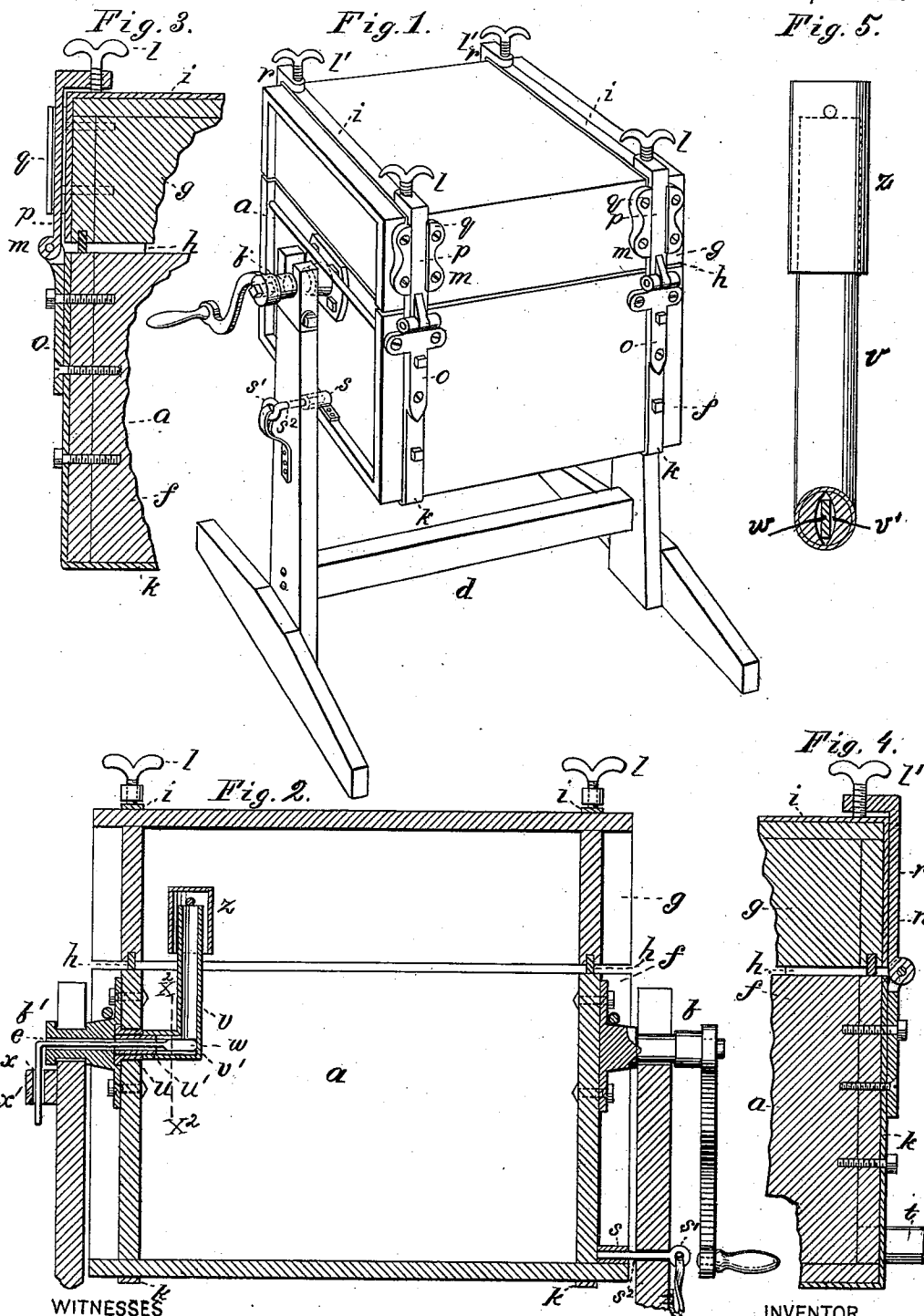


(No Model.)

A. C. CLARK.
CHURN.

No. 308,240.

Patented Nov. 18, 1884.



WITNESSES

Villette Anderson.
John Thonow.

INVENTOR

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UNITED STATES PATENT OFFICE.

AMASA C. CLARK, OF MANCHESTER, IOWA.

CHURN.

SPECIFICATION forming part of Letters Patent No. 308,240, dated November 18, 1884.

Application filed August 24, 1883. (No model.)

To all whom it may concern:

Be it known that I, A. C. CLARK, a citizen of the United States, residing at Manchester, in the county of Delaware and State of Iowa, have invented certain new and useful Improvements in Churns; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a perspective view. Fig. 2 is a vertical sectional view of the same. Figs. 3 and 4 are detail sectional views showing the clamp-hinges; and Fig. 5 is a sectional view of the ventilator, taken on the lines x^x of Fig. 2.

This invention has relation to rotary churns; and it consists in the construction and novel arrangement of devices, as will be hereinafter fully described, and particularly pointed out in the claims appended.

Referring by letter to the accompanying drawings, a designates a rectangular box or churn-body, provided at its ends with the journals b and b' , which have their bearings in the tops of the uprights c and c' of the frame d . The journal b' has an aperture, e , extending longitudinally through it, for a purpose hereinafter explained.

f designates the body of the box a , and g the cover hinged thereto, as shown. The lower edges of the cover g are provided with a packing, h , of leather, which, when the cover is closed down, rests upon the upper edges of the body f of the box. The cover g is made deep, as shown, in order that when it is turned open it may serve as a butter-bowl, and is of a size with relation to the body f that will hold all of the butter produced at a single churning. Both the body f and cover g are bound near each end with metallic straps i and k , which give the parts additional strength, and serve as bearing-plates for the points of the thumb-screws l , employed in the angles of the clamp-hinges m and the hinged clamps n . The lower leaves, o , of the clamp-hinges m are

secured to the rear wall of the body portion f , while the upper arms or leaves, p , work in guides q , secured to the rear wall of the cover g , as shown, thereby permitting the cover g to have a slight vertical movement up or down, in order to tighten and loosen, when necessary, the pressure on the packing h when the cover is closed. The lower portions of the hinged clamps n are secured to the front wall of the body f , and their arms r are adapted to be turned up, so that the thumb-screws l in their angular ends are carried over the top of the cover in line with the metal straps i , and may be screwed down to assist in compressing the packing, and also to lock the cover firmly in place. The body f is provided at one end with a socket, s , for the reception of a pin, s' , which is passed through a perforation, s'' , in the upright of the frame into said socket to hold the churn-body in a horizontal position and prevent it from turning, when desired, and especially when the cover is in use as a butter-bowl. t designates a tube or outlet, through which the buttermilk and cleansing-water may be drawn at the proper time. In an opening in the end of the body f , and in line with the opening e in the journal b' , is rigidly set a tube, u , into which a second tube, u' , telescopes water-tight. To this tube u' the ventilator v , which is provided with an elongated socket, v' , in its interior in line with the opening e in the journal b' , is secured, and is prevented from turning with the churn by a key-rod, w , the inner end of which is rectangular to fit the socket v' , and its outer end is bent down at a right angle to the stem, and rests in a vertical perforation, x , in a block, x' , on the upright of the frame immediately below the journal b' . z is the ventilator-cap.

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

1. In a rotary churn, the combination, with the body f and the cover g , carrying the packing h , of the clamp-hinges, carrying thumb-screws in their angular ends, the upper portions of said clamp-hinges working in guides secured to the rear wall of the cover, and the hinged clamps secured to the front wall of the

body *f*, carrying thumb-screws in their angular ends, and adapted to be turned over upon the top of the cover and secured by the thumb-screws, substantially as specified.

- 5 2. In a rotary churn, the combination, with the journal *b'*, having the longitudinal aperture *e*, with the fixed tube *u*, the telescoped tube *u'*, the ventilator *v*, having an elongated socket, *v'*, the key-rod *w*, fitting the socket in
10 the ventilator, and its outer bent end engag-

ing the perforation *x* in the block *x'*, secured to the frame below the journal *b'*, substantially as specified.

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

AMASA C. CLARK.

Witnesses:

CHAS. E. BRONSON,
FRED. F. CARY.