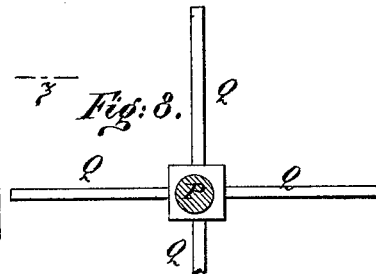
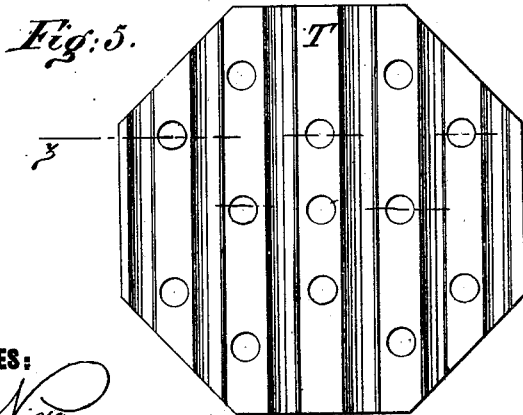
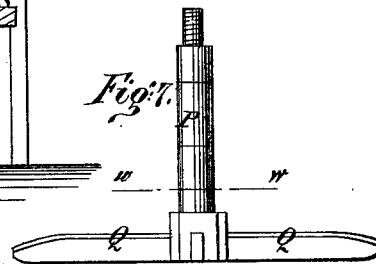
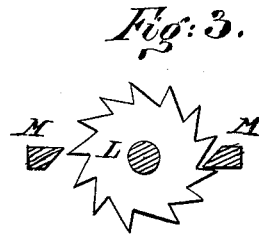
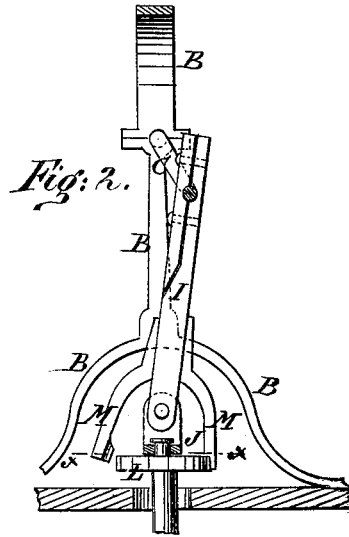
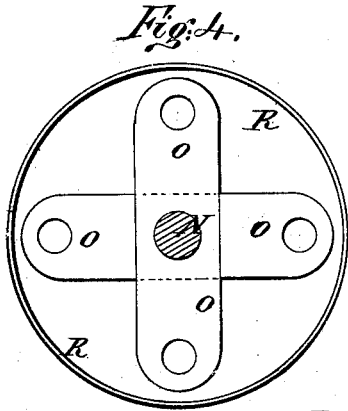
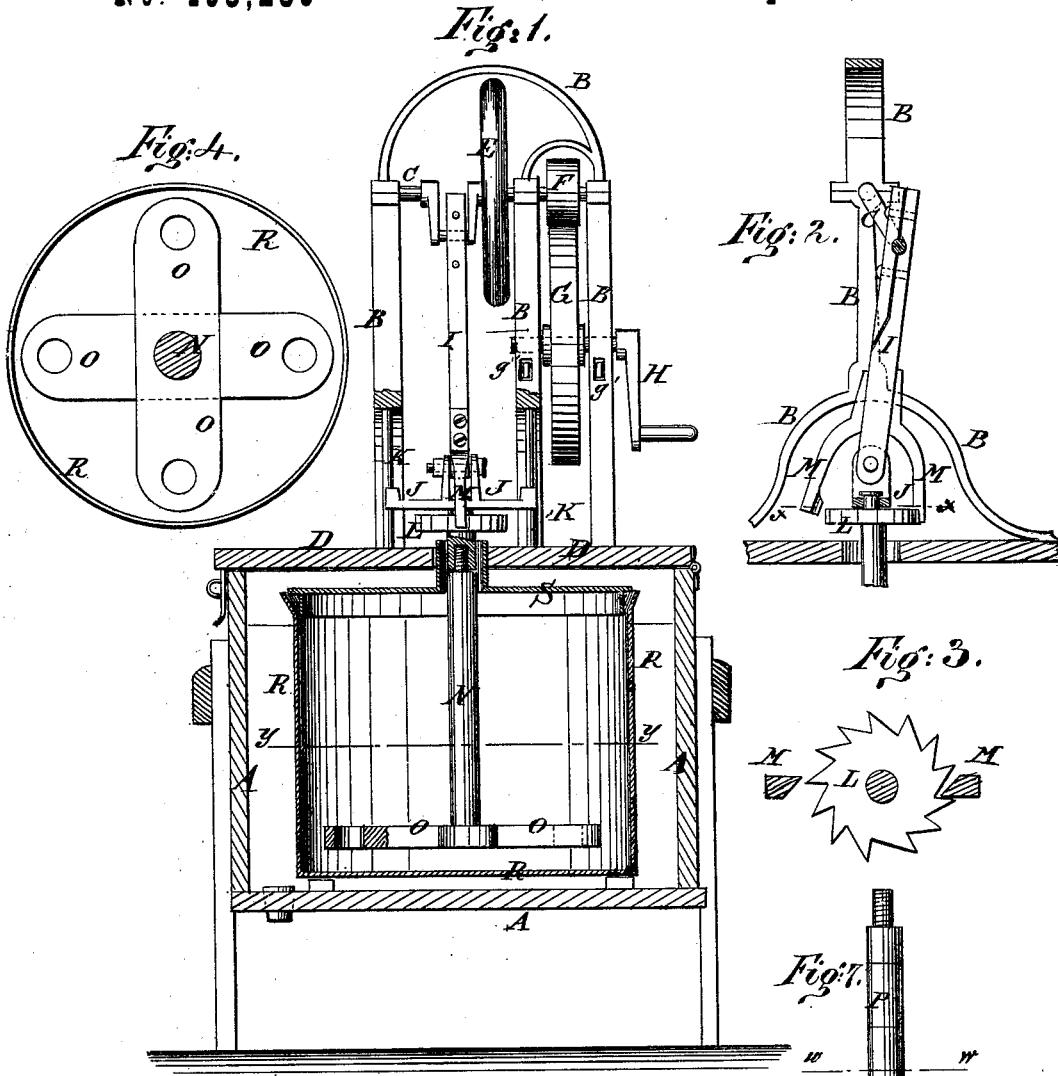


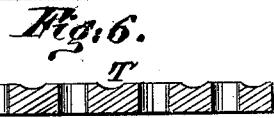
W. H. CLARKE & W. COLLINS.
 WASHING-MACHINE AND CHURN COMBINED.

No. 195,259

Patented Sept. 18, 1877



WITNESSES:
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UNITED STATES PATENT OFFICE.

WIOT H. CLARKE AND WILLIAM COLLINS, OF COUNCIL GROVE, KANSAS.

IMPROVEMENT IN WASHING-MACHINE AND CHURN COMBINED.

Specification forming part of Letters Patent No. 195,259, dated September 18, 1877; application filed April 30, 1877.

To all whom it may concern:

Be it known that we, WIOT HINKLEY CLARKE and WILLIAM COLLINS, of Council Grove, in the county of Morris and State of Kansas, have invented a new and useful Improvement in Combined Clothes-Washing and Churning Apparatus, of which the following is a specification:

Figure 1 is a side view, partly in vertical section, of our improved machine arranged as a churn. Fig. 2 is a detail view, showing the device for rotating the dasher-shaft. Fig. 3 is a detail horizontal section, taken through the line *x x*, Fig. 2. Fig. 4 is a horizontal section of the churn body and dasher, taken through the line *y y*, Fig. 1. Fig. 5 is a detail top view of the false bottom for the washing-machine. Fig. 6 is a section of the same, taken through the line *z z*, Fig. 5. Fig. 7 is a side view of the dasher for the washing-machine. Fig. 8 is a top view of the same, the dasher-shaft being shown in section through the line *w w*, Fig. 7.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine which shall be so constructed that it may be used as a clothes-washer or as a churn, and which shall be simple in construction, convenient in use, and noiseless and effective in operation.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A represents the suds-box, which is provided with a closely-fitting cover, D, hinged at one edge, and secured at the other edge by a hasp and staple or other suitable fastening.

To the cover D is attached an iron frame, B, to the upper part of which is pivoted a crank-axle, C. To the crank-axle C is attached a fly-wheel, E, and a small friction-wheel, F. Against the face of the small friction-wheel F rests the face of a large friction-wheel, G, the journals of which revolve in bearings in slots in the frame B, which bearings are supported upon wedge-keys *g'*, so that by adjusting the said wedge-keys *g'* the wheel G may be adjusted to bear against the wheel F with any desired force.

To the outer journal of the friction-wheel G

is attached the crank H, by which the machine is operated.

To the crank of the shaft O is pivoted the upper end of the connecting-rod I, the lower end of which is pivoted to and between lugs formed upon the middle part of the guide-bar J. The ends of the bar J are notched to receive the guide-rods K, upon which they slide up and down, and which are attached to the frame B.

To the center of the guide-bar or cross-head J is swiveled the upper end of the hub of the ratchet-wheel L, with the teeth of which engage alternately the pawls M, rigidly attached to the opposite sides of the lower part of the connecting-rod I, so that the ratchet-wheel may be rotated by the lateral movement of the connecting-rod I, while it is moved up and down by the longitudinal movement of said rod.

In the lower end of the hub of the ratchet-wheel L is formed a screw-hole, to receive a screw formed upon or attached to the dasher-shaft N of the churn-dasher O or the dasher-shaft P of the clothes-dasher Q.

The churn-dasher O is formed of two boards, crossing, each other at right angles, and secured to the lower end of the shaft N. The boards O are placed in a horizontal position, and have holes formed through them, so as to violently agitate the milk as they are moved through it.

The washer-dasher Q is formed of two narrow boards, crossing each other at right angles, and secured to the lower end of the shaft P. The boards Q are arranged in a vertical position, so as to beat the clothes by their up-and-down movement, and turn them by their rotary movement.

When the machine is to be used as a churn, a churn-body, R, is placed within the suds-box A, as shown in Fig. 1, to receive the milk. The churn-body R is provided with a closely-fitting cover, S, through the center of which the dasher-shaft N passes.

This construction allows hot or cold water to be put into the suds-box A, around the churn-body R, to temper the milk, as required.

When the machine is to be used as a washer, the dasher N O and the churn-body R S are removed, and the false bottom T is put into the suds-box A, and the dasher P Q is at-

tached to the ratchet-wheel L. The false bottom T is grooved upon its upper surface to act as a rubber upon the clothes, and it has holes formed through it for the passage of the water.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with the frame B and box A D, of the wheels G F, crank-shaft C, pit-

man-rod I, having pawls M, cross-head J, sliding on rods K, and the swiveled ratchet-wheel L, the latter being both rotated and reciprocated by the rod I, as and for the purpose specified.

WIOT HINKLEY CLARKE.

WILLIAM COLLINS.

Witnesses:

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