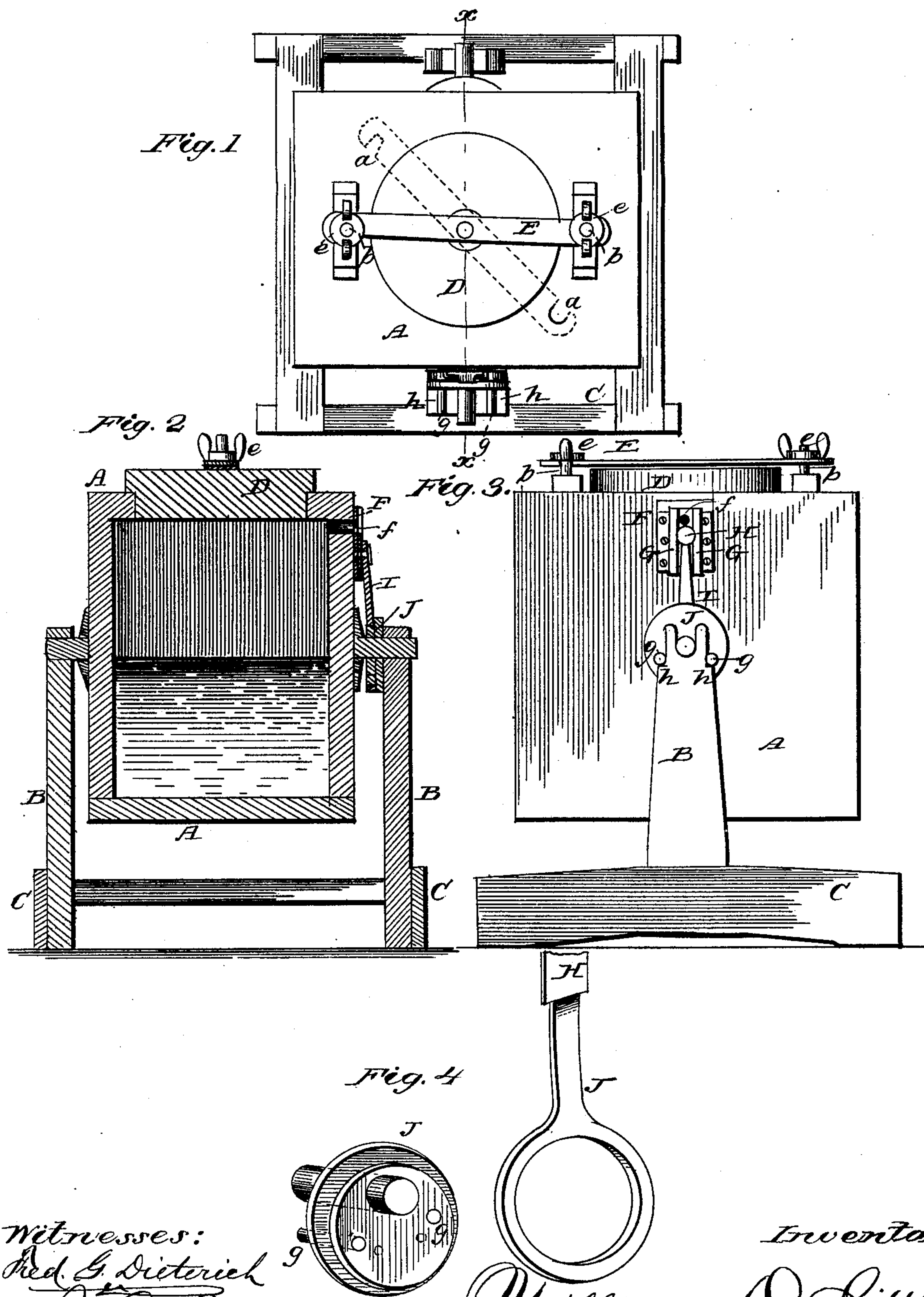


W. D. LITTLE.  
Churn and Washing-Machine.

No. 220,247.

Patented Oct. 7, 1879.



Witnesses:  
Ed. G. Dietrich  
J. R. Littell,

Inventor,  
William D. Little,  
By C. A. Snow & Co. attys



# UNITED STATES PATENT OFFICE.

WILLIAM D. LITTLE, OF BRUSH CREEK, IOWA.

## IMPROVEMENT IN CHURN AND WASHING-MACHINE.

Specification forming part of Letters Patent No. **220,247**, dated October 7, 1879; application filed March 17, 1879.

*To all whom it may concern:*

Be it known that I, WILLIAM D. LITTLE, of Brush Creek, in the county of Fayette and State of Iowa, have invented certain new and useful Improvements in Churn and Washing-Machine; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a plan view, the locking-bar being shown in both full and dotted lines. Fig. 2 is a vertical cross-section through line *x x*. Fig. 3 is a side elevation at the side having the cam and eccentric-rod. Fig. 4 is a view of the cam and eccentric-rod detached.

This invention has relation to churns and washing-machines, and consists in the improvements in the construction of the same, hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings similar letters of reference indicate corresponding parts in the several figures.

The rectangular box A is mounted in bearings in the upper ends of the uprights B B, rising from a base, C.

A lid, D, closes the opening in the top of the box A, and is held in place by a pivoted locking-bar, E, having recesses *a a* in its opposite edges near its ends, which recesses *a a* receive stud-screws *b b*, rising from the top of the box at diametrically opposite points at the sides of the lid D.

Thumb-nuts *e e* on the stud-screws *b b* are used to hold the locking-bar E in place when turned to lock the box and to release it again at pleasure.

A ventilator, F, is placed in one side of the box A, quite near its top. Said ventilator consists of the plate F, having a perforation, *f*, leading to the interior of the box, and flanges or ways G G to receive a slide, H, operated by

an eccentric-rod, I, connected with a cam, J, removably secured to the upright B at that end of the box by studs *g g*, which slip over the end of the upright and rest on shoulders, *h h*, made therein.

The cam J is, of course, removed with the journals when the box is taken from its bearings for any purpose whatever.

The ventilator F is open when the top of the box A is uppermost; but when the box is being revolved in its bearings the slide H is moved by the cam J and eccentric-rod I to close the ventilator F, which it does so effectually as to prevent the contents from escaping from the box when the ventilator has been turned, which if not closed they would otherwise do. Of course, when the ventilator approaches the top again the slide is moved to open it.

This box A and its adjuncts may be used either as a churn or a washing-machine, the construction and operation in either case being the same.

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

1. In a churn or washing-machine operated by revolving the same in bearings, the combination of the box A, provided with the ventilator F and slide H, with the eccentric-rod I and cam J, constructed and operating substantially as and for the purposes set forth.

2. In a rotary churn or washing-machine provided with the slide H F and eccentric-rod I, the combination therewith and with the upright B of the removable cam J, provided with the studs *g g*, constructed and operating substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM D. LITTLE.

Witnesses:

E. M. VOORHEES,  
J. H. WALRATH.