(No Model.)

H. HAYS.

CHURN.

No. 265,064. Patented Sept. 26, 1882.

Fig. 1.

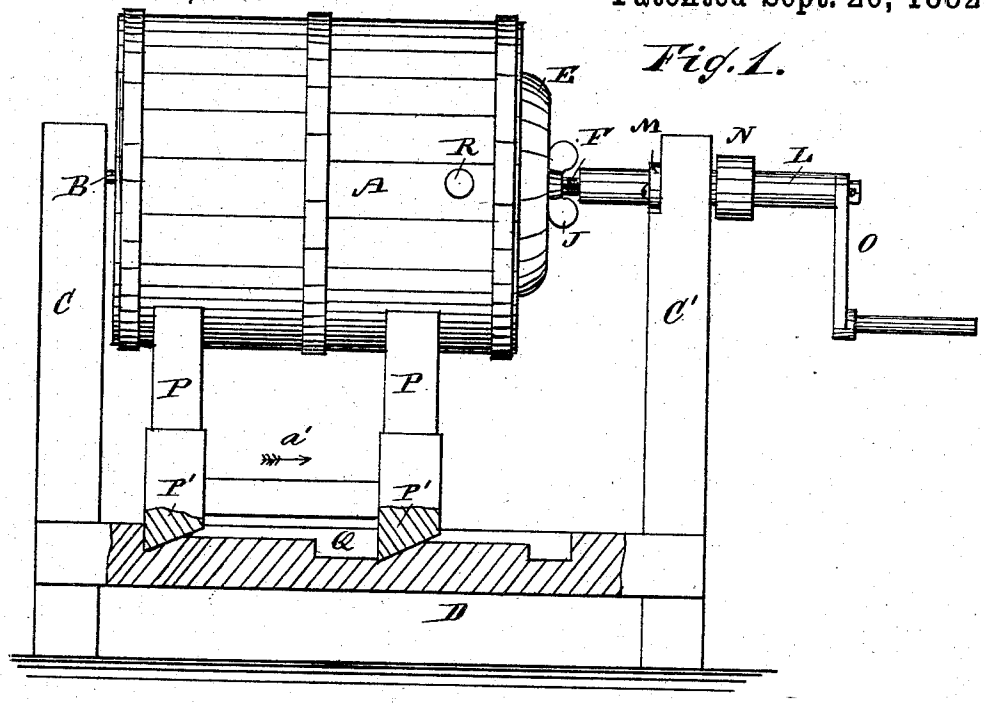


Fig. 2.

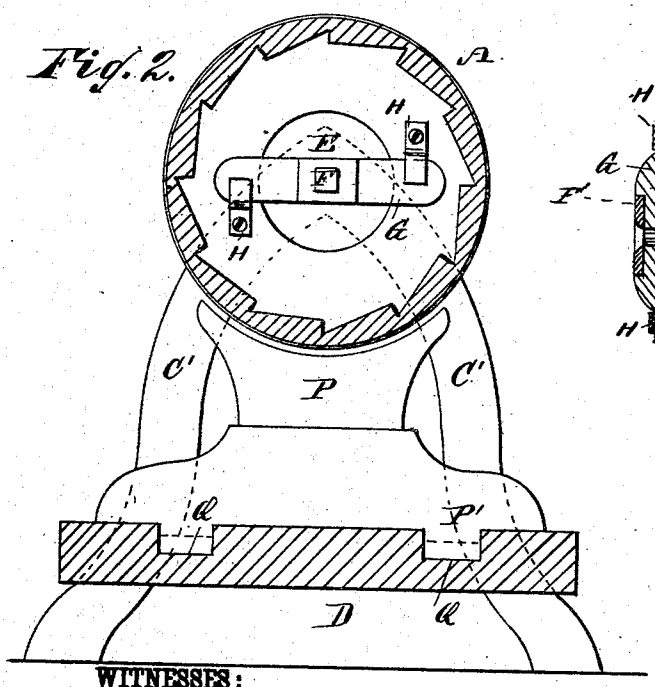


Fig. 3.

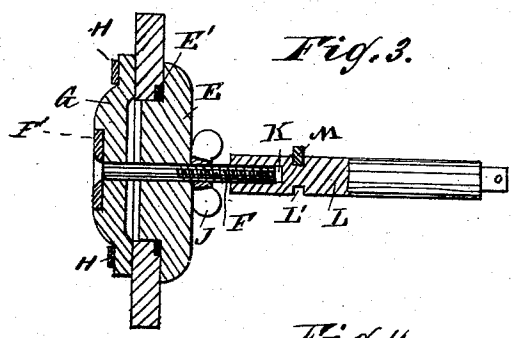
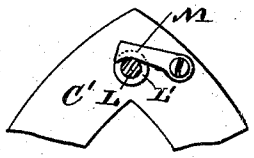


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY HAYS, OF BRIDGEPORT, CALIFORNIA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 265,064, dated September 26, 1882.

Application filed April 29, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY HAYS, of Bridgeport, in the county of Mono and State of California, have invented a new and Improved Churn, of which the following is a full, clear, and exact description.

The invention consists in an internally-serrated churn journaled in standards, and provided with an opening in one of the heads, which opening can be closed by a cover which is held in place by a screw-pintle passed through a cross-piece on the inside of this head and through the cover, this cover being pressed against the head by a winged nut on the threaded pintle. The end of this threaded pintle is screwed into one end of the journaled handle-shaft, which, when the pintle is screwed in the proper distance, is locked by means of a latch to prevent further longitudinal movement and to rotate the churn.

The invention also consists in a sliding supporting-frame on the base of the churn for holding the cream-box during adjustment of the bearings of the same.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal elevation of my improved churn, parts being shown in section. Fig. 2 is a cross-sectional elevation of the same. Fig. 3 is a detail longitudinal sectional elevation of one end of the churn and its shaft. Fig. 4 is a detail side elevation of one of the standards in which the shaft of the churn is journaled.

The cylindrical cream-box A has its inner cylindrical surface serrated or grooved longitudinally, as shown in Fig. 2, and at one end is provided with a projecting pintle, B, fitting in an aperture in a standard, C, on a base, D. The other end or head of the cylinder is provided with an aperture which can be closed by a flanged cover, E, provided with a packing-strip, E′. A threaded pintle, F, passes through this cover E, and the head F′, at the inner end of the pintle F, is attached to a cross-piece, G, resting against the inner surface of the head of the cream-box, from which inner surface of this head of the cream-box two clips, H, project in opposite directions, under which clips the ends of the cross-piece G can be passed.

A winged nut, J, is screwed on the threaded end of the pintle F, and is adapted to rest against the outer surface of the cover E, and to press this cover against the head or end of the cream-box A. The threaded end of the pintle F is adapted to be screwed into a threaded aperture, K, in the end of a shaft, L, journaled in a standard, C′, resting on the base D.

The shaft L is provided with an annular recess, L′, adapted to receive the end of a swinging latch-arm, M, pivoted to the inner side of the standard C′. A belt-pulley, N, is mounted on the shaft L, and a crank-handle, O, can be attached to the end of this shaft. A supporting-frame, P, having its upper edges recessed, so that the cream-box fits against them, rests upon the base D, and is provided on its bottom with beveled tenons P′, adapted to slide in longitudinal grooves Q in the top of the base, the ends of these grooves being beveled. The cream-box is provided with an aperture, R, through which the cream can be poured into it.

A washing-machine can be constructed in the same manner as the churn above described.

The operation is as follows: The cross-piece G is turned so that its ends pass under the clips H, and the cover E is placed into the opening on the head of the cream-box, the pintle F passing through this cover. By turning the winged nut J down tightly the cover E will be pressed firmly against the head of the cream-box, the packing-strip E′ forming a close joint. The frame P is drawn in the direction of the arrow *a′*, whereby the beveled tenons P′ will slide up the beveled ends of the grooves Q, and the frame P will be raised. The cream-box A is placed on the supporting-frame P, and the pintle B is passed into the recess in the standard C. The latch-arm M is raised and the shaft L is rotated, and thereby is screwed on the pintle F, and when the annular groove L′ is on the inner side of the standard C′ the latch-arm M is dropped into this annular groove L′ to prevent further longitudinal movement of the shaft L by rotation of the same. Then the frame P is moved in the reverse direction of the arrow *a′*, whereby it will be lowered, and the cream-box remains suspended or hung on the standards C C′. The cream-box is then rotated by means of the crank-handle O, or by a belt passing over

the pulley N. The cream is agitated in the box by being thrown against the longitudinal ribs or projections in the inner cylindrical surface of the box, and butter is thus formed.

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

1. The combination, with the cream-box A, constructed substantially as described, and provided with pintle B, of the threaded pintle F, provided with nut J for securing the cover E, journal-shaft L, provided with threaded end aperture, K, adapted to receive the said pintle F, groove L′, latch M, and means for operating the cream-box, substantially as set forth.

2. The combination, with the cream-box A, of the cover E, the clips H, the cross-piece G, the threaded pintle F, the winged nut J, and the journaled shaft L, provided with a threaded end aperture, K, substantially as herein shown and described, and for the purpose set forth.

3. The combination, with the journaled serrated cream-box A, the standards C C′, and the base D, provided with longitudinal grooves Q, having the ends beveled, of the supporting-frame P, having beveled tenons P′, sliding in the grooves Q, substantially as herein shown and described, and for the purpose set forth.

HENRY HAYS.

Witnesses:
DAVID HAYS,
MAURICE P. HAYS.