

(No Model.)

S. D. PALMER.
CHURN CLOSURE FASTENING.

No. 423,489.

Patented Mar. 18, 1890.

Fig. 1

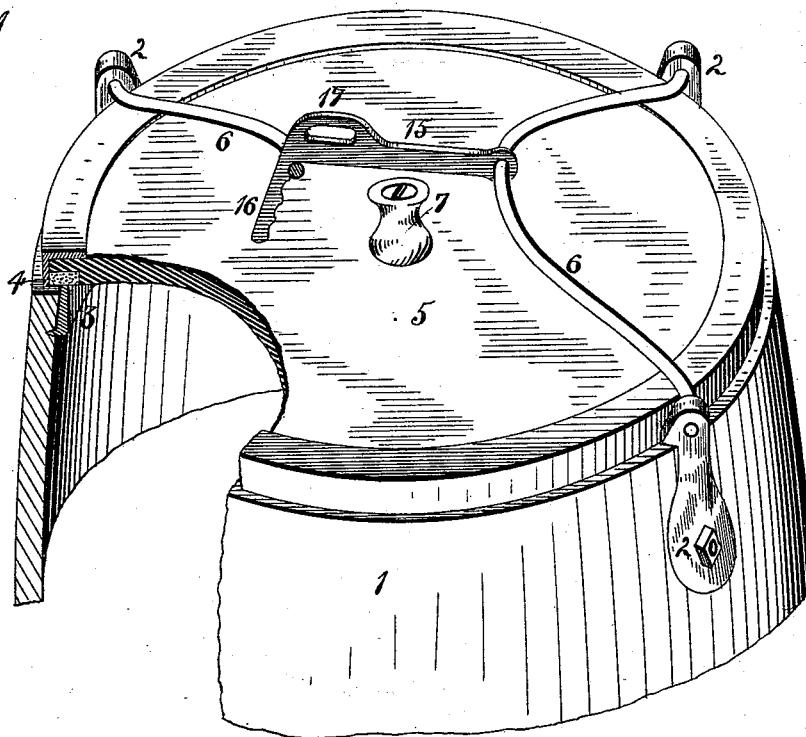
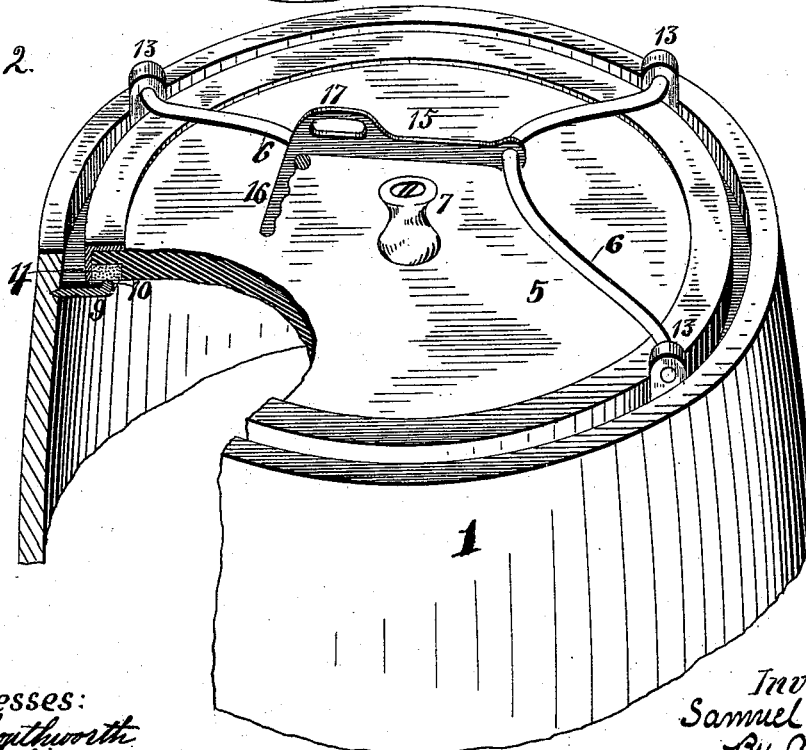


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

SAMUEL D. PALMER, OF ROCKFORD, ILLINOIS, ASSIGNOR OF TWO-THIRDS
TO HENRY H. PALMER AND GEORGE E. KING, OF SAME PLACE.

CHURN-CLOSURE FASTENING.

SPECIFICATION forming part of Letters Patent No. 423,489, dated March 18, 1890.

Application filed October 28, 1889. Serial No. 328,419. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL D. PALMER, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Churns, of which the following is a specification.

This invention relates to a class of churns known as the "revolving barrel-churn," and in which a bail-fastening is employed to hold the removable head in position on the churn-body.

In the accompanying drawings, Figure 1 is an isometrical representation of a churn embodying my invention in which outside ears are employed. Fig. 2 is an isometrical representation of a churn embodying my invention in which a ring-head carrying the ears is employed.

The churn shown in the drawings at Fig. 1 consists of a churn proper 1, to which are secured outside ears 2 by a fastening passing through the churn and ears. A ring-head 3 is placed in the chine of the churn and extends slightly above the chine to receive the packing 4 of a removable head 5. Bails 6 are pivoted in the ears 2 and rest upon the removable head between their free ends and their pivotal connection with the ears. A knob 7 has a screw passing through it into the churn-cover and forms means for handling the removable head.

The churn represented at Fig. 2 consists of a churn-body 1, in the chine of one end of which is seated a ring 9, with an uprising bead 10, which forms a seat for a packing 4 in the under side of the head 5. From the upper surface of the ring 9 rise ears 13, in which are pivoted bails 6, capable of a swinging movement. These bails when turned inward will rest on the removable head near its periphery, and should a downward pressure be applied to the free ends of the bails a similar pressure would be applied to the removable head, thereby forcing the packing in engagement with its seat.

I have constructed a fastening which does away with any connection of the fastening with the removable head, but which simply reaches from one bail across to the other bail, and in this instance consists of a lever 15, having a pivotal connection with one of the

bails and of sufficient length to reach across the other bail when the bails are swung inward. A depending arm 16 stands at an angle to the main portion of the lever and has its inner 55 inclined face serrated or notched.

When it is desired to depress the bails for the purpose of pressing the head to its seat on the churn, the bails are swung inward onto the head and the lever is swung across 60 the bails, so that its depending arm will engage the outer surface of the bail. By reason of the inclination of the depending arm its extreme end will come first in contact with the bail, and by pressing downward on 65 the lever the depending arm will descend notch by notch until the required pressure is brought to bear on the removable head. By the downward pressure of the lever the free ends of the bails are brought closer together, 70 and are thus held by the lever-connection. An operating-handle 17 furnishes means by which the lever can be released from its engagement with the bail. This arrangement furnishes a cheap and efficient means for secur- 75 ing the head of a churn in position on the body of the churn.

I do not limit myself to the use of my fastening in connection with the churns herein shown and described, as it is evident that 80 many varieties of bail-churns are and may be produced in which my improved fastening could be applied.

I claim as my invention—

1. The combination, with a churn, of a removable head, a pair of bails for holding the head in position on the churn, and a fastening provided with an arm having its inner face inclined and notched, the said fastening engaged at each end with said bails, substantially as set forth. 85 90

2. The combination of a churn, a removable head, a pair of bails holding the head in position on the churn, and a fastening connecting the bails, said fastening having a pivotal connection with one bail and a hook-connection with the other bail, said hook provided with serrations or notches to receive the bail, substantially as set forth. 95

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