

(No Model.)

M. L. HOYT.
CHURN COVER.

No. 462,007.

Patented Oct. 27, 1891.

Fig. 1.

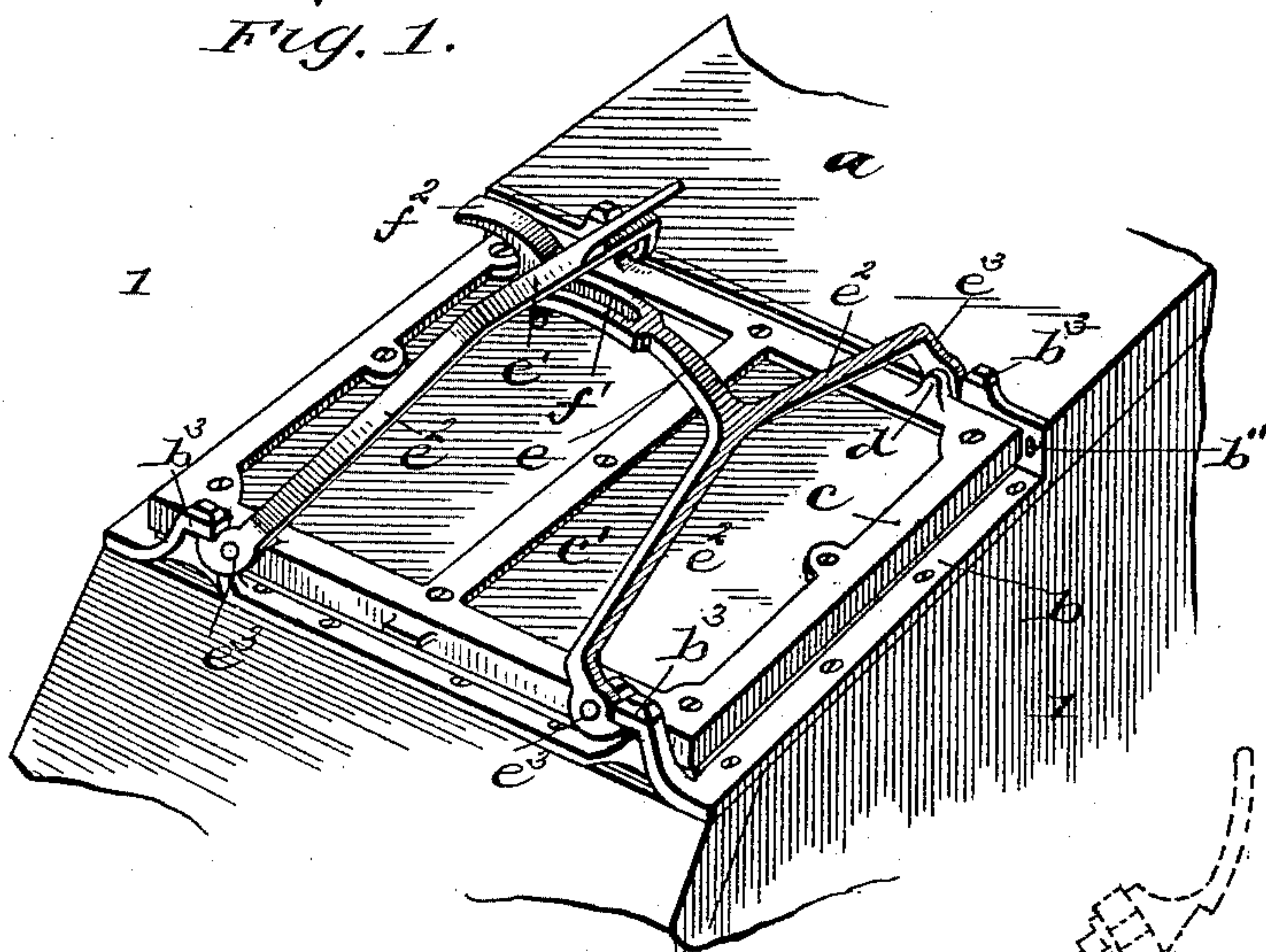


Fig. 2.

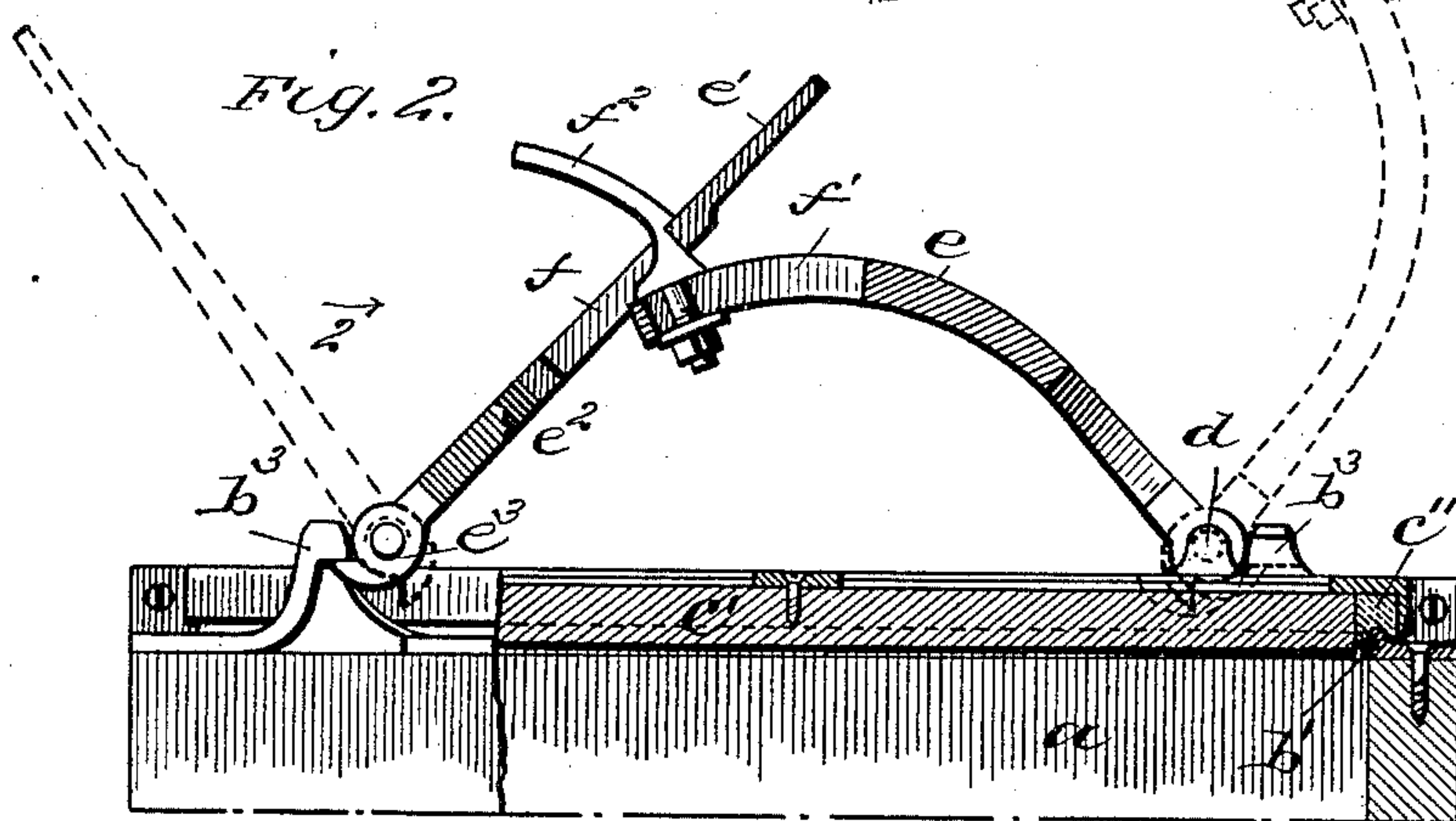
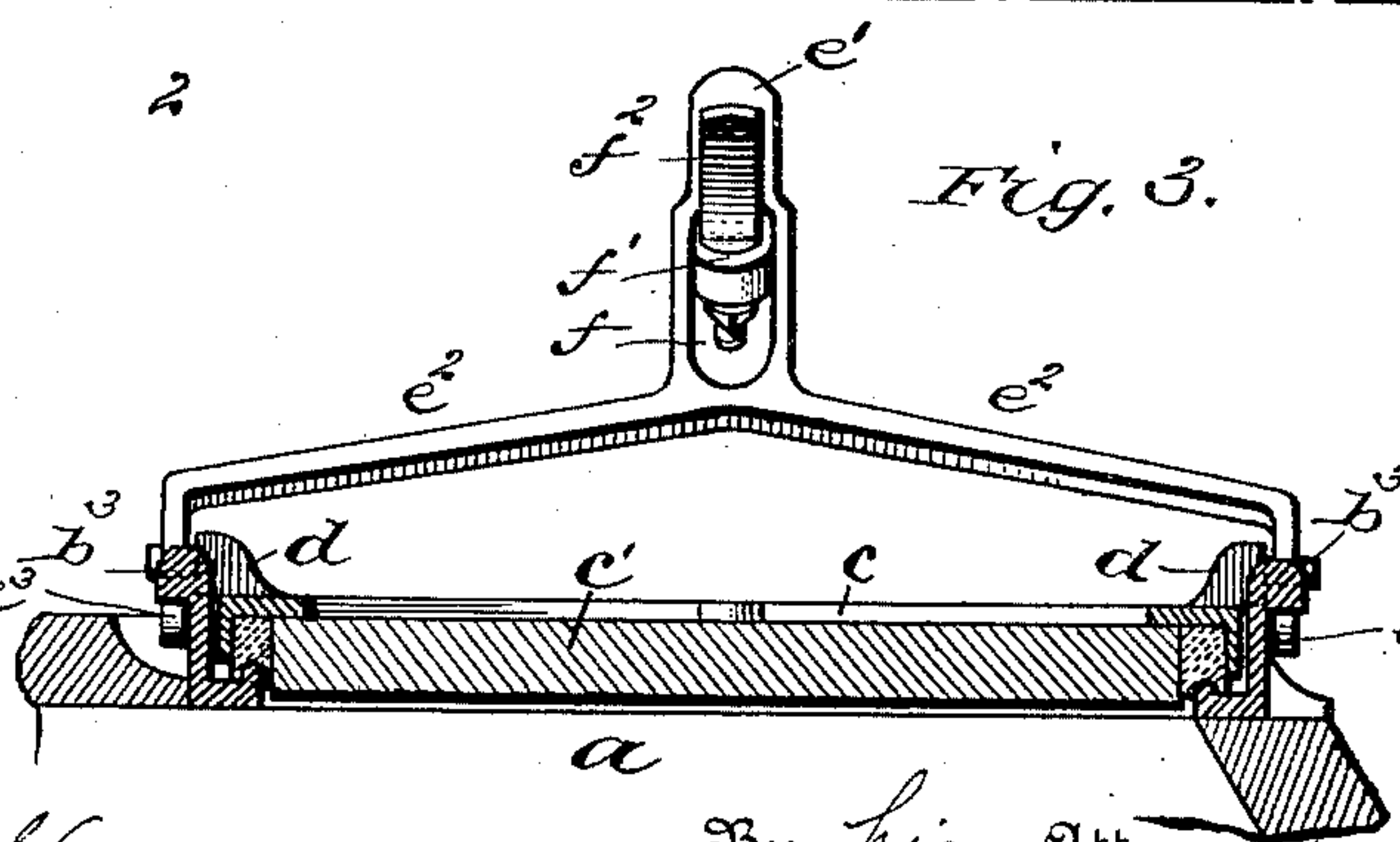


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

MATTHEW L. HOYT, OF BALLSTON SPA, NEW YORK.

CHURN-COVER.

SPECIFICATION forming part of Letters Patent No. 462,007, dated October 27, 1891.

Application filed June 13, 1891. Serial No. 396,102. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW L. HOYT, a citizen of the United States, residing at Ballston Spa, in the county of Saratoga and State of New York, have invented certain new and useful Improvements in Churn - Covers, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved churn-cover applied to a churn-body, a portion of which latter is shown. Fig. 2 is a vertical sectional view of the same on the line 1 1 of Fig. 1, the cover being shown closed and locked and a portion at the left-hand side being shown in side elevation; and Fig. 3 is a vertical sectional view on the line 2 2 of Fig. 2.

The invention is designed especially to provide an improved cover for use upon the balanced diamond-shaped revolving churn patented to Hugh F. Murray and myself on the 28th day of May, 1889, and numbered 404,281, of which I am now the sole owner, although it may with equal advantages be used upon other varieties of churns; and it has for its objects the provision of a cover of very simple construction that may be readily locked in place over the opening and securely held during the revolution of the churn-body, and which may be as readily removed for access to the interior of the churn, as will more fully hereinafter appear.

In the drawings, *a* designates a portion of the body of a churn, preferably diamond-shaped, around the rectangular opening of which is secured a rectangular metallic frame *b*, this frame being provided all around its inner edge with an upwardly-extending flange or bead *b'*. Along the outer edge of one side bar of this frame is formed a vertical flange *b''*, that abuts against and is screwed to the adjacent edge of the churn-body. Formed on each of the side bars of the frame is a pair of upwardly-extending shouldered lugs *b³*, one lug being located near each corner of the frame.

The cover consists of a rectangular metal frame *c*, adapted to fit between the lugs *b³* and provided with a depending flange all around its outer edge. Screwed to the under side of the metallic frame, within the flange,

is a rectangular wooden block or board *c'*, and inserted between the edges of this board and the depending flange on the frame is a packing-strip *c''*, of some suitable material, such as cork, this packing being arranged to bear upon the flange *b'* around the churn-opening. This flange *b'* is pressed into the packing by the locking devices, hereinafter described, so as to form a perfectly tight joint and effectually prevent leakage. Formed integrally with the frame *c* are pivotal pins *d*, two of which project laterally from each side bar of the frame in close proximity to the lugs *b³*.

Two levers *e e'* are employed to lock the cover removably in place, both of these levers being provided with oppositely-extending arms *e²*, whose outer ends are turned downwardly, as at *e³*, and pivoted on the outwardly-projecting pins *d*, the parts *e³* being shouldered to catch under the adjacent lugs *b³* of the stationary frame when the levers are thrown toward each other. The lever *e'* is straight and provided with a longitudinal slot *f* near its lower end, while the forward end of lever *e* is curved forwardly and downwardly, and provided with a longitudinal slot *f'*, a curved notched latch *f²* being adjustably secured in the slot in the curved part of the lever by means of a bolt and nut.

To lock the cover in place it is simply necessary to place it over the opening between the lugs *b³* and turn the levers toward each other and lock them together by pressing the lever *e'* over the other lever, so that the curved notched catch will pass through the slot *f* and engage the upper end of the same, this action serving to engage the shoulders of the arms *e³* under the shoulders of the lugs *b³* and press and hold the cover upon its seat, the leverage exerted to press the cover being comparatively great. The arms *e²* give sufficient elasticity to the levers to enable them to spring into engagement with each other when pressed together and to firmly lock them together during the movements of the churn-body.

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

1. The combination, with a churn-body having stationary shouldered lugs *b³* upon opposite sides of its opening, of a cover fitting over the opening between the lugs, levers *e* and *f*,

provided with arms e^2 , these arms projecting outwardly in opposite directions and having their ends turned downwardly and pivoted upon the side edges of the cover near the lugs b^3 , the levers e and f being bent toward each other and detachably connected together at their upper ends, substantially as described.

2. The combination of a churn-body provided with lugs b^3 upon opposite sides of its opening, a cover fitting over said opening, arms e^2 , pivoted on the side edges of the cover and shouldered to engage under the lugs b^3 , levers e and f , connected to the arms e^2 , one of these levers being provided with a notched catch adapted to engage the other lever when the two are pressed together, substantially as described.

3. The combination, with a churn-body hav-

ing stationary lugs b^3 upon opposite sides of its opening, of a cover fitting over the opening between the lugs, and levers provided with oppositely-projecting arms, these arms being turned downwardly at their ends, as at e^3 , so as to engage the lugs b^3 , one of said levers being curved and provided with an adjustable notched catch adapted to engage in a slot formed in the other lever to lock the levers together and hold the cover to its seat, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

MATTHEW L. HOYT.

Witnesses:

ABIJAH COMSTOCK,
LEANDER SPICER.