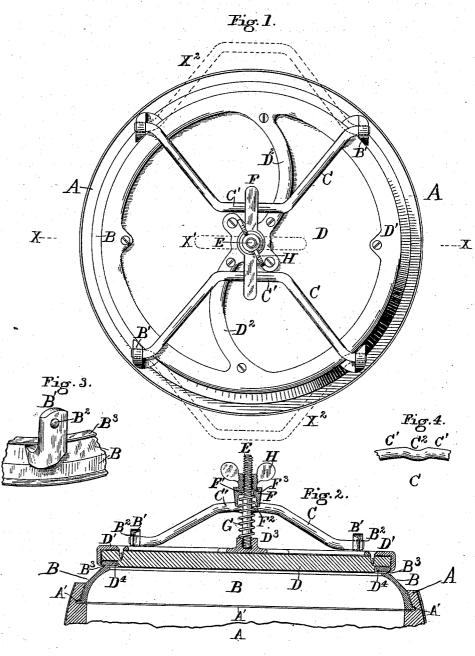
(No Model.)

## H. A. WEBBER. CLOSURE FOR CHURNS.

No. 411,846.

Patented Oct. 1, 1889.



Witnesses: Frank & Catlin! b. E. Blinn.

Inventor: Henry A. Webber, per L. L. Morrison Attorney.

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# UNITED STATES PATENT OFFICE.

HENRY A. WEBBER, OF ROCKTON, ASSIGNOR TO SEARLE, BISHOP & CO., OF ROCKFORD, ILLINOIS.

### CLOSURE FOR CHURNS.

SPECIFICATION forming part of Letters Patent No. 411,846, dated October 1, 1889. Application filed February 4, 1889. Serial No. 298,655. (No model.)

To all whom it may concern: Be it known that I, HENRY A. WEBBER, a citizen of the United States, residing at Rockton, in the county of Winnebago and State of 5 Illinois, have invented a certain new and use-

ful Improvement in Closures for Churns, of which the following is a specification.

This invention relates partly to the form and construction of the chine-ring head and 10 partly to the manner in which the cover is secured to the same.

The invention consists of certain new and useful features of construction and combinations of parts, hereinafter described, and 15 pointed out in the claims.

Referring to the accompanying drawings, which form a part of this specification, Fig-ure 1 is a plan view of a churn embodying my invention. Fig. 2 is a view of a vertical

20 section of the upper portion of the churn and cover through the dotted line X X of Fig. 1. Fig. 3 is an isometric view in detail of a portion of the chine-ring head of the churn and a lug projecting therefrom. Fig. 4 is a de-25 tailed view of the central portion of one of

the cam-bails of the churn. Like letters of reference indicate corre-

sponding parts throughout the several views. A is a barrel-churn, having a croze A' in 30 the chine thereof.

B is a chine-ring head, preferably concavoconvex in form, seated in the croze A', the upper portion of the chine-ring head projecting above and extending inwardly from

- 35 the open end of the churn A sufficiently to adapt the upper side thereof to receive and sustain the bail-lugs B', located thereon. I prefer to have the lugs B' integral with the chine-ring head B, and their bases over-
- 40 hang and rest upon the end of the churn A, which serves as a partial support for the same.

C is a cam-bail inserted through the openings  $B^2$  in and pivoted to the lugs B'. The

45 portions C' of the cam-bail C incline gradually upward, forming a species of double cam, until they terminate in the common notch, C<sup>2</sup>. The function of the parts just described will be fully explained hereinafter.

D is a churn-cover, circular in form. 50

D' is a metallic casing inclosing the periphery and upper peripheral angle of the cover D.

 $D^2$  is a transverse strengthening-brace, integral with the casing D' and extending across the center of the cover D.

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 $D^3$  is a vertical boss integral with the brace D<sup>2</sup>.

 $D^4$  is a ring, of cork or other suitable ma-terial, set into the lower side of the cover D, to engage with the upper end B<sup>3</sup> of the chine- 60 ring B and form a tight joint therewith.

E is a vertical bolt, threaded at both ends and tapped into the boss D<sup>3</sup>.

F is a cam-bail button adapted to engage with the notches  $C^2$  in the bails C and lock 65 them fast, thereby securing the cover D to the churn. The button F has a vertical hole F' therein to admit the bolt E, and is provided with a central vertical recess  $F^2$  on the under side thereof to admit the upper end of 7c the spring G, which is coiled around the bolt E and prevents the button from dropping down when the bails C are unlocked. The upper side of the button F is also provided with a central vertical recess  $F^3$  to admit 75 the lower end of the thumb-nut H, which serves to take up the wear of the parts connected therewith, and, in conjunction with the spring G, prevents the inner portion of the button F from coming in contact with 80 and wearing away the upper threaded portion of the bolt E.

The cam-button F, upon being turned transversely over the bails, engages with the cam portions C' of the same, and, slight force 85 being applied thereto, slides into the notches C<sup>2</sup> and securely locks the bails, thereby retaining the cover on the churn.

This form of cam-bail and button-fastening will be found to be absolutely secure, and 90 it is believed that it is the simplest and most easily operated of any churn-cover fastening in use.

Whenever it is desired to remove the cover from the churn, turn the cam-button and 95 swing the bails outward, as indicated by the dotted lines  $X' X^2$ .

I claim

1. In combination, a circular cover having a metallic casing inclosing the periphery and 100 upper peripheral angle thereof, and a transverse strengthening-brace integral with said casing, extending across the center of the cover, and provided with a central vertical

boss on the upper side thereof, a vertical bolt, threaded at both ends, tapped into said boss, a thumb-nut, a spring coiled about said bolt, a cam-bail button having a vertical hole 5 therein to admit said bolt, and being provided with a central vertical recess on the under side thereof to admit the upper end of said spring, and a central vertical recess on the upper side of the same to receive the 10 thumb-nut, substantially as set forth.

 In combination, a churn having a croze in the chine thereof, a chine-ring head, concavo-convex in form, seated in said croze, projecting above and extending inwardly
from the open end of said churn sufficiently to adapt the upper side thereof to receive and sustain bail-lugs located thereon, cam-bails pivoted to said lugs, a circular cover having a metallic casing inclosing the periphery and

upper peripheral angle thereof, and a trans- 20 verse strengthening-brace integral with said casing extending across the center of the cover, and provided with a central vertical boss on the upper side thereof, a vertical bolt, threaded at both ends, tapped into said boss, 25 a thumb-nut, a cam-bail button having a vertical hole therein to admit said bolt, and being provided with a central vertical recess on the under side thereof to admit the upper end of said spring, and a vertical recess on 30 the upper side of the same to receive the thumb-nut, substantially as and for the purpose set forth.

#### HENRY A. WEBBER.

Witnesses: FRANK E. CATLIN, L. L. MORRISON.

411,846