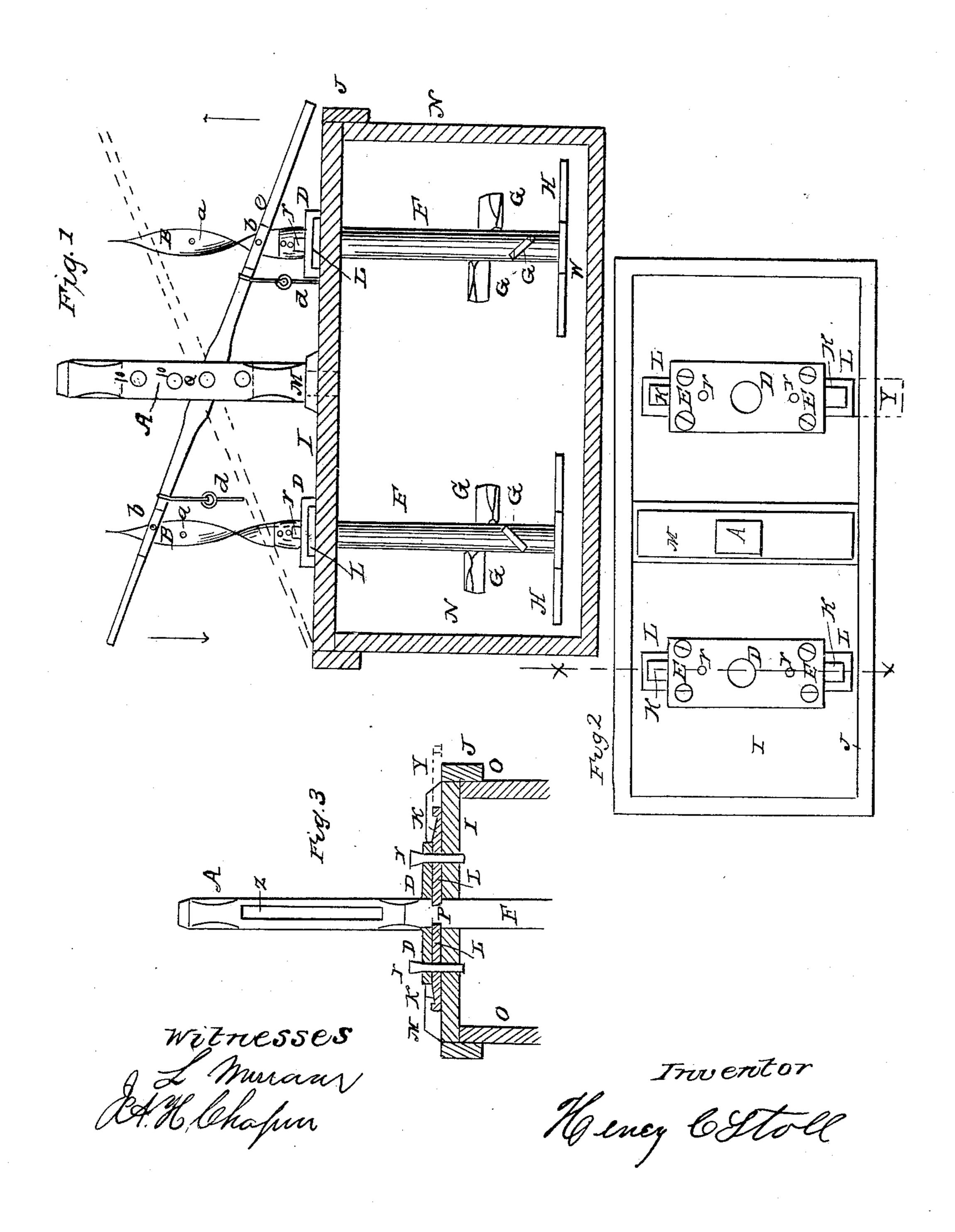
## H. C. STOLL.

Churn.

No. 57,794.

Patented Sept. 4, 1866.



## UNITED STATES PATENT OFFICE.

HENRY C. STOLL, OF MOKENA, ILLINOIS.

## IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 57,794, dated September 4, 1866.

To all whom it may concern:

Be it known that I, Henry C. Stoll, of Mokena, Will county, in the State of Illinois, have invented an Improved Churn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal elevation of my improved churn with one side of the churn-box removed for the purpose of showing the dashers. Fig. 2 is a plan view of the same with the gearing removed. Fig. 3 is a transverse section of the churn, taken in the plane indicated by the red line X X, and also shows an elevation of the standard A.

The object of my invention is to construct a churn in such a manner that the two dashers may be made to have an up-and-down motion, a reverse rotary motion, and, further, so that either dasher may have an up-and-down motion while the other has a reverse rotary motion.

The object to be gained by the use of this arrangement in the motion of the dashers is the securing in one churn all the facilities for giving the proper friction to the cream for separating the butter and gathering it into a body when separated.

To enable others skilled in the art to make and use my invention, I will describe the method of making and using the same.

W represents the bottom, N the ends, and O the sides, of the common churn-box. I shows the movable top of the box, resting in the rabbet formed by the part J, projecting the thickness of the top or lid above the ends and sides of the box—a very common construction in boxchurns.

D represents supports, of wood or of other suitable material, secured to the lid I by means of the screw E, used both for holding the dashers F in a vertical position and the slide L in a convenient position in the groove on the under side of the support.

It will be seen by the dotted lines Y, Fig. 3, that if the pin r be removed the slide L may be drawn out of the annular groove P, made in the dasher-rod F. The object of this an-

nular space P is to receive the end of the slide L when the dasher-rod F is required to have a reverse rotary motion.

G represents the wings of the dasher-rod, and H the common dashers, secured to the rod in the usual manner. M shows the part secured to the lid I by any common means, and supports the slotted part or standard A.

C represents the lever passing through the slot Z in the standard A, and is held in position by means of the common pin Q. 10 shows holes made through the standard A for the purpose of receiving the pin Q when it is required to change the motion of the dasherrods.

B B represent thin pieces of iron or steel, twisted so as to give a reverse rotary motion to the dasher-rods when the ends of the lever C are alternately moved up and down. To accomplish this the twisted parts B are let into a mortise made in the tops of the standards F, and secured by means of bolts or rivets; and two slots are made vertically through the lever C, of such size as will pass over the twisted parts B and turn the rods F.

a are holes made in the parts B, which may be made to correspond with the holes b, made through the lever C.

The object of the holes is to receive the pin d when an up-and-down motion is required of the rods F.

Operation: The drawings at Fig. 1 represent the churn adjusted for giving the rods a reverse rotary motion. The lid can be removed and the cream put in the box in the usual manner. The operator must then grasp hold of the end of the lever C either side of the standard A, and work it up and down until the butter is ready to gather. The lever C must then be placed in a horizontal position, which will allow the pin d to be put through the holes a b and secure the lever and the twisted part together. The pins rmust then be removed and the slides drawn out, which will allow the dashers F to be alternately worked up and down in the same manner as the common double-dasher churn. The lever C must be worked in the same manner as before until the butter has been gath- | 2. The combination of the support D, slide

ered.

Having thus described my invention, what I claim as new, and desire to secure by Letters | HENRY C. STOLL.

twisted parts B with the lever C and stand-ard A, as set forth.

A. H. Chapin.

L, and dasher-rod F, substantially as described.