G. B. RICHARDS.

Churn and Washing-Machine.

No. 209,922. Patented Nov. 12, 1878.

Fig. 1

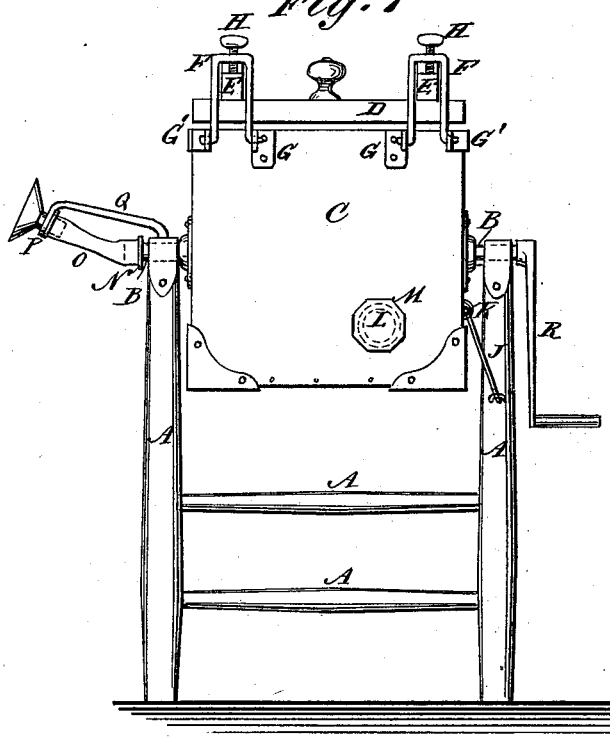


Fig. 2

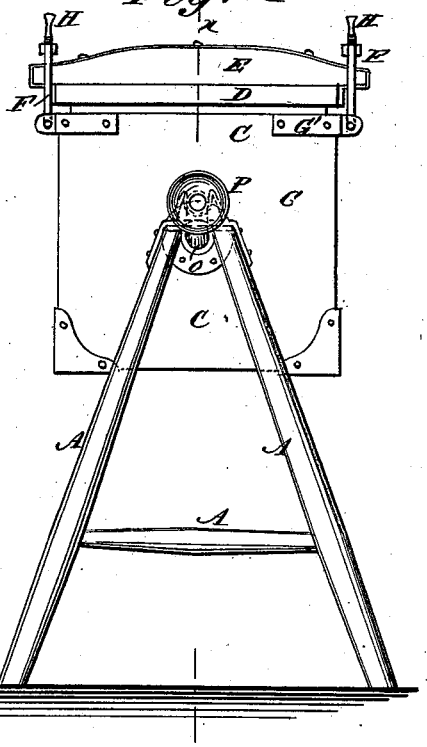
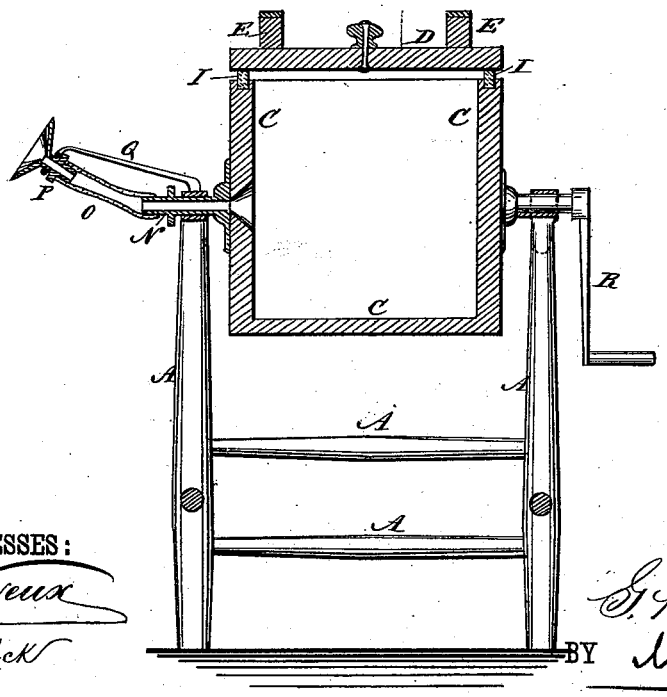


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

GEORGE B. RICHARDS, OF PRAIRIEVILLE, MICHIGAN.

IMPROVEMENT IN CHURN AND WASHING-MACHINE.

Specification forming part of Letters Patent No. **209,922**, dated November 12, 1878; application filed April 27, 1878.

To all whom it may concern:

Be it known that I, GEORGE BENJAMIN RICHARDS, of Prairieville, in the county of Barry and State of Michigan, have invented a new and useful Improvement in Churn and Washing-Machine, of which the following is a specification:

Figure 1 is a front view of my improved machine. Fig. 2 is a side view of the same. Fig. 3 is a vertical section of the same, taken through the line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

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

The invention consists in the construction and arrangement of parts, as will be hereinafter fully described, and pointed out in the claims.

A is the frame, which is formed by connecting two pairs of inclined posts by rounds, as shown in Figs. 1, 2, and 3, the two posts at each side of the frame inclining toward each other, as shown in Fig. 2, thus forming a frame-work narrower in its upper part and wider at its base.

To the upper ends of the two pairs of posts of the frame A are attached bearings, in which revolve gudgeons B, attached to the centers of the opposite sides of the box C. The box C is made cubical in form, and with an open top, upon which is placed a cover, D.

To the cover D, near its ends, are attached two cross-bars, E, the ends of which project a little beyond the edges of the said cover, as shown in Fig. 2, to receive the loops F. The ends of the loops F are hinged to the straps G, which are attached to the box C, near its corners.

The outer straps, G′, are bent to pass around the corner of the box C, and serve as corner-straps for strengthening it.

Through screw-holes formed in the bend of the loops F are passed set-screws H, which, when the loops F are turned up over the projecting ends of the cross-bars D, are turned down to bear against the upper sides of the ends of the said cross-bars, and press the cover D down firmly upon the top of the box C.

The edge of the top of the box C has a groove formed in it, into which is pressed a rubber packing, I, as shown in Fig. 3. The rubber packing I projects above the upper edge of the said box C, so that the cover D may rest upon its upper edge, as shown in Fig. 3.

By this construction, when the cover D is drawn down by the action of the screws H, the rubber packing I will be compressed between the cover D and the edge of the box C, so that no leaking will be possible.

To one of the posts of the frame A is pivoted a hook, J, in such a position that it may be hooked into an eye, K, attached to the box C, to hold the said box stationary, when desired, for convenience in putting in and taking out milk or clothes.

In the side of the box C, near its bottom, is formed a nozzle, L, which is closed by a screw-cap, M, so that by removing the said cap the milk or water may be readily drawn from the box C.

One of the gudgeons B is made hollow, and communicates with the outer end of a hole formed through the side of the box C, and which is countersunk upon the inner side of the said box, as shown in Fig. 3.

To the outer end of the hollow gudgeon B is attached a bushing, N, upon which is placed one end of a short rubber tube, O, in the other end of which is secured a bushing, P. The bushing P is formed with a funnel-shaped outer end, or has a funnel attached to its outer end.

Q is a rod, bent into U form, and having its ends and bend bent downward. The ends of the rod Q are secured to the upper end of the posts of the frame A, and its bend is passed beneath the neck of the bushing P, to serve as a bearing for said bushing.

The rod Q is so formed that the bushing P may be held at a higher level than the gudgeon B, so that water or milk within the box C cannot pass out, and so that at the same time air may pass in freely to ventilate the interior of the said box C.

With this construction the cover D may be

easily and quickly secured in place, and will wholly prevent any breakage when the box C is revolved.

To the other gudgeon B is attached a crank, R, by which the box C is revolved. With this construction, the gudgeons B being attached to the center of the opposite sides of the box C, said box may be revolved with very little labor, and when revolved the milk or the clothes and suds will be dashed from side to side of the said box, bringing the butter or washing the clothes in a very short time.

I am aware that rotary churns having hollow journals and removable funnels fitting therein, and also having removable covers, with a rubber packing interposed between said cover and the body of the churn, and adjusting devices for securing the cover in position, are old; and such I do not desire to claim, broadly, as my invention; but,

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

1. The combination, with the cubical box C, having hollow gudgeon B, of the bushing N, flexible tube O, the funnel-bushing P, and the bent supporting-rod Q, for holding the funnel-bushing P at a higher level than said gudgeon B, as and for the purpose herein shown and described.

2. The combination of the cubical box-body C, grooved in its upper edge, the rubber packing I, cover D, projecting cross-bars E, hinged loops F, set-screws H, metal straps G, and metallic corner-straps G′, the several parts constructed and relatively arranged as and for the purposes herein shown and described.

GEORGE BENJAMIN RICHARDS.

Witnesses:
R. B. RICHARDS,
STEPHEN TEMPLE.