

F. BLECKA.
CHURN.

No. 66,122.

Patented June 25, 1867.

Fig. 1

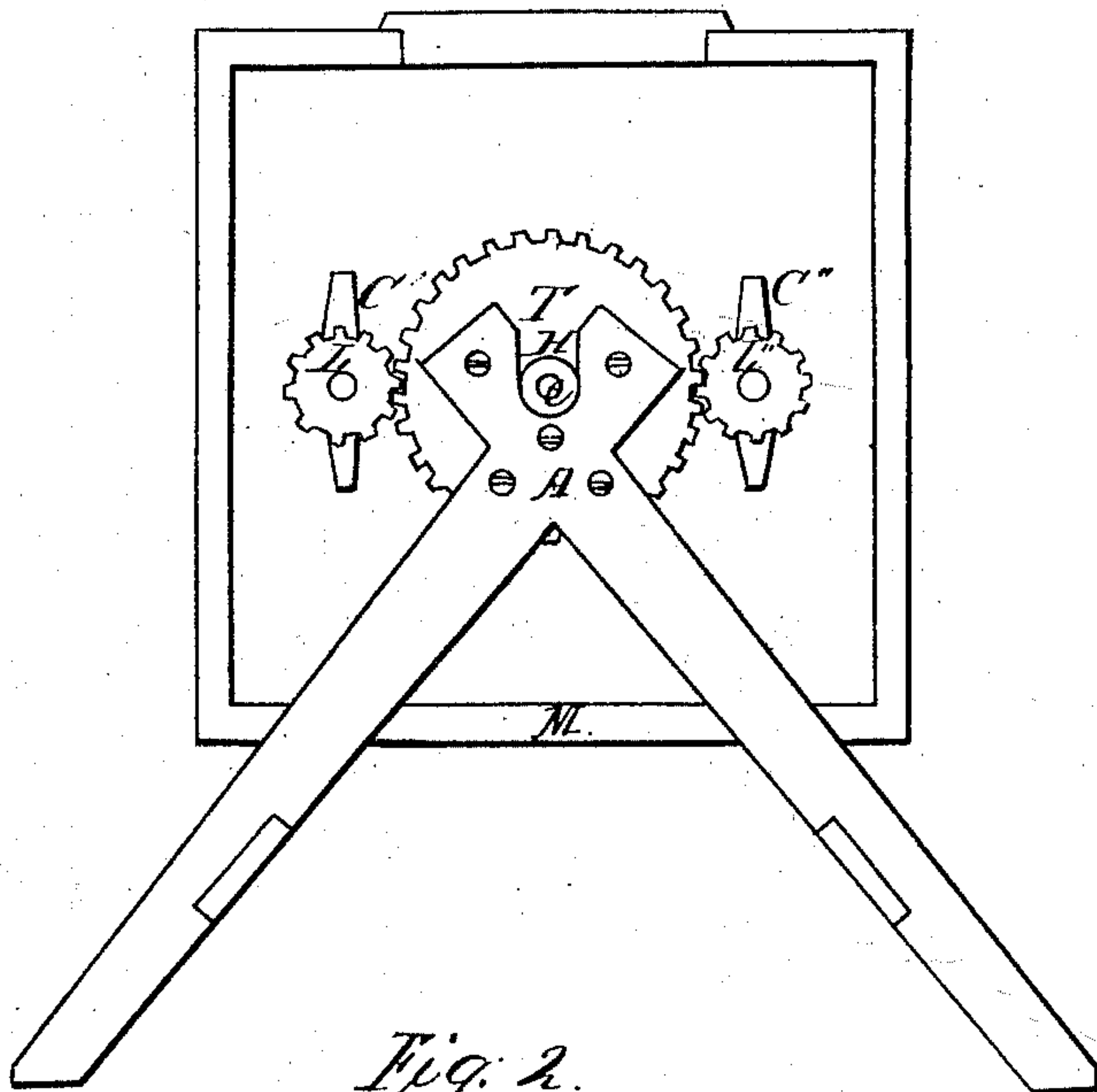
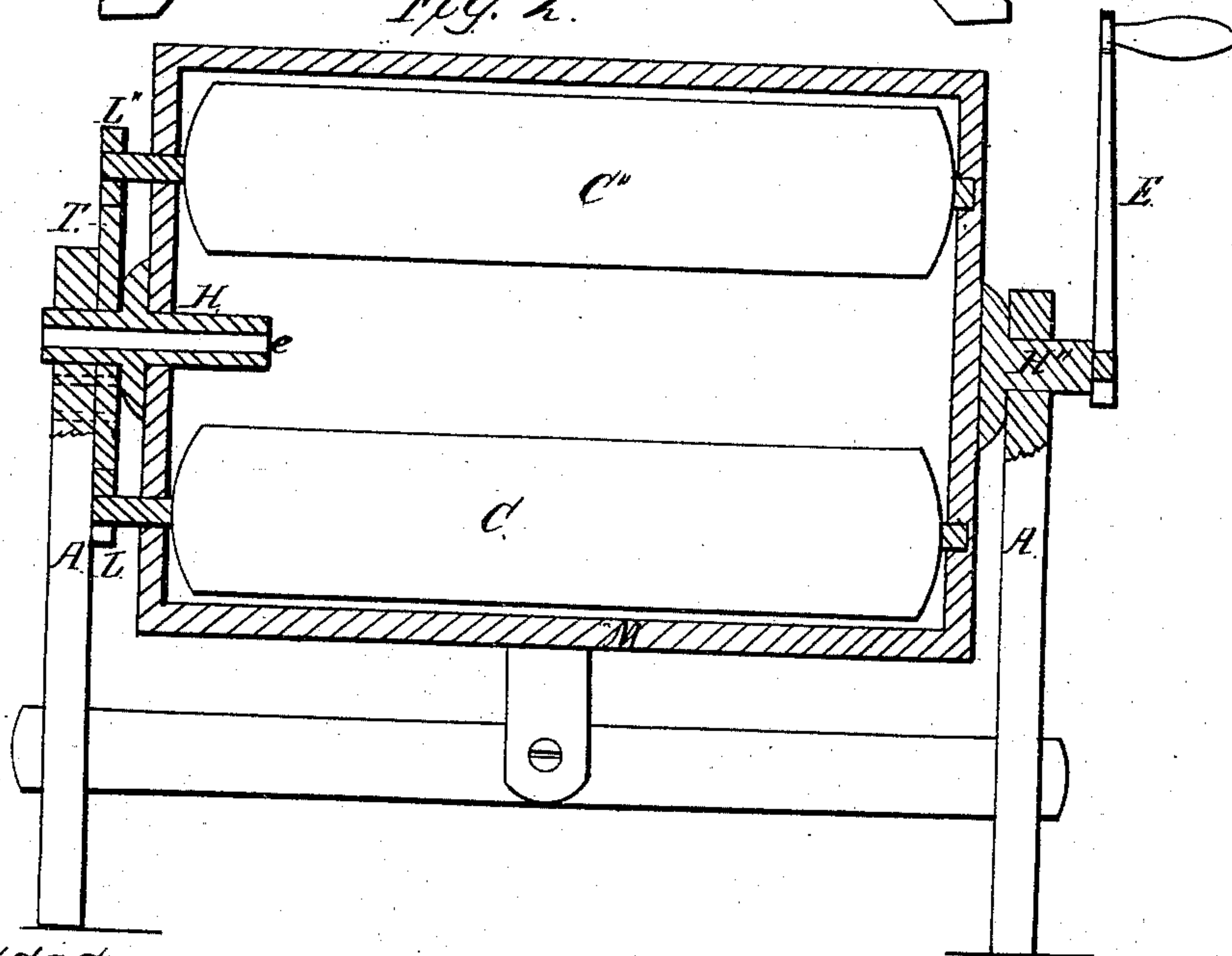


Fig. 2.



Witnesses;
A. H. Sherburne
B. Burritt

Inventor;
Frank Blecka

United States Patent Office.

FRANK BLECKA, OF ELGIN, ILLINOIS.

Letters Patent No. 66,122, dated June 25, 1867.

CHURNS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN :

Be it known that I, FRANK BLECKA, of Elgin, in the county of Kane, and State of Illinois, 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, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a vertical transverse section through the machine, showing the plan of gearing.

Figure 2 is a vertical longitudinal section through the same.

Similar letters of reference, where they occur in the separate figures, denote like parts in each of the drawings.

My invention relates to an improvement in that class of rotary churns wherein the case or body of the churn is made to revolve; and the nature of my improvement consists in so arranging a series of horizontal blades within the case as to give each an independent opposite rotating motion as the case is revolved.

To enable others skilled in the art to construct and use my invention, I will proceed to describe the same with reference to the drawings.

A represents the frame, and M the case or body of the churn, the same being provided at each end with shafts H H'', which rest in vertical grooves cut in the upper part of the frame, (at opposite sides,) forming the bearings upon which said case revolves. Within said case are blades or agitators, C C'', passing horizontally the entire length of the case, and are provided at each end with shafts or bearings which pass through boxes in the end of the case. Attached to one end of the shafts of the agitators C C'' are pinions, L L'', which gear with and take into a gear-wheel, T, which is loose upon shaft H, and firmly bolted or otherwise attached to the inside of the frame.

The objects of this style of arrangement are several: first, the case having a rotating motion the heft of the same, when once set in motion, acts as a balancing power, thus a proper motion is attained; and second, the agitators having an independent and opposite rotating motion to that of the case subjects the cream equally to the required degree of agitation.

It is found beneficial to admit cool air into the cream while churning. For this I form a cavity in shaft H longitudinally, as shown at e, fig. 2.

The operation is as follows: The cream to be churned is placed in the case cover m, being tightly closed; the case is then given a rotating motion by means of crank E, thus causing agitators C C'' to revolve with the case, pinions L L'' thereon gearing with wheel T of frame A, causing said agitators to rotate independently and in opposite direction to that of the case, thus subjecting the cream to the required degree of agitation to produce the butter in the shortest possible space of time.

Having thus described the nature and object of my invention, I disclaim the mere rotation of the case broadly considered; but what I do claim as new, and desire to secure by Letters Patent, is:—

Agitators C C'', pinions L L'', and wheel T, when used in combination with a rotating case, substantially as and for the purpose set forth.

FRANK BLECKA.

Witnesses:

N. H. SHERBURNE,
B. BURRETT.