(No Model.)

J. W. KERNODLE.

CchurN.

No. 332,614. Patented Dec. 15, 1885.

Fig. 3.

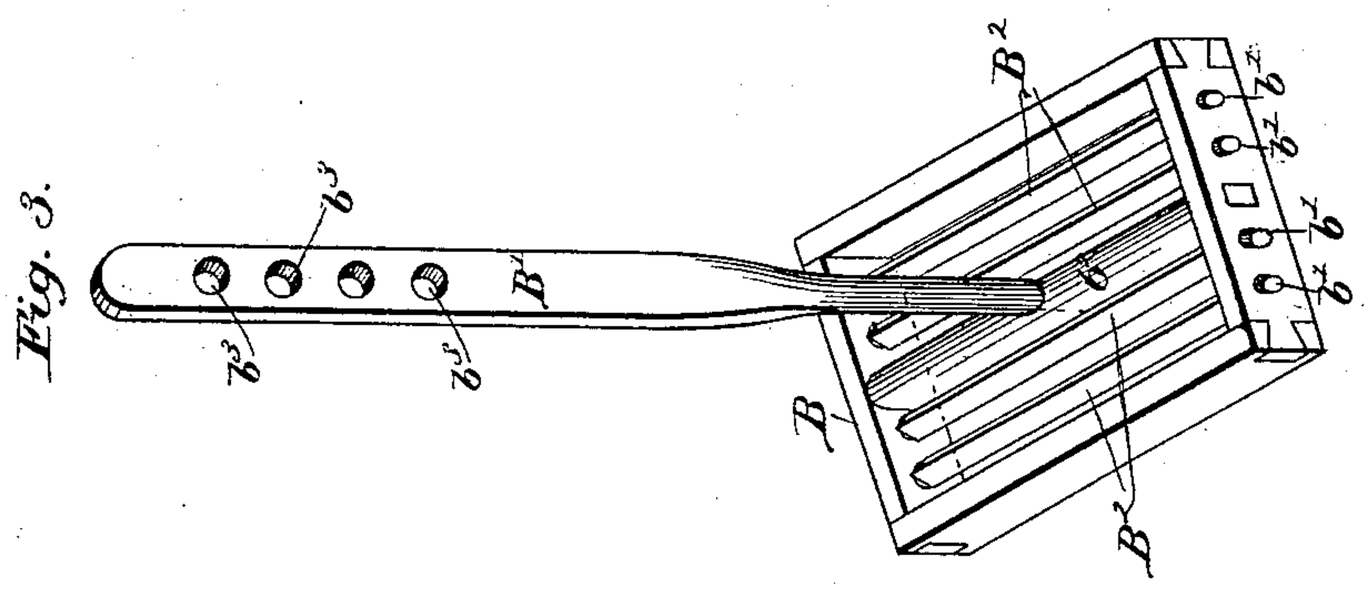


Fig. 2

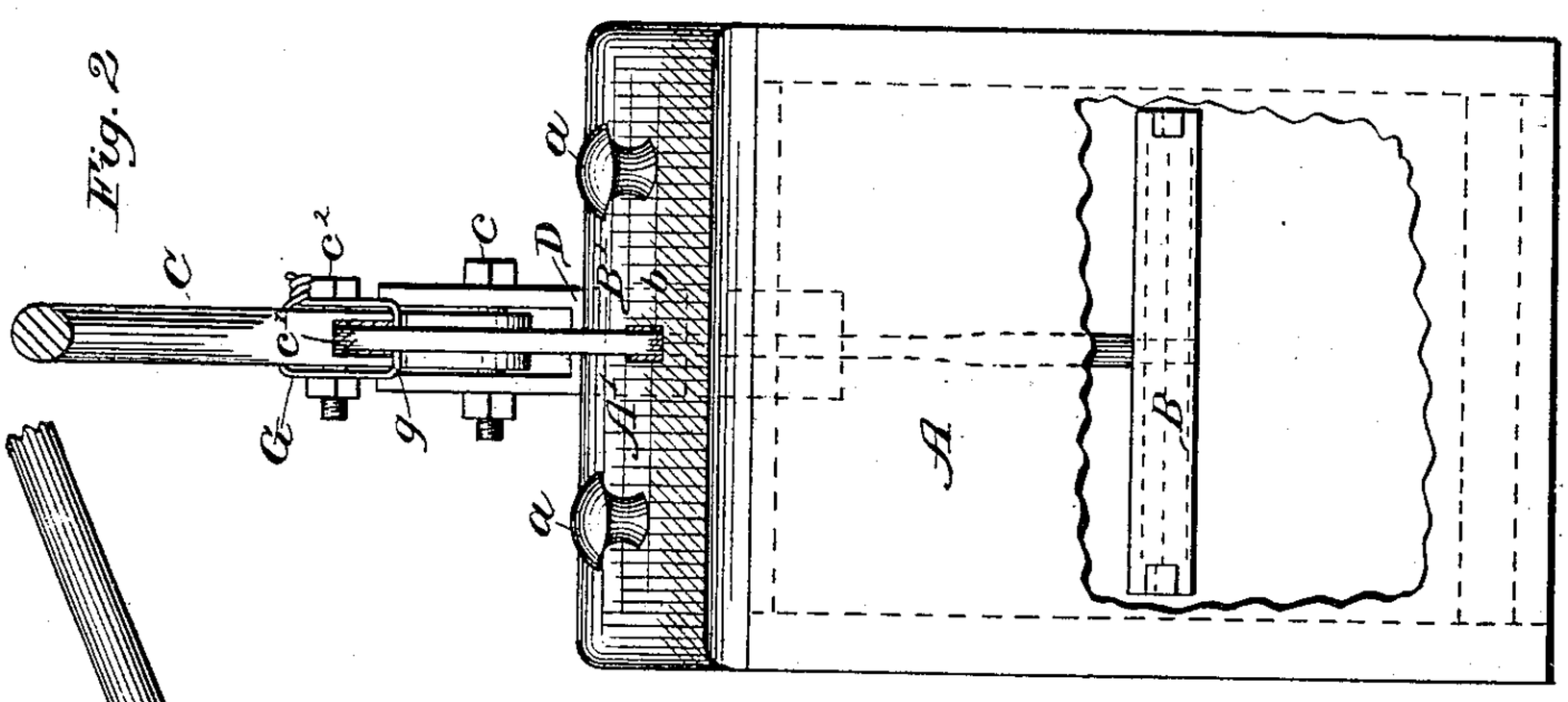
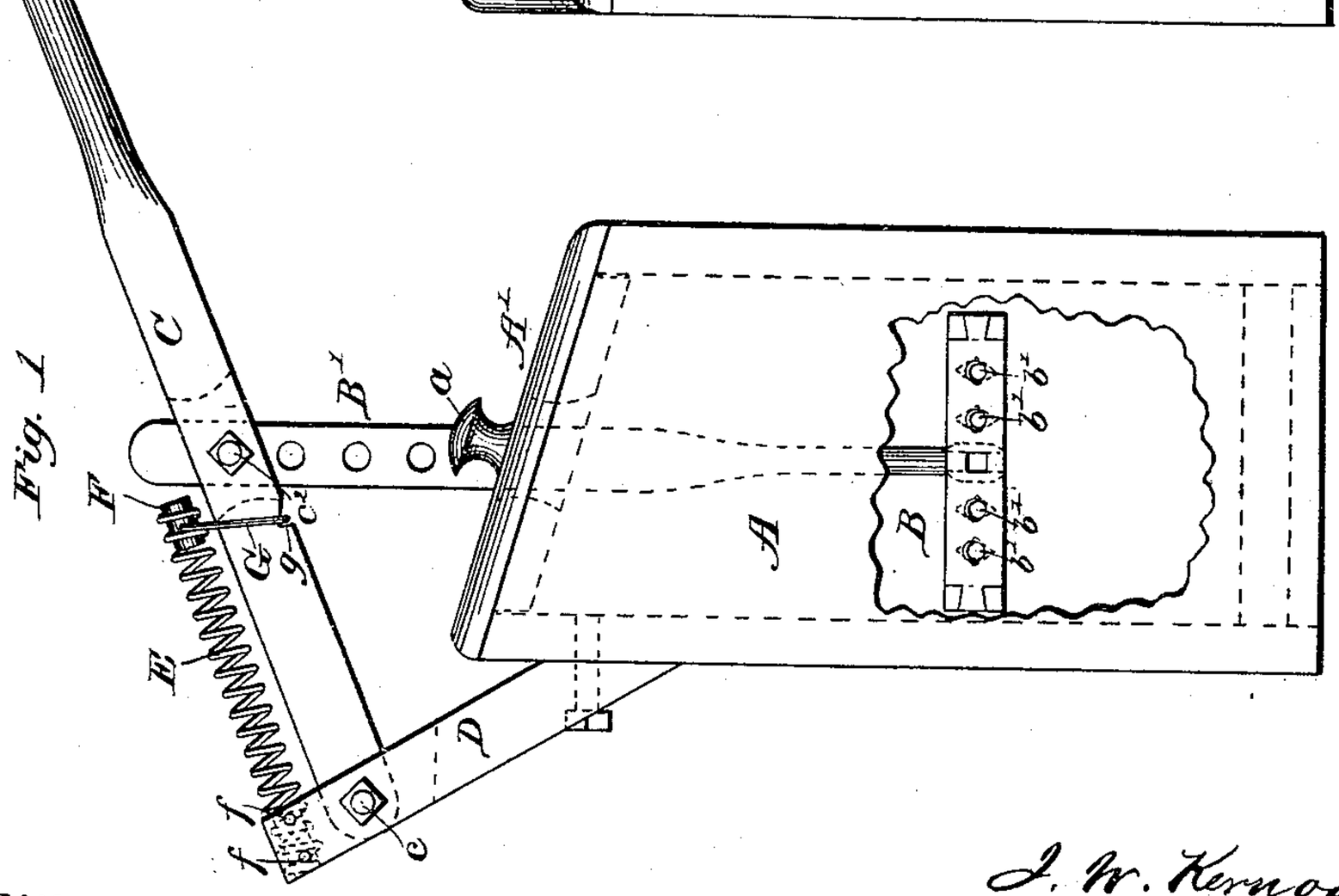


Fig. 1



Witnesses
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UNITED STATES PATENT OFFICE.

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CHURN.

SPECIFICATION forming part of Letters Patent No. 332,614, dated December 15, 1885.

Application filed August 29, 1884. Serial No. 141,734. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. KERNODLE, of Winston, in the county of Forsyth and State of North Carolina, have invented certain new and useful Improvements in 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 drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this improvement is to provide a churn-power of economical construction and simple operation that will relieve and expedite the labor of churning. These results are attained by the mechanism illustrated in the drawings herewith filed as part hereof, in which the same letters of reference denote the same parts in the different views.

Figure 1 is a side elevation, partly in section, representing a churn embodying the features of my improvement. Fig. 2 is a front view of the same. Fig. 3 is a perspective representation of the dasher.

A is the churn-box.

A′ is the lid or cover, provided with knobs *a*, for convenience in removing and replacing the same.

B is a rectangular dasher-frame having its parts connected by any suitable means, and provided with a central piece, b^2, to which the dasher-rod B′ is rigidly affixed.

b^3 represents perforations in the dasher-rod, provided for a purpose hereinafter set forth.

B^2 B^2 are agitators, diamond-shaped in cross-section, and pivotally or loosely connected to the perforated ends of the dasher-frame by journals, as shown at *b′*, Figs. 1 and 3.

C is an operating-lever having a slot, *c′*, through which the dasher-rod B′ is pivotally secured thereto by means of a bolt, c^2.

D is an arm or fulcrum affixed to the churn-box, and provided at its upper end with a slot of suitable depth for the reception of the end of the lever C, pivoted thereto by a bolt, *c*, as fully shown in Fig. 2.

E is a spiral spring, provided at each end with a wood or metal plug or filling, as shown at F, Fig. 1.

f f represent pins transversely driven through the arm D and plug or filling at the outer end of the spring E, thereby securing the connection of the spring and the arm.

G is a link passing through the plug or spring filling F and around the lever C, the under part of which is provided with a notch, *g*, for the reception of the link G, the object of which is to connect the lever with the spring, so that the elasticity of the latter will operate to return the lever to the position shown after the downstroke of the same.

By reason of the perforations b^3 in the dasher-rod B′, the latter may be adjusted to bring the dasher in suitable position to have either a short or long stroke, and thus adapted to churning a greater or less quantity of cream. The agitators B^2, by reason of being journaled to the dasher-frame, as set forth, will be given a rotary motion by their movement through the cream, by which its transformation into butter will be accelerated. By reason of the lever C the dasher may be more easily forced downward through the cream, and as the reaction of the spring E will materially assist in returning the dasher to an elevated position, it is obvious that the labor of churning will be largely diminished by the mechanism shown and herein described.

Having explained the construction and operation of my improvement, what I claim as new, and desire to secure by Letters Patent, is—

In churns, the box A, having removable slotted cover A′ and fulcral support D, in combination with the lever C, pivoted at *c* to the support D, notched at *g*, and joined at c^2 to the dasher-rod, the spring E, having plugs at each end, and attached thereby, respectively, to the support D and lever C, rod B′, having a series of holes, b^3, to vary its stroke, and dasher B, having rotary agitators B^2, journaled therein, diamond-shaped in cross-section, the whole co-operating in the manner and for the purpose set forth.

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

JOHN W. KERNODLE.

Witnesses:
P. H. BOOE,
GEO. D. HODGIN.