the spindle *h*, and serving as a guide which enters the aperture in the tapering end of the faucet when driven into the plug, and insuring the proper return of the valve to its seat when the faucet is removed from the plug.

The faucet and the hollow plug may each be provided with a screw-thread to fit each other, and a small screw-stopper may be employed for closing the hollow tapering plug when the faucet is removed, by which means no possible leakage can occur.

From the foregoing it will be seen that my improved hollow tapering plug is of simple construction, may be conveniently applied to a barrel, and when in place therein is in a position where it is not liable to be injured by accident or use, while the contents may be instantly drawn or shut off by simply inserting or removing the faucet.

I am aware that a device for tapping beer and other casks consisting of a tubular stopper device provided with an automatically-closing valve, and formed with a taper bearing and screw-thread, and a faucet or top formed with a correspondingly-tapering por-

tion and a counter-thread, is old, and such I do not desire to claim, broadly, as my invention; but

What I claim as my invention, and desire to secure by Letters Patent, is—

The hollow tapering bung or plug B, provided with one or more ribs or projections, *a*, on its outside, and with its central aperture *c* enlarged at *b*, in combination with the valve *e*, spindle *h*, spring *k*, guide-piece *i*, guide-pin *l*, and tapering faucet C, the whole constructed, arranged, and operating substantially in the manner and for the purpose set forth.

Witness my hand this 5th day of July, 1878.

JOHN A. MOFFITT.

In presence of—

N. W. STEARNS,

W. J. CAMBRIDGE.