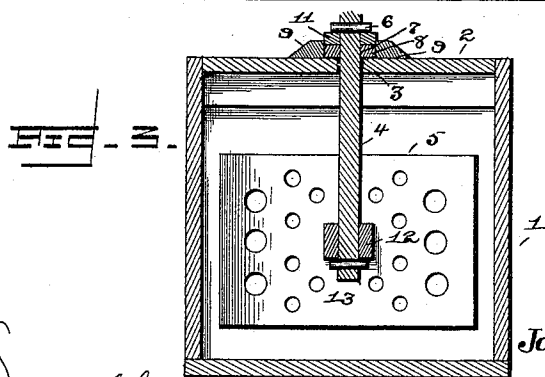
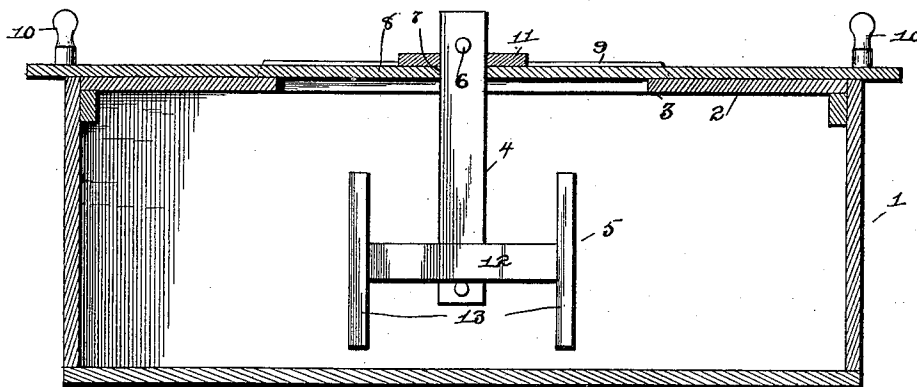
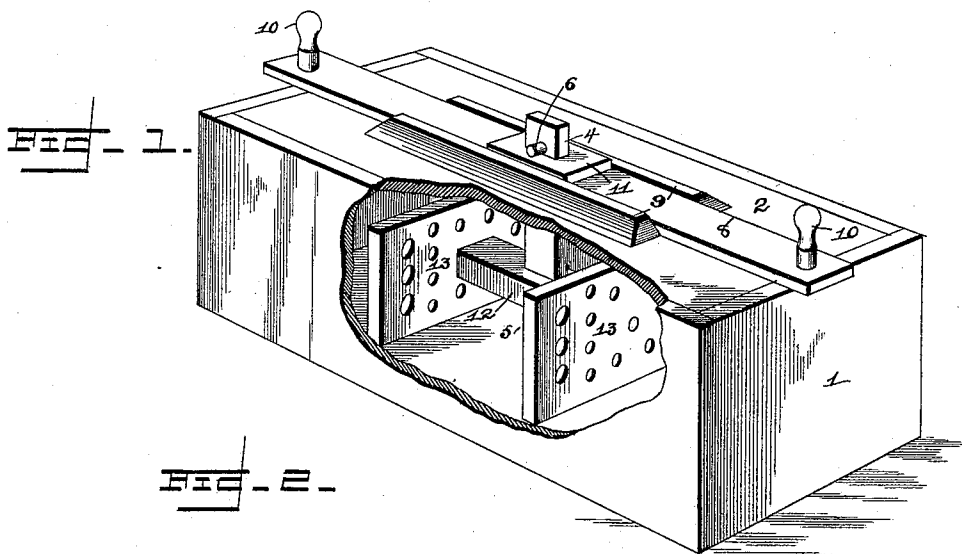


(No Model.)

J. H. BROWNFIELD.
CHURN.

No. 463,800.

Patented Nov. 24, 1891.



Witnesses

E. S. Duvall
N. F. Riley

By his Attorneys,

Inventor
John H. Brownfield.

Chas. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN H. BROWNFIELD, OF MOBERLY, MISSOURI.

CHURN.

SPECIFICATION forming part of Letters Patent No. 463,800, dated November 24, 1891.

Application filed July 30, 1891. Serial No. 401,203. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BROWNFIELD, a citizen of the United States, residing at Moberly, in the county of Randolph and State of Missouri, have invented a new and useful Liquid-Agitator, of which the following is a specification.

The invention relates to improvements in liquid-agitators for churns, washing-machines, and the like.

The object of the present invention is to simplify and improve the construction of liquid-agitators for churns, washing-machines, and the like to increase their strength and durability, and to enable cream to be sufficiently agitated to produce butter, and to force water through clothes for removing dirt and stains at a minimum amount of labor on the part of the operator.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

In the drawings, Figure 1 is a perspective view of a liquid-agitator embodying the invention, the body being partially broken away. Fig. 2 is a central vertical longitudinal sectional view. Fig. 3 is a transverse sectional view.

Referring to the accompanying drawings, 1 designates a body for churns, washing-machines, and the like, preferably rectangular in section and constructed of suitable material, and provided in its cover 2 with a longitudinal slot in which is arranged a vertical bar or stem of an agitator 5, which reciprocates within the washing-machine body and agitates cream and produces butter and forces water through the clothes and effectually removes dirt and stains. The vertical bar 4 extends through the slot 3 of the cover 2, and is secured by a pin 6 in an opening 7 of a slide 8, arranged on the upper face of the cover 2 between guide-strips 9, and is provided at each end with a handle 10, whereby the slide is conveniently operated. The pin 6 passes through a perforation of the bar, and the latter is provided with a plate 11, which further secures the agitator to the cover and facilitates easy reciprocation. The plate 11 is ar-

ranged on the upper face of the slide, and is provided with a central opening to receive the bar 4. The agitator consists of the vertical bar 4, a horizontal bar 12, and rectangular boards 13, which are perforated and serve as dashers, and move clothes from one end of the washing-machine to the other, forcing water through them, causing the removal of dirt and stains. The bar 12 is horizontally disposed and extends longitudinally of the washing-machine body, and is provided with a central opening, in which is secured the lower end of the vertical bar 4. The perforated rectangular boards 13 are centrally secured to the ends of the horizontal bar and one of them engages clothes at each stroke of the agitator.

It will be seen that by liquid-agitators constructed in accordance with this invention butter is quickly produced and water is greatly agitated, and clothes are moved from one end of the washing-machine body to the other, water is forced through them, and dirt and stains are thereby readily removed. Water for the washing-machine may be heated by any suitable means.

The above-described construction, besides making an effective washing-machine, is equally applicable to churns, and is capable of thoroughly agitating cream and quickly converting the same into butter.

What I claim is—

The combination, with a body provided in its cover with a longitudinal slot and having guide-strips arranged on opposite sides of the slot, of an agitator comprising a vertical bar extending through the slot, a horizontal bar centrally secured to the lower end of the vertical bar and the perforated boards arranged at the ends of the horizontal bar, and a slide arranged between the guide-strips and centrally secured to the upper end of the vertical bar and provided at its ends with handles, substantially as described.

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

JNO. H. BROWNFIELD.

Witnesses:

I. W. BROWN,

V. M. BROWNFIELD.