No. 39,600.

H. P. WESTCOTT.

Churn Dasher.

Patented Aug. 18, 1863.



Witnesses: Cha A Nash Elgspaulding

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UNITED STATES PATENT OFFICE.

HENRY P. WESTCOTT, OF SENECA FALLS, NEW YORK.

IMPROVEMENT IN CHURN-DASHERS.

Specification forming part of Letters Patent No. 39,600, dated August 18, 1863.

To all whom it may concern:

Be it known that I, HENRY P. WESTCOTT, of the village of Seneca Falls, in the county of Seneca and State of New York, have invented a new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which-

Figure 1 is a perspective view. Fig. 2 represents in perspective a portion of a similar churn with two barrels worked with one lever, and Fig. 3 is a perspective view of the dashers.

My improved churn is constructed and operated as follows:

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The barrel g is made of staves and hooped in the usual manner, or of other suitable material, nearly cylindrical in form, and rests upon the cast-iron frame e, into which it enters about half an inch, resting on a flange the barrel steady, and yet allow it to be removed from the frame with facility. The frame e is supported by four short feet, fixed in projecting portions thereof, through one of which projections is a slot or mortise, in which is secured by a tenon and key the standard c. This standard may be of wood or metal, and is perpendicular to the frame, rising to a convenient height above the barrel to support the lever b, one end of which is connected with the standard c, at the top of the same, by a bolt which passes through two ears at the top of the standard and through the lever, near one end, so as to form a joint by which the lever b may be moved upward and downward, the said bolt being its fulcrum. Over the center of the barrel the lever b has a slot or open mortise through it, and through which passes the flattened end of the dasher-rod a, which is connected with the lever b by the pin f. The mortise is long enough to allow free action to the lever. The dasher-rod a is made of wood, cylindrical in form, and has a screw-thread cut upon it from near the lower end thereof to a point at the level of the cover of the churn, when the lever is raised up as high as it ordinarily rises in use. Above this screw-thread the dasher-rod is diminished in diameter by the amount occupied by the screw-thread, or a little more. The dashers j and h, Fig. 3, are constructed |

of wood or other suitable material. The lower dasher, j, is made in any of the ordinary forms used in the dasher-churn, and is fastened on the lower end of the dasher-rod a. The adjustable dasher h is constructed with its upper surface, as shown in the drawings, in the form of a truncated cone, the lower part being hollowed out so as to leave the thickness of about threeeighths of an inch at the outer edge, and increasing to an inch or a little more at the center, its thickness varying with the size of the churn. At the center a cylindrical hole through the dasher h is surrounded by a female screw, which fits the screw on the dasherrod a, on which it is screwed and may be moved upward and downward at pleasure and fastened at any convenient height by means of the nut I and adjusted to the quantity and condition of the cream in the churn. This dasher may be conveniently turned out of soft maple in a common lathe. Two or more rows projecting inward on the frame, so as to hold | of holes, *i i*, are bored through the adjustable dasher h in a direction nearly at right angles with the upper surface of the dasher, the rows commencing at a convenient distance from the outer edge and extending around the dasher. A dasher of eight inches in diameter may be two and a half inches in height, and twenty-six holes of seven-eighths of an inch diameter each will be sufficient. These proportions may be varied to some extent. The nut I is an ordinary wooden nut for the purpose mentioned. The cover d is in the ordinary form, resting in a rabbet in the upper end of the barrel g. The spring k is for the purpose of assisting the upward motion of the lever b. The object of the peculiar form of the dasher h is partly to carry air into the cream, and also to give by means of the direction of the holes through it a motion to the cream outward toward the side of the churn, while in forcing the cream through the holes, which are diagonal to the line of motion of the dasher, it agitates it more than if their direction were parallel with the perpendicular of the churn. The advantages of the adjustable dasher h_{1} in combination with the dasher j, as described, consist, mainly, in being able to act perfectly on any quantity of cream in the churn, larger or smaller, with about the same sweep of the lever, giving more leverage with less sweep than a single dasher. The advantages of making the dasher h ad-

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justable consist in the facility with which its position is adapted to the varying quantity and condition of the cream in different churnings and to the changes it undergoes in the same churning, by which means the quantity of butter is increased and its quality much improved.

2

In operating my improved churn the adjustable dasher h is moved along the screw by turning the dasher around to a position which is on the level of the cream in the churn, when the dasher is raised to the height to which the lever raises it in use. At the commencement of the churning, should the cream swell, it is again raised, and lowered if the cream shrinks, the aim being to keep its relative position to the surface of the cream nearly as indicated during the progress of churning. I sometimes reverse the position of the adjustable dasher h, putting the apex of the cone downward, but usually use it as exhibited in the drawings.

The principal effect of the lower dasher, j, besides assisting in gathering the butter, is in bringing up the cream to the surface, and experience has shown that the agitation of the cream must be kept up at the surface in order to make good butter, which is effected with more certainty and less labor by the means described than by any other means heretofore known and used.

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I do not claim the whole of the churn described as my invention; but

What I claim as my invention, and desire to secure by Letters Patent, is-1. The dasher h, constructed and made adjustable, as and for the purpose set forth. 2. The adjustable dasher h, in combination with the dasher j, or its equivalent.

HENRY P. WESTCOTT.

Witnesses: BENSON OWEN, JOSEPH NEWBOLD.

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