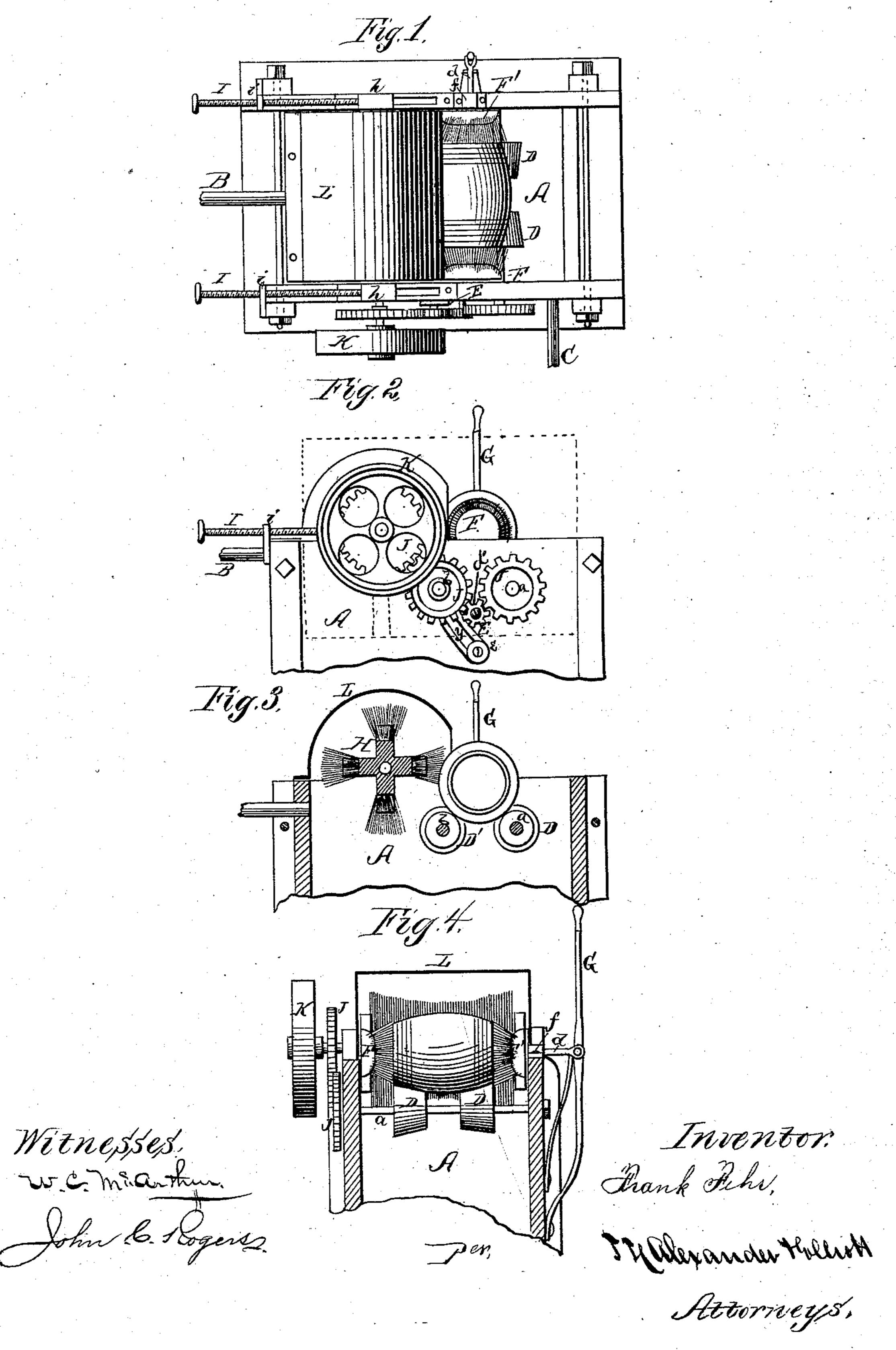
## F. FEHR. Machine for Washing Beer-Casks.

No. 215,597.

Patented May 20, 1879.



## UNITED STATES PATENT OFFICE.

FRANK FEHR, OF LOUISVILLE, KENTUCKY.

## IMPROVEMENT IN MACHINES FOR WASHING BEER-CASKS.

Specification forming part of Letters Patent No. 215,597, dated May 20, 1879; application filed March 18, 1879.

To all whom it may concern:

Be it known that I, FRANK FEHR, of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Machines for Washing Beer-Casks; and I 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, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a machine for cleaning beer and other casks, 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 drawings, in which-

Figure 1 is a plan view; Fig. 2, a side elevation; Fig. 3, a longitudinal section, and Fig.

4 a cross-section.

outer end.

A represents a box or tank, constructed in any suitable manner and of any desired size, and provided at or near the top with an inletpipe, B, and at or near the bottom with an outlet, C. a and b are two cross-shafts, provided, respectively, with conical rubber pulleys D D and D'D', upon which the cask rests that is to be cleaned. The shaft a has-its bearings in the sides of the tank, while the shaft b passes through slots in its sides and has its bearings in metallic plates E E on the outside thereof. These plates are adjustable and fast. ened by screws e e, passing through slots y in the plates, so that the shaft b, with its pulleys D' D', can be adjusted as required according to the size of the casks.

Between and above the two shafts a b, to the inside of one side of the box, is attached a stationary circular brush, F, while directly opposite is a similar brush, F', which is movable in and out. This brush F' is attached to a rod or shaft, d, which passes through a box or bearing, f, and has a lever, G, connected to its

By means of this lever the brush F' may be moved inward and brought to bear on the end of the cask, and the cask itself forced up with its opposite end against the stationary brush F with any required pressure, so as to clean the ends of the cask as the same revolves.

The outside of the cask is cleaned by a re-

volving brush-cylinder, H, having its journals mounted in movable bearings h h, which are adjusted to and from the cask by means of screw-rods II, passing through nuts ii, at-

tached to the tank.

The shafts a b and journal of the brush-cylinder are geared together by cog wheels J, and power is communicated by belt to a pulley, K, on the cylinder-journal from any suitable or convenient motor. d' is a pinion, located between and below the center of the cog-wheels on the ends of shafts a b, for the purpose of revolving the pulleys in the same direction—that is, in a direction opposite to that in which the brush-cylinder H revolves. L is a casing, covering the brush-cylinder.

The shaft b being properly adjusted, the cask is placed on the rubber pulleys D D and D' D', and the brush-cylinder H moved inward to come in contact with the cask, and at the same time the brush F' pressed inward by the lever G. The cylinder and shafts being in motion, the cask is rotated, as well as the cylinder, and the various brushes quickly clean the cask and remove all labels, stamps,

&c., thereon.

The water, of course, is to stand at a certain height in the tank, and is to be drawn off and replenished as required.

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

Letters Patent, is—

1. In a machine for washing beer-casks, the combination of the conical pulleys D D and D'D' with the two end brushes FF' and the revolving brush-cylinder, all arranged to effect the object mentioned, substantially in the manner herein set forth.

2. The brush F', shaft d, and lever G, in combination with the tank A and stationary

brush F, substantially as set forth.

3. The brush-cylinder H, mounted in movable bearings h h, and adjusted by means of the screw-rods II, in combination with the brushes F F' and pulleys D D', substantially as and for the purposes herein set forth.

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

witnesses.

FRANK FEHR.

Witnesses:

JOHN F. KELLNER, JOHN HELMUS.