(No Model.)

J. F. RICHARDSON.

CHURN.

No. 422,631. Patented Mar. 4, 1890.

Fig. 1.

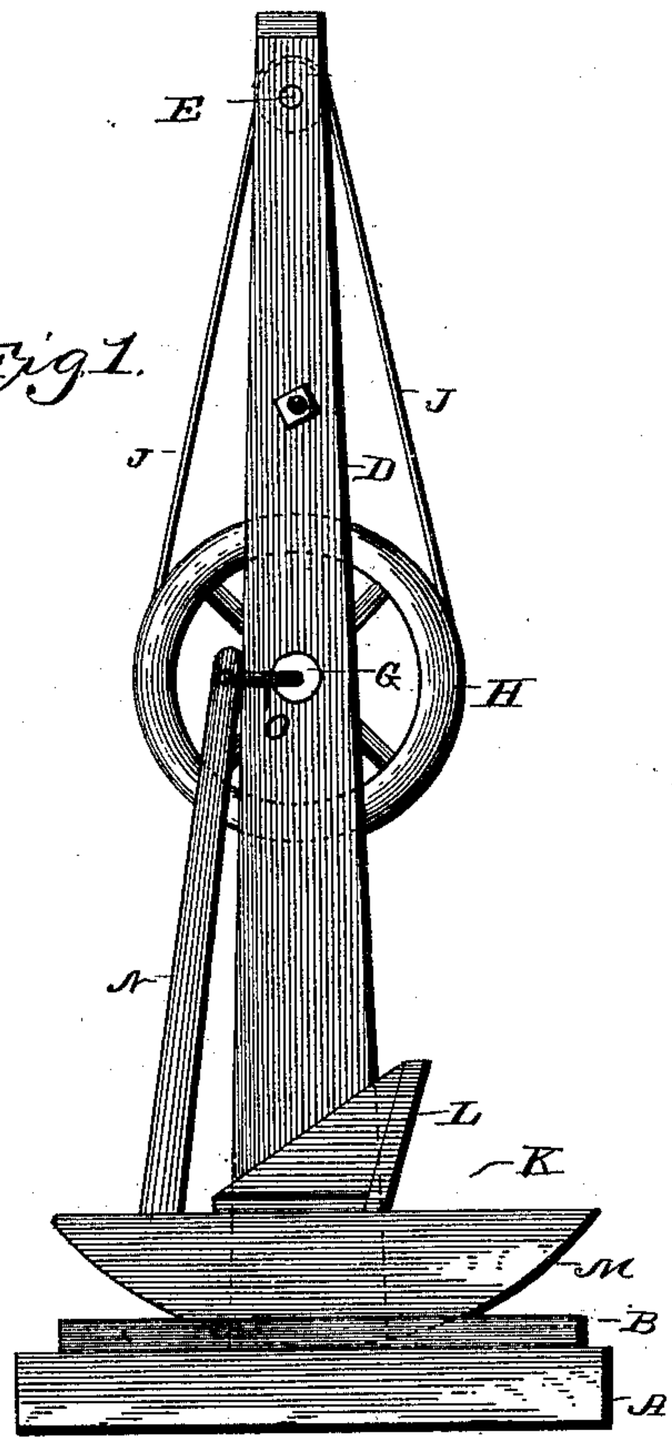


Fig. 2.

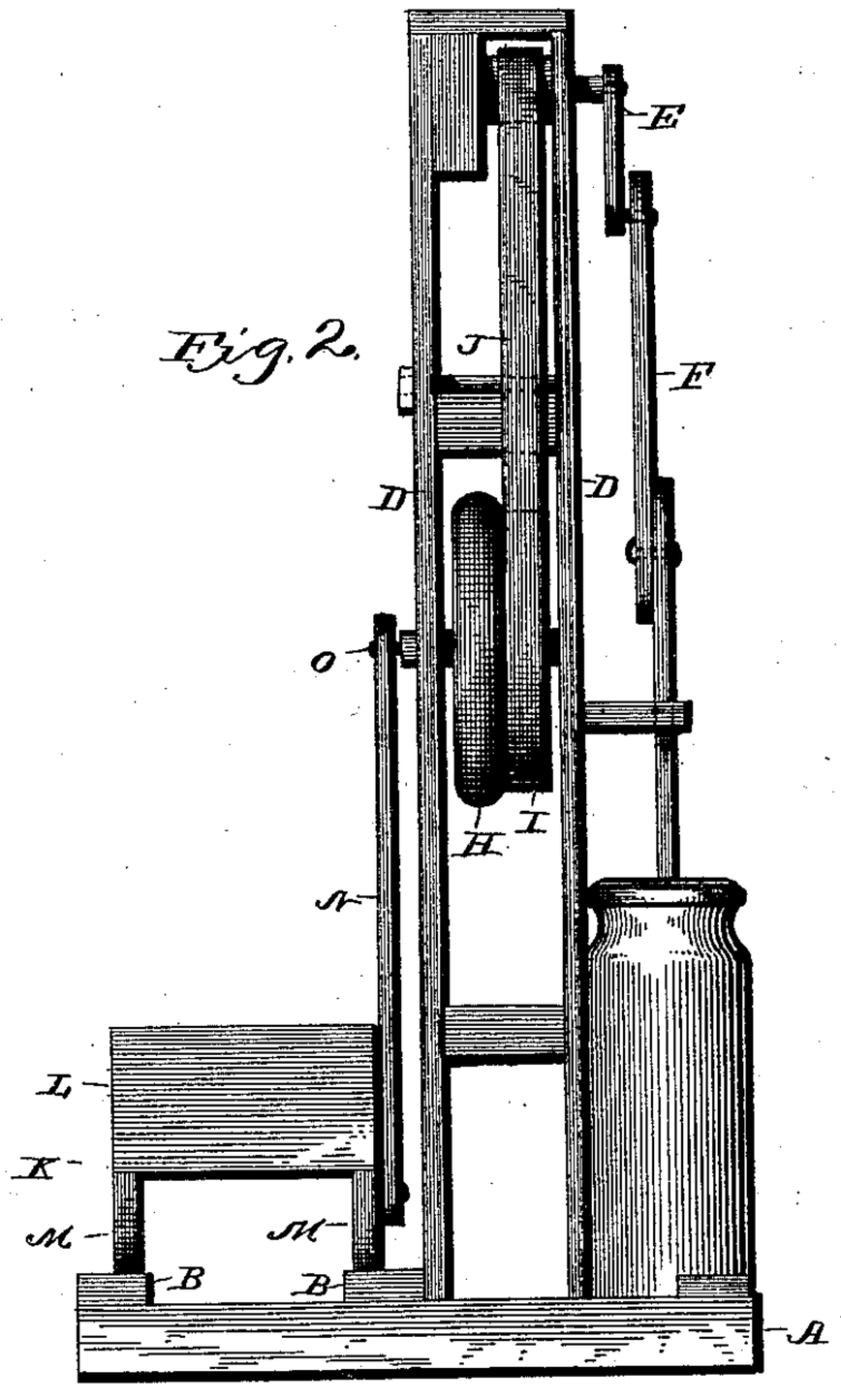
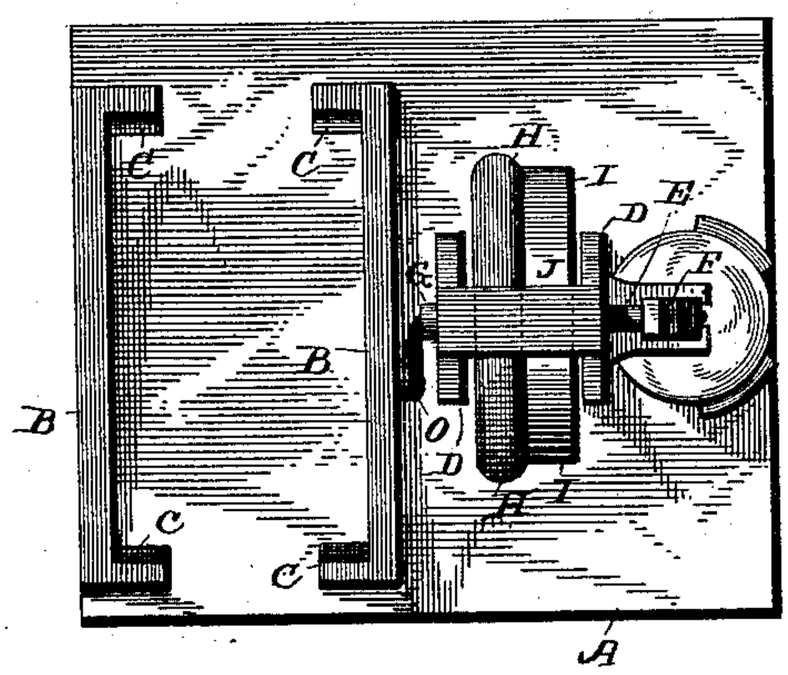


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH F. RICHARDSON, OF BIRKS CITY, KENTUCKY.

CHURN.

SPECIFICATION forming part of Letters Patent No. 422,631, dated March 4, 1890.

Application filed July 5, 1889. Serial No. 316,494. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. RICHARDSON, a citizen of the United States, residing at Birks City, in the county of Daviess and State of Kentucky, have invented a new and useful Churn, of which the following is a specification.

My invention relates to improvements in churns; and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side view of a churn provided with my improvements. Fig. 2 is a rear elevation. Fig. 3 is a detail plan view.

Referring to the drawings by letter, A designates the base, on the upper side of which, at and near the rear edge of the same, I secure the guide-rails B, having the inwardly-projecting shoulders or stops C at their ends, as shown most clearly in Fig. 3. Adjacent to the inner rail B, I erect the standards D, in and between which I journal the crank-shaft E, which is connected to the dasher-rod by a pitman F and the driving-shaft G, upon which I secure the fly-wheel H and the band-wheel I, as shown, the said band-wheel being connected with the crank-shaft by the belt J.

The churn-body is placed on the base in front of the standards, and the dasher-rod plays therein in the usual manner. On the base between the guide-rails B, I rest the rocking stool K, consisting of the seat L and the rockers M, secured to the under side of the seat, resting on the base and bearing against the inner sides of the guide-rails. The inner rocker is connected directly with the driving-shaft G by the connecting-rod N, having its lower end pivoted to the rocker at the front end of the same, and its upper end pivoted on the crank-arm O at the rear end of the driving-shaft.

In practice the cream is placed in the churn-body and the operator sits on the rocking stool and vibrates the same, as will be readily understood. The vibratory motion thus given to the rockers is transmitted directly to the driving-shaft and there converted into a rotary motion, so that the driving-wheel will be easily and rapidly rotated. The rocking stool is effectually held to its place on its base, and is prevented from slipping therefrom by the guide-rails B and the stops or shoulders C. The guide-rails prevent any lateral movement of the stool, while the shoulders C not only serve to prevent the stool slipping endwise from the base, but also serve to limit the vibratory movement of the stool, so as to lessen the labor necessary to operate the churn.

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

The combination of the base, the standards erected thereon, the guide-rails B, secured on the base and having the stops or shoulders C at their ends, the driving-shaft journaled in the standards and provided with a crank-arm at its rear end, the rocking stool resting on the base between the guide-rails, and the connecting-rod having its upper end pivoted on the crank-arm of the driving-shaft and its lower end pivoted to the end of the inner rocker, as specified.

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

JOSEPH F. RICHARDSON.

Witnesses:
H. A. WILLIAMS,
GUS T. BRANNON.