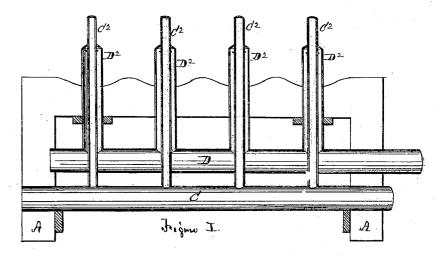
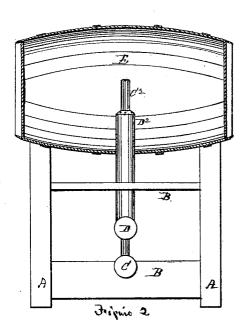
T. REYNOLDS. MACHINE FOR WASHING BARRELS.

No. 103,371.

Patented May 24, 1870.





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## United States Patent Office.

## THOMAS REYNOLDS, OF YONKERS, NEW YORK.

Letters Patent No. 103,371, dated May 24, 1870.

## IMPROVEMENT IN MACHINES FOR WASHING BARRELS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS REYNOLDS, of Yonkers, Westchester county, New York, have invented an Improved Machine for Washing Barrels and Kegs; and that the following is a full, clear, and correct description of the same, reference being had to the accompanying drawings making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a longitudinal sectional view of my invention.

Figure 2 an end view of the same.

In the drawings-

Like parts of the invention are pointed out by the same letters of reference.

The nature of my invention consists in the construction, as more fully hereinafter set forth, of an improved machine for washing barrels and kegs, the object of the invention being the construction of a machine for the purpose intended, which shall expeditiously and thoroughly accomplish its work.

To enable those skilled in the arts to make and use

my invention, I will describe the same.

A shows a suitable frame-work for supporting the barrels or kegs to be washed, which frame-work may be made of wood or any proper material.

B is a series of cross-braces, through which pass the branch-pipes D<sup>2</sup>, the object of which will be here-

after explained.

C shows the water-pipe extending very nearly the length of the frame-work A, through which the water employed to wash the barrels or kegs is introduced.

This pipe C is connected with the upright pipes C<sup>2</sup>, which may extend any proper distance above the frame-work A, and have their upper ends perforated as shown.

D is the steam-pipe through which the steam employed is introduced, which pipe is made very nearly the length of the frame-work A. This pipe D is provided with the branch-pipes D<sup>2</sup> extending upward, and made sufficiently large to allow the pipes C<sup>2</sup> to pass through them, and to leave a space between the exterior of the pipes C<sup>2</sup> and the interior of the pipes D<sup>2</sup>.

The pipes C<sup>2</sup> project a short distance above the pipes

The pipes  $G^2$  project a short distance above the pipes  $D^2$ , the top or upper portion of which is closed around the pipes  $G^2$  and is perforated as shown

the pipes C2, and is perforated as shown.

E, fig. 2, is a barrel or keg placed in position to be washed.

Such being the construction, the operation is as follows:

The water-pipe C is connected with a proper watersupply chamber, and the steam-pipe D with a steamboiler. The barrel or keg E is placed upon the frame-work A, so that the branch pipe C<sup>2</sup> will enter readily into

the same, through the bung-hole.

Connection may then be opened between the steamboiler and the pipe D, and the steam enters the pipe D from the steam-boiler, passes through the same into the pipe D², and out of the perforations in the top or upper end of the same, enters into the barrel or keg E, for the purpose of moistening, and thus loosening any foreign substance remaining within the barrel or keg.

The connection between the water-pipe and the water-supply chamber may now be opened, and the water will enter the pipe  $C_j$  pass through the same into the branch-pipe  $C_j$  and, through the perforations in the top of the same, enter the barrel or keg E.

As the water passes through the pipe C<sup>2</sup>, the steam contained in pipe D<sup>2</sup> has a tendency to warm it, and as it issues through the perforations in the pipe C<sup>2</sup>, and is met by the currents of steam issuing through the perforations in the pipe D<sup>2</sup>, the steam spreads the water, so to speak, and showers it upon and into the interior of the barrel or keg E.

The operation just described may be continued until the barrel or keg is thoroughly washed, when it may be removed from the frame-work A, and a second barrel supplied in its place, and the operation just de-

scribed be repeated.

I have described the operation of the machine in question relatively to one barrel, although my drawings show that in the machine provision is made for washing several barrels or kegs at the same time, and it will readily be seen that the machine can be made of any desired size, provision being made for a proper supply of water and steam.

The expedition and facility which attend the washing of barrels or kegs in connection with my machine are the points which particularly recommend it.

Having thus described my invention,

What I claim as new is-

The combination with the frame-work A, of the pipes C and D when the same shall be provided with any desired number of perforated pipes C<sup>2</sup> and D<sup>2</sup>, when the same shall be constructed and operate substantially as and for the purpose set forth.

THOMAS + REYNOLDS.

Witnesses:

E. JACKSON,

R. G. JACKSON.