

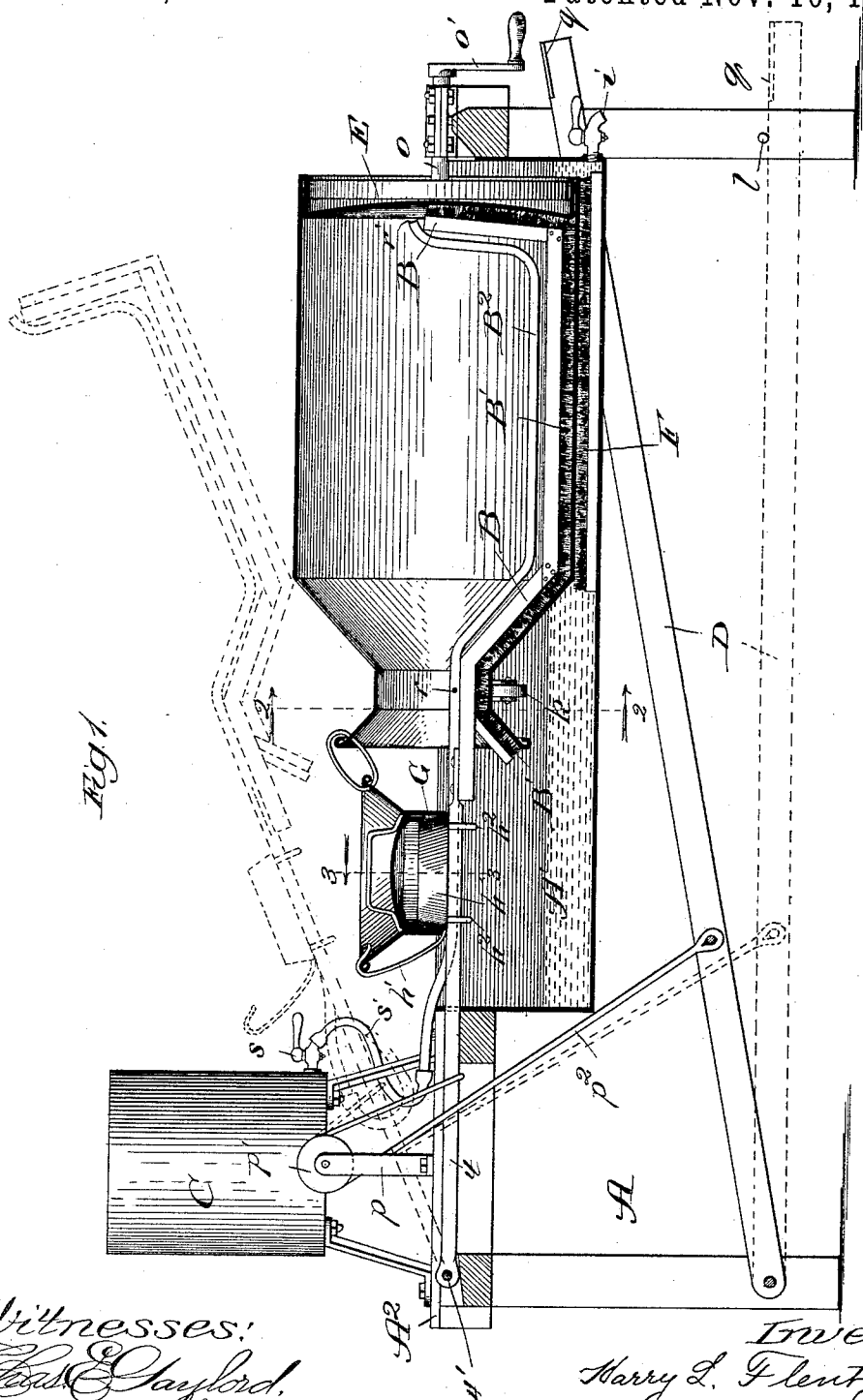
(No Model.)

2 Sheets—Sheet 1.

H. L. FLENTYE.
MACHINE FOR WASHING MILK CANS.

No. 462,839.

Patented Nov. 10, 1891.



Witnesses:
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(No Model.)

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Fig. 3.

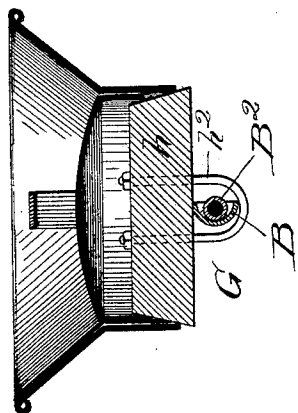


Fig. 4.

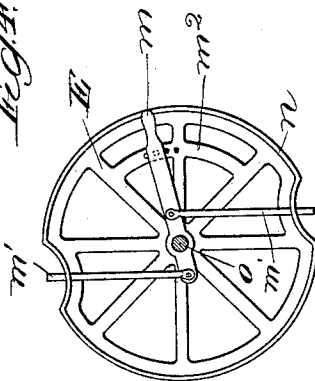
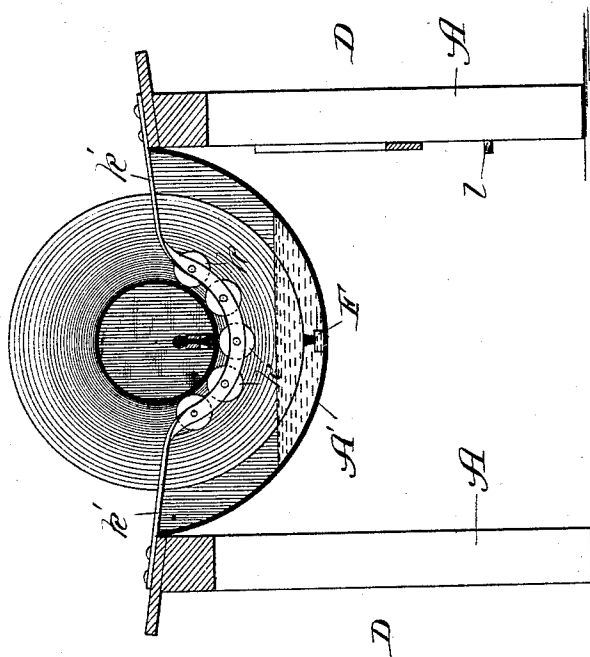


Fig. 2.



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UNITED STATES PATENT OFFICE.

HARRY L. FLENTYE, OF OAK GLEN, ILLINOIS.

MACHINE FOR WASHING MILK-CANS.

SPECIFICATION forming part of Letters Patent No. 462,832, dated November 10, 1891.

Application filed April 13, 1891. Serial No. 388,731. (No model.)

To all whom it may concern:

Be it known that I, HARRY L. FLENTYE, a citizen of the United States, residing at Oak Glen, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Machines for Washing Milk-Cans, of which the following is a specification.

My object is to provide a machine of improved construction for washing milk-cans, in the use of which the cans may be quickly and thoroughly cleaned at the expense of comparatively little labor on the part of the operator.

In the drawings, Figure 1 is a vertical central section of my improved machine taken longitudinally thereof, showing a can in position therein and indicating by dotted lines the position to which the inside brush-frame and attendant parts are raised to receive or permit the withdrawal of a can; Fig. 2, a section taken on line 2 2 of Fig. 1 and viewed in the direction of the arrows; Fig. 3, an enlarged section taken on line 3 3 of Fig. 1 and viewed in the direction of the arrows; and Fig. 4, a view, partly in section, of the rotary clutch which engages the lower end of the milk-can.

A is the supporting-frame of the machine, provided with a sink A' and formed with a platform A². A rod *t* is pivoted at one end *t'* to the rear upper end of the frame A, and extends to the sink, where it carries a brush-frame B. The brush-frame B is shaped in outline to conform to the longitudinal contour of the inner surface of a milk-can from the open flared end of the latter to the center of its base, and set into and secured to the brush-frame are brushes B'. Mounted upon the platform A² is a water-tank C, having a faucet *s*, from which extends a pliable hose *s'*, connecting at its opposite end with a pipe B². The pipe B² extends along the rod *t* and brush-frame B, as shown, and has an outlet-opening at *r* and another in its end *r'*, which extends over the end of the brush-frame.

D is a lever pivoted to the lower rear end portion of the main frame and extending beyond the forward end, where it carries a foot-plate *q*. Mounted in standards *p* on the platform A² is a sheave *p'*, and extending over the sheave is a cord or other flexible medium

*p*², fastened at opposite ends to the lever D and rod *t*. The weight of the rod *t* and brush-frame causes the lever D, through the medium of the cord *p*², to be drawn up to the position shown by full lines, which is its normal position.

Journaled upon the frame A, centrally of the forward end of the sink, is a shaft *o*, provided on the outer side of the frame with a crank *o'*, and carrying at its opposite end in the sink a clutch E. The clutch E comprises a wheel having a rim *n* of a size to fit loosely into the recess at the base of the milk-can, afforded by the raised bottom of the latter as it is generally constructed. Fulcrumed upon the shaft *o* is a lever *m*, and pivotally secured to the lever at opposite sides of its fulcrum are bars *m'*, which extend through guide-openings in the rim *n*, normally to the outer circumference of the latter. Movement of the lever *m* will cause the bars *m'* to be advanced beyond or retracted to the circumference of the rim, and a rack *m*² on the wheel and across which the lever *m* is moved affords means for engaging and holding the lever in any adjusted position.

To place a milk-can in position in the machine, the operator presses the lever D down with his foot and swings it under a stop *l*, which projects from the frame A into the path of the lever and by engaging the latter holds it in its lowered position. The descent of the lever D causes the brush-frame B and pipe B² to be raised on its pivot to the position shown by dotted lines in Fig. 1. The can to be washed is then passed over the brush-frame until the end of the latter meets the bottom of the can, when the lever D is disengaged from the stop *l*, and the brush-frame and attendant parts are lowered into the sink. The clutch is then slid into the base of the can and the lever *m* moved, as described, to cause the bars *m'* to advance and engage the inner surface of the rim at the base of the can. When the can is lowered into the sink it rests at its neck upon a series of bearing-rollers *k* mounted in a frame *k'*, which extends across the sink.

In operation the tank C is filled with hot water, or provision may be made for heating the water in the tank in any suitable manner,

- and the faucet *s* is opened to permit water to flow from the tank through the pipes *s'* B², and discharge through the openings at *r* and *r'* upon the brush. The crank *o'* is then turned, causing the can to be rotated and the inner surface of the can to rub across the brush, which with each revolution of the can scours the entire inner surface thereof and thus operates in a short time to cleanse it thoroughly.
- 10 In order that the outside of the can as well as the inside may be cleaned, I provide a brush F secured in place in the sink, against which the outer surface of the body portion of the can rests and rotates.
- 15 To remove the can from the machine the clutch E is disengaged and withdrawn therefrom and the brush-frame and can elevated, as before described, by depressing the lever D. As the can is removed the water contained therein is emptied into the sink.
- 20 While a can is being removed from the machine and replaced by another the flow of water from the tank C may be shut off at the faucet *s*.
- 25 It will be seen that the inside of each can placed in my improved machine is washed with a fresh supply of clean water, and a much more thorough cleansing is thus effected than would be possible were the same water used over and over again, especially where
- 30 the water used to wash the outside of the can is afterward employed to wash the inside. In order that the filthy water in the sink may be kept below the level of the mouths of the
- 35 milk-cans I provide a faucet *i* at the base of the sink, which should be opened from time to time, so that no more water will stand in

the sink than is necessary to wash the outside of the can.

The cans now generally employed by milk shippers have their covers linked to the cans to prevent their becoming lost. In order that the covers thus secured may not interfere with the rotation of the can in the machine I provide a rotary cover-carrier G, comprising a block *h*, over which the cover fits and to which it may be fastened by a swinging hook *h'* pivotally secured to the block. The block is provided with stirrups *h*², which extend loosely around the bar B and pipe B², affording a bearing around which the block turns. When the cover is fastened to the block it and the block will rotate with the can.

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

1. In a machine for washing milk-cans, the combination, with a sink, inside brush-frame and brush thereon, and can-rotating mechanism, of a rotary carrier for the can-cover and means for securing the said cover thereto, substantially as described.

2. In a machine for washing milk-cans, the combination, with the main frame, sink, inside brush-frame and brush thereon, and can-rotating mechanism, of a bar *t*, pivotally secured to the main frame and carrying the said brush-frame, and a carrier G for the can-cover, comprising a rotary block *h*, upon the bar *t*, provided with fastening means for the can-cover, substantially as described.

HARRY L. FLENTY.

In presence of—

J. W. DYRENFORTH,
M. J. FROST.