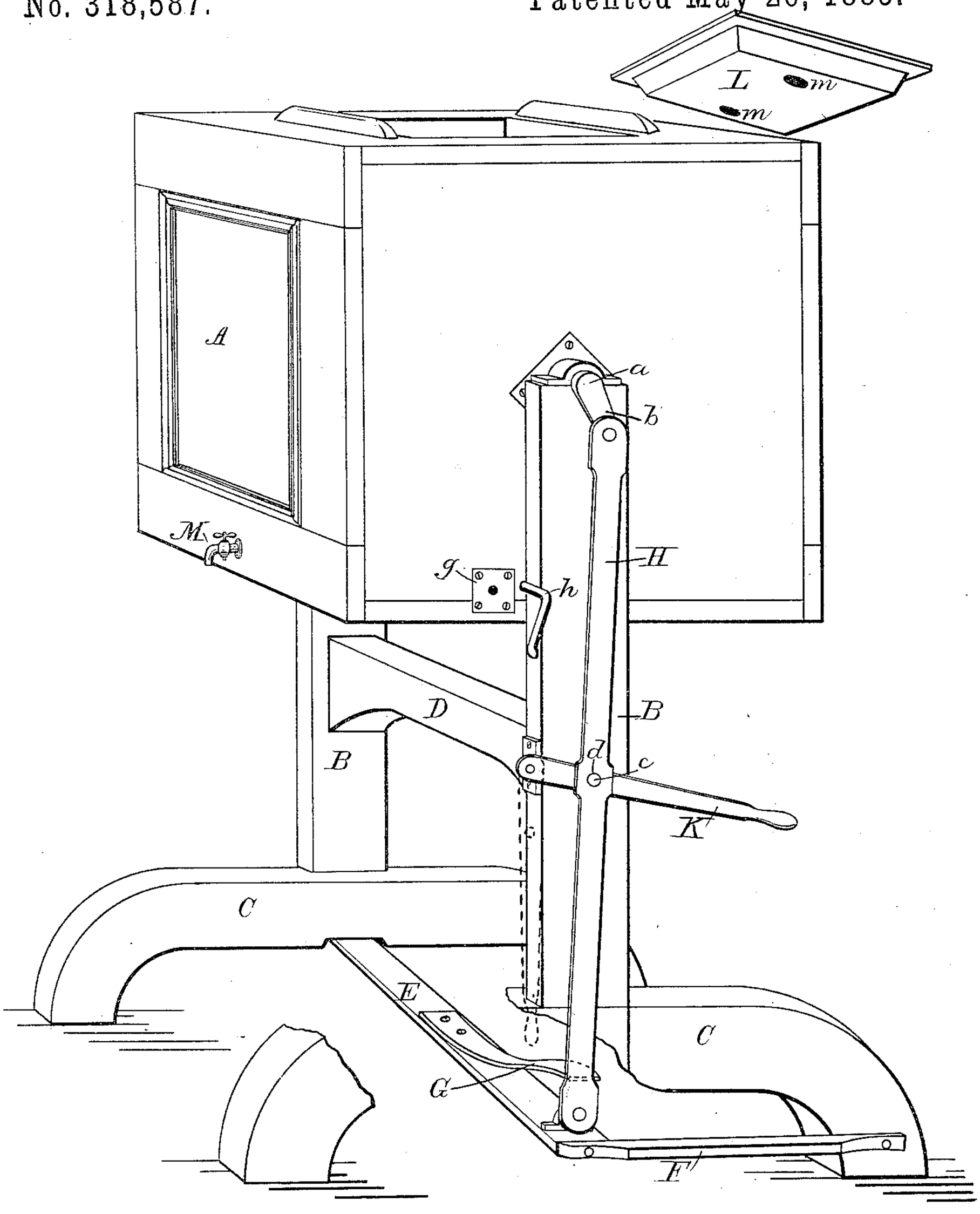
(No Model.)

H. C. WINQUEST.

OSCILLATING Cchurn.

No. 318,587. Patented May 26, 1885.



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UNITED STATES PATENT OFFICE.

HENRY CLAY WINQUEST, OF FAIRFIELD, IOWA.

OSCILLATING CHURN.

SPECIFICATION forming part of Letters Patent No. 318,587, dated May 26, 1885.

Application filed January 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. WINQUEST, of Fairfield, in the county of Jefferson and State of Iowa, have invented certain new and useful Improvements in Oscillating Churns; 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 drawing, which forms a part of this specification.

The object of this invention is to provide a simple and efficient motor for imparting oscillating motion to churns and analogous devices; and it consists in the mechanism and combinations of mechanism, hereinafter fully described and claimed.

In the accompanying drawing my device is shown applied to a churn.

The oscillating churn-body A is supported by means of trunnions *a a*—one on each side—suitably journaled in the uprights B B, attached to or formed integral with the curved supporting-bars C C, and braced apart by the rod or bar D. One of the trunnions *a* projects beyond the outer surface of one of the uprights, and is bent downward and then laterally to form a crank, *b*. To one of the curved supporting-bars C is hinged or pivoted one end of a lever, E, the other or free end passing under and projecting beyond the other curved supporting-bar C, and being secured to the free end of a right-angled foot-lever, F, pivoted to the supporting-bar C. On the upper surface of the lever E is secured one end of a flat spring, G, which bears at its free end against the under surface of one of the supporting-bars C and tends to hold said lever down. To the lever E is secured the lower end of a flexible connecting-rod, H, the upper end of which embraces the wrist-pin of the crank *b*. This rod H is made of light spring metal or wood, so that it may be drawn or bent outwardly from the upright B, and the pin *c* on hand-lever K inserted in the opening *d* in said rod H. Near the middle of the upright on the same side of the churn as crank *b* is hinged or pivoted a hand-lever, K, having a short pin, *c*, projecting laterally therefrom and engaging an opening, *d*, in the rod H. The churn-body A has a lid, S, with wire-covered perforations *m* therein for ventilation. In one end of the body A a plate, *g*, is inserted, having an opening therein, with which engages a latch, *h*, for the purpose of securing the body against movement while filling with milk or cream or when not in operation. An opening is made in one side of the body A, near its bottom, and a spigot, M, inserted, through which the milk may be drawn. The location of the spring on the upper surface of lever E is of great importance, as it acts as a cushion to prevent the too sudden stoppage of the body A when said body reaches the extremity of its oscillation, and its return movement is greatly facilitated by the reaction of the spring carrying the crank past its dead-center. I have shown a flat spring, but do not wish to be restricted thereto, as it is obvious that a spiral spring secured near the end of lever E, immediately under the support and pressing thereagainst or secured to the under surface of the support and exerting its tension downward on the lever, would operate the same. The foot-lever F may be used independently of the hand-lever K, as when the pin *c* of the latter is disengaged from the rod H the lever will be allowed to hang down alongside of the upright out of the way of the operator and the working parts of the churn, as indicated in dotted lines.

From the above-described construction it will be seen that the body A may be oscillated by the hand or foot of the operator, or by both.

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

1. In combination, a suitable supporting-frame, the oscillating body A, provided with the trunnions *a a*, crank *b*, connecting-rod H, having opening *d*, pivoted hand-lever K, provided with pin C, pivoted lever E, and spring G, substantially as described.

2. In oscillating churns, the combination, with a suitable supporting-frame, churn-body, and connecting-rod H, of the pivoted levers E and F, crank *b*, and a spring, G, on the upper surface of lever E, whereby a cushion is formed which prevents the too sudden stoppage of the body at the extremity of its oscillation.

3. The combination of the following instrumentalities: supporting-bars C C, uprights B

B, brace-bar D, oscillating body A, trunnions *a a*, crank *b*, connecting-rod H, having the opening *d*, the pivoted hand-lever K, provided with pin *c*, the pivoted levers E and F, and spring G, to oscillate churn-bodies and analogous devices, substantially as described.

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

HENRY CLAY WINQUEST.

Witnesses:
WILLIAM RINEHAT BLOSS,
PERRY KING.