No. 648,227. Patented Apr. 24, 1900.

G. A. BACHMANN.

APPARATUS FOR WASHING BARRELS, BEER KEGS, OR CASKS.

(Application filed Apr. 12, 1899.)

(No Model.)

Fig. 1.

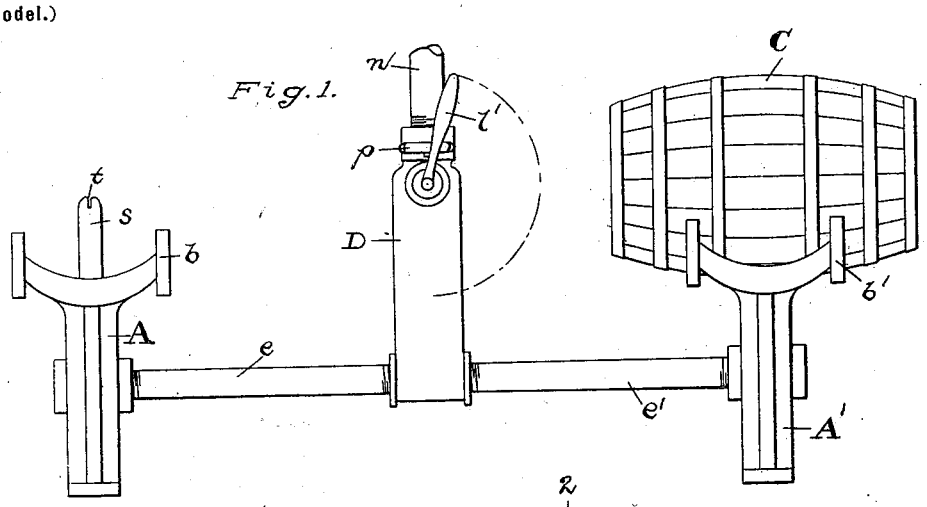


Fig. 2.

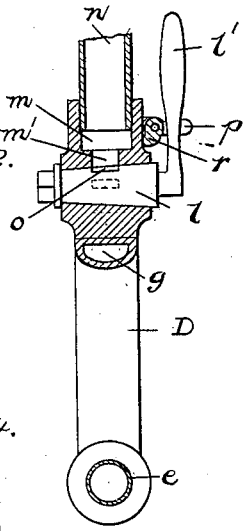


Fig. 3.

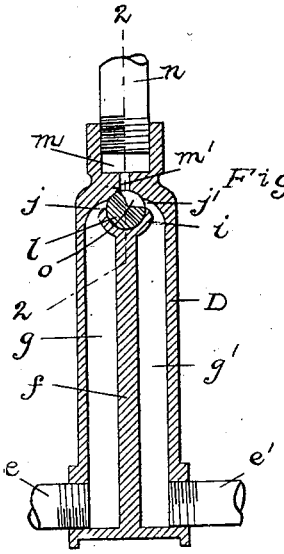


Fig. 4.

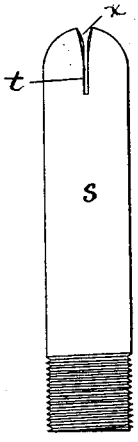


Fig. 5.

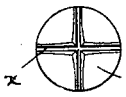


Fig. 6.

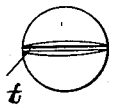


Fig. 7.

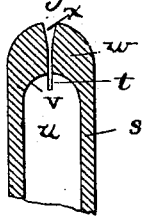


Fig. 8.

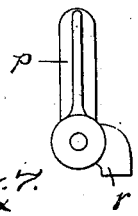
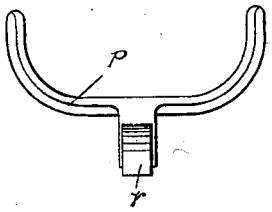


Fig. 9.



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UNITED STATES PATENT OFFICE.

GUSTAV A. BACHMANN, OF BALTIMORE, MARYLAND.

APPARATUS FOR WASHING BARRELS, BEER-KEGS, OR CASKS.

SPECIFICATION forming part of Letters Patent No. 648,227, dated April 24, 1900.

Application filed April 12, 1899. Serial No. 712,685. (No model.)

To all whom it may concern:

Be it known that I, GUSTAV A. BACHMANN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Apparatus for Washing Barrels, Beer-Kegs, or Casks, of which the following is a specification.

This invention relates to an apparatus for washing or flushing the interior of barrels, casks, or beer-kegs.

The object of the invention is to provide a duplex apparatus for flushing casks or kegs at two stands which are so connected with a water-supply that both will flush from the same supply, but only one at a time. When the water is streaming from one, the supply must be cut off from the other, and when cut off from one it must stream from the other, and vice versa. A practical advantage results from this mode of operation, to wit: It insures that each keg placed in position on one of the stands will certainly be flushed, and the liability of a workman placing a keg on the sprinkler-stand and subsequently removing it without turning on the water will be obviated.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the improved apparatus and shows a cask in position on one stand, as when being washed out. Fig. 2 is a vertical section of the water-supply pipe or shell on the line 2 2 of Fig. 3 and illustrates the cut-off valve. Fig. 3 is a vertical section of the water-supply pipe and two-way valve, the section being in a transverse direction to that shown in Fig. 2. Fig. 4 is an elevation of one of the nozzles. Fig. 5 is a plan view of the nozzle end, showing it provided with slits crossing each other. Fig. 6 is a plan view of the nozzle end, showing it provided with one slit. Fig. 7 is a vertical section of the nozzle, showing the formation of the structure. Figs. 8 and 9 are views of the regulator-catch for the lever of the two-way cock.

In the drawings, A A′ designate two standards which rest on the floor and which may be secured thereto, if desired, by bolts. Each standard, at the top, is provided with a suitable concave seat or frame *b b′*, which receives and supports the barrel or cask C whose interior is to be washed. An improved sprinkling-nozzle *s* projects upward from the center of each seat or frame, and this nozzle has a top rounded end and is provided with one or more slits *t* to insure throwing a sharp broad thin stream of water, as hereinafter more particularly described. A vertical water-distributing shell D has position between the two standards A A′. This water-supply shell has a vertical central partition *f*, forming two passages *g g′*. A horizontal pipe *e* has one end tapped into the side of the shell and connects with one passage *g*, and the other end of said pipe connects with the standard A, which has a passage leading to the nozzle *s*. A similar pipe *e′* connects the passage *g′* with the standard A′, which has a passage leading to the nozzle *s*, obscured by the barrel. The vertical partition *f* at its upper end is flared to form a valve-seat *i*, and the upper ends of the two passages in the shell curve toward each other and form ports *j j′*, both of which are controlled by the valve *l*. The upper end of the shell is provided with a chamber *m*, from which a port *m′* communicates to the valve *l*, and a water-supply pipe *n* is tapped into said chamber and the flow of water is controlled by the said valve *l*. The valve *l* is of ordinary cone-plug construction and at one side has a V-shaped groove *o*, and is provided with a handle *l′*, by which the valve may be shifted to direct the water into either of the passages *g g′* or be entirely cut off from both by entirely reversing the valve.

The shell D is provided at its upper end with a valve-lever-regulator catch *p*, which is pivoted to the shell, so that it can be raised or lowered. The catch *p* is provided with two outwardly-extending curved arms, which when the catch is in the lowered position, as in Figs. 1 and 2, project beyond the handle *l′* of the valve and limit the throw of the said handle and prevent the closing of the valve. A stop-lug *r* on the catch serves to hold it in the lowered position. When the catch *p* is turned up, the valve lever or handle *l′* may be reversed or turned downward, in which position the valve *l* will cut off the supply from both stands or nozzles. It will be understood that when the valve lever or handle *l′* is in the tilted position shown in Fig. 1 the water will be passing through the passage *g′*

and will be entirely cut off from the passage g, and when the said lever or handle is tilted to the opposite side the passage g' will be cut off and water will be passing through the passage g. From this description it will be seen that when the lever l' is upward and tilted within the limits of the regulator-catch water will flow from one nozzle or the other. In cleaning barrels both nozzles must be used. In order to remove a barrel from one stand, it is necessary to cut off the water from that stand, and in doing so the water will be turned on to the other stand. If the nozzle s of the stand where there is no barrel is not streaming, the operator will know that the other nozzle where the barrel is is streaming, and this insures certainty of flushing. If a barrel be removed without first shifting the lever l', the streaming water will wet the operator. While the barrel on one stand is being flushed, the barrel on the other stand may be removed and another barrel placed in position. Then the lever l' will be shifted and the flushed barrel will be removed, and so on.

The nozzle has an interior bore u, which at the top terminates in an arch v, and the metal end above the arch is thick, as at w. The slit t is in said thick top arched part. It will be noticed that the bottom of the slit t is straight and vertical and at the top and on the exterior it is broadened to a V shape, as at x. This particular construction has been contrived in order to produce a stream that will be thin, sharp, and forceful. I find it very efficacious. I may use one or more of these slits, according to the service the nozzle is to perform. In Fig. 5 I show two slits, one crossing the other at right angles. In Fig. 6 I show only one slit diametrically across. The number of slits used is immaterial and would be governed by the larger or smaller dimensions of the vessel to be sprinkled. I employ these nozzles mostly for throwing hot and cold water; but they are also useful for throwing streams of melted pitch into the barrels and kegs.

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

1. In an apparatus for flushing barrels or kegs the combination of two keg-supporting stands each provided with a nozzle or sprinkler; a vertical distributing-shell provided with an interior vertical partition, f, which is flared at its upper end to form a valve-seat, i, said partition forming two vertical parallel passages, g, g', in said shell and the shell having at its upper end a supply-port, m', immediately above and opposite the said valve-seat; a pipe, e, connecting one of said vertical passages in the shell with one of the said sprinkling-nozzles; a similar pipe, e', connecting the other vertical passage in the shell with the other sprinkling-nozzle; and a plug-valve on the flared seat and opening and closing communication alternately between the said supply-port and each of said two passages, as shown and described.

2. In apparatus for flushing barrels or kegs the combination of two stands each to hold a barrel and each having a nozzle; a supply-shell between the said two stands—said shell having two passages which at one end point toward each other, and also provided with a supply-port; pipes connecting said passages with said nozzles; a valve opening communication from the supply-port to said two passages alternately, that is first one passage and then the other, and having an operating-lever; a regulator-catch provided with two arms and pivoted on the exterior of the shell and adapted when turned in one position for the arms to take place on opposite sides of the said operating-lever and limit the throw of the latter, and when turned in the other position to allow the lever free movement, as shown.

3. In an apparatus for throwing a stream into barrels and kegs the combination of two stands each to hold a barrel and each having a nozzle provided with a bore, an internal arch at the end of the bore, an end exterior of said arch which is relatively thicker than the wall of the bore, and a slit in said thick end whose bottom is straight and which on the exterior extremity is broadened to a V shape; a water-supply shell having two communications one with each of the said nozzles; and a valve controlling the communications of both of said nozzles, whereby a broad thin stream of liquid will be thrown alternately from first one and then the other nozzle.

In testimony whereof I affix my signature in the presence of two witnesses.

GUSTAV A. BACHMANN.

Witnesses:
THOS. C. BAILEY,
GEORGE KOETHER.