

E. L. GILMAN.

Churn.

No. 69,653.

Patented Oct. 8, 1867.

FIG. 1.

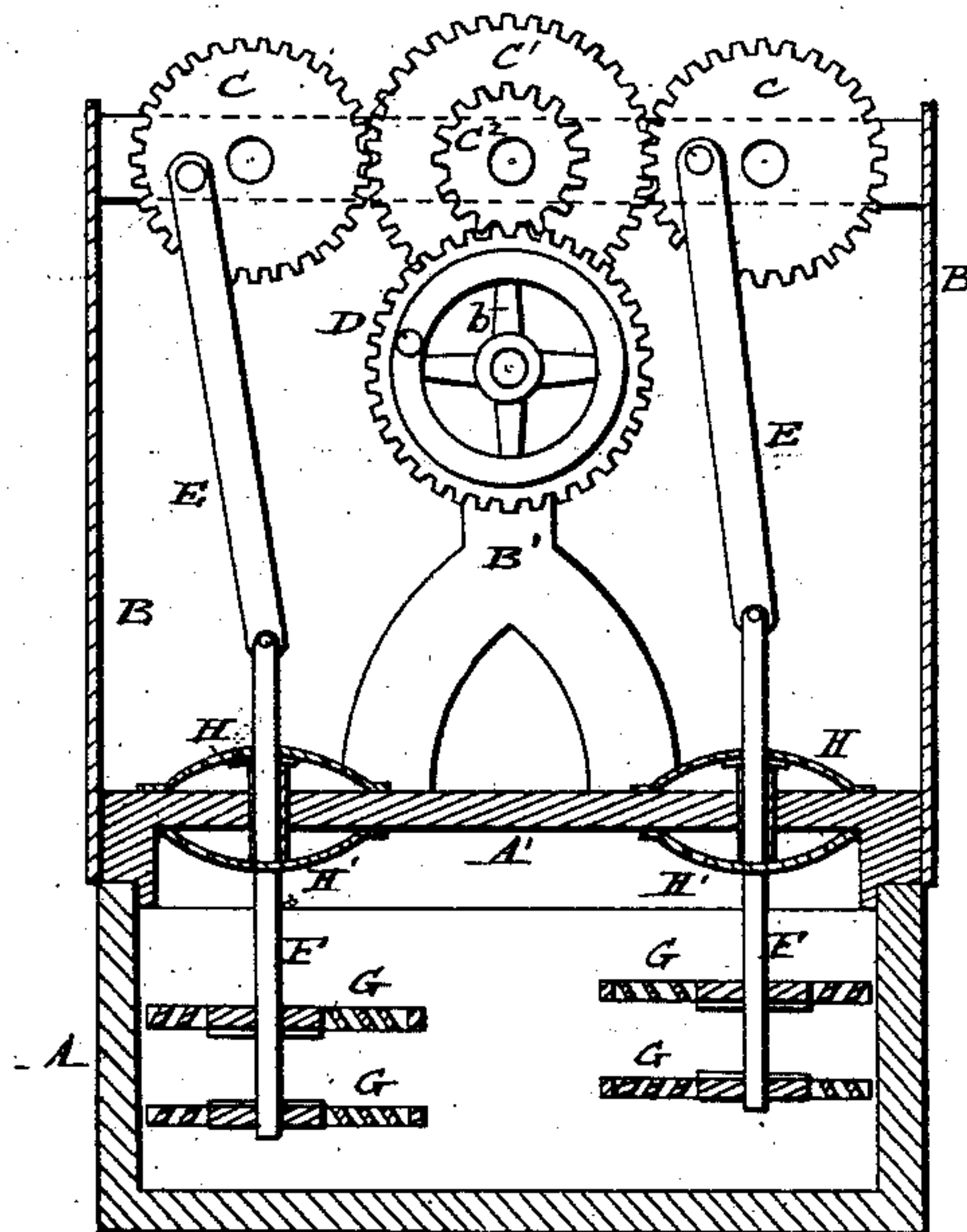
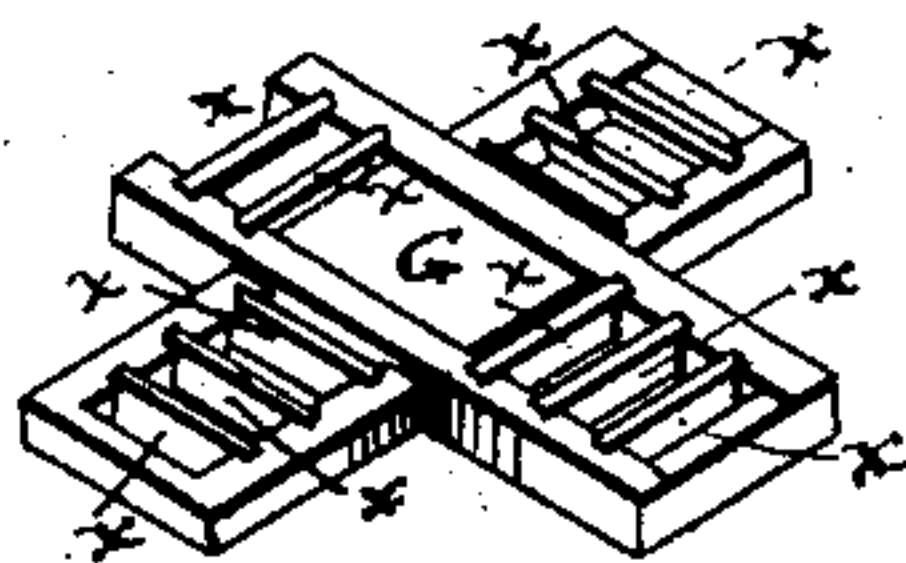


FIG. 2.



WITNESSES.

Witnesses:
S. L. Smith

INVENTOR:

Edward L. Gilman
per
Alexander Mason
Atty.

United States Patent Office.

EDWARD L. GILMAN, OF SOMERVILLE, MASSACHUSETTS.

Letters Patent No. 69,653, dated October 8, 1867.

IMPROVEMENT IN 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, EDWARD L. GILMAN, of Somerville, in the county of Middlesex, and in the State of Massachusetts, have invented certain new and useful Improvements in Churns; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

In the annexed drawings A represents the churn-box, which is oblong or any other suitable form, having a lid, A', through which the dasher-shafts are passed. This lid has a suitable frame, B, secured upon it, upon which are two cog-wheels C C, with an idle-wheel, C¹, between them, and a small cog-wheel, C², upon the front of the idle-wheel C¹. These wheels are connected to this frame so as to readily revolve. B' represents bearings secured to each side of the lid A', through which is passed a horizontal shaft having a cog-wheel, D, so placed as to mesh into the small cog C², and is also provided with a balance-wheel, b, with crank for revolving the wheels. Each of the wheels C has a pin on its face, to which are connected the pitmen E E. F F represent the dasher-shafts, which are secured to the lower ends of the pitmen, and pass through the cover, so as to project into the churn-box. Connected to the extremities of these shafts, a short distance from each other, as shown, are two dashers, G G. Said dashers are constructed somewhat in the form of two ordinary window-shutters, crossing each other at their centres. The slats x x x in these dashers are set at a suitable angle, and the dashers placed upon the shafts so that the upper dasher-slots will be at opposite angles, allowing the cream to flow inwards towards the dasher-shaft through the lower dasher-slats, and then outwards from the shaft through the upper dasher-slats. H H' represent two metallic perforated cups placed above and below the lid A', having a suitable opening and thimble for the dasher-shaft to pass through the centre. These cups are used for the purpose of guiding and keeping the shaft F in position, and by means of the perforations in the lid A' allow the ingress of air on to the cream, and prevent the egress of the cream.

It will be seen that by turning the crank-wheel b, motion is imparted through wheel D to wheel C², wheel C¹, and wheels C C, thereby causing the pitmen to work simultaneously up and down, causing the dasher-shaft to work the dashers and the cream.

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

1. The dashers G G, constructed as described, and used with the shaft F, in the manner and for the purposes set forth.

2. The cups H H', perforated as described, and used upon the lid A', with the dasher-shaft F, in the manner specified.

3. The arrangement of the frame B upon the lid, with wheels C C C¹ C², pitmen E E, with their dashers and shafts operated by the wheel D, in the manner and for the purposes described.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of July, 1867.

EDWARD L. GILMAN.

Witnesses:

HENRY HAIGHT,
SAML. SOULE.