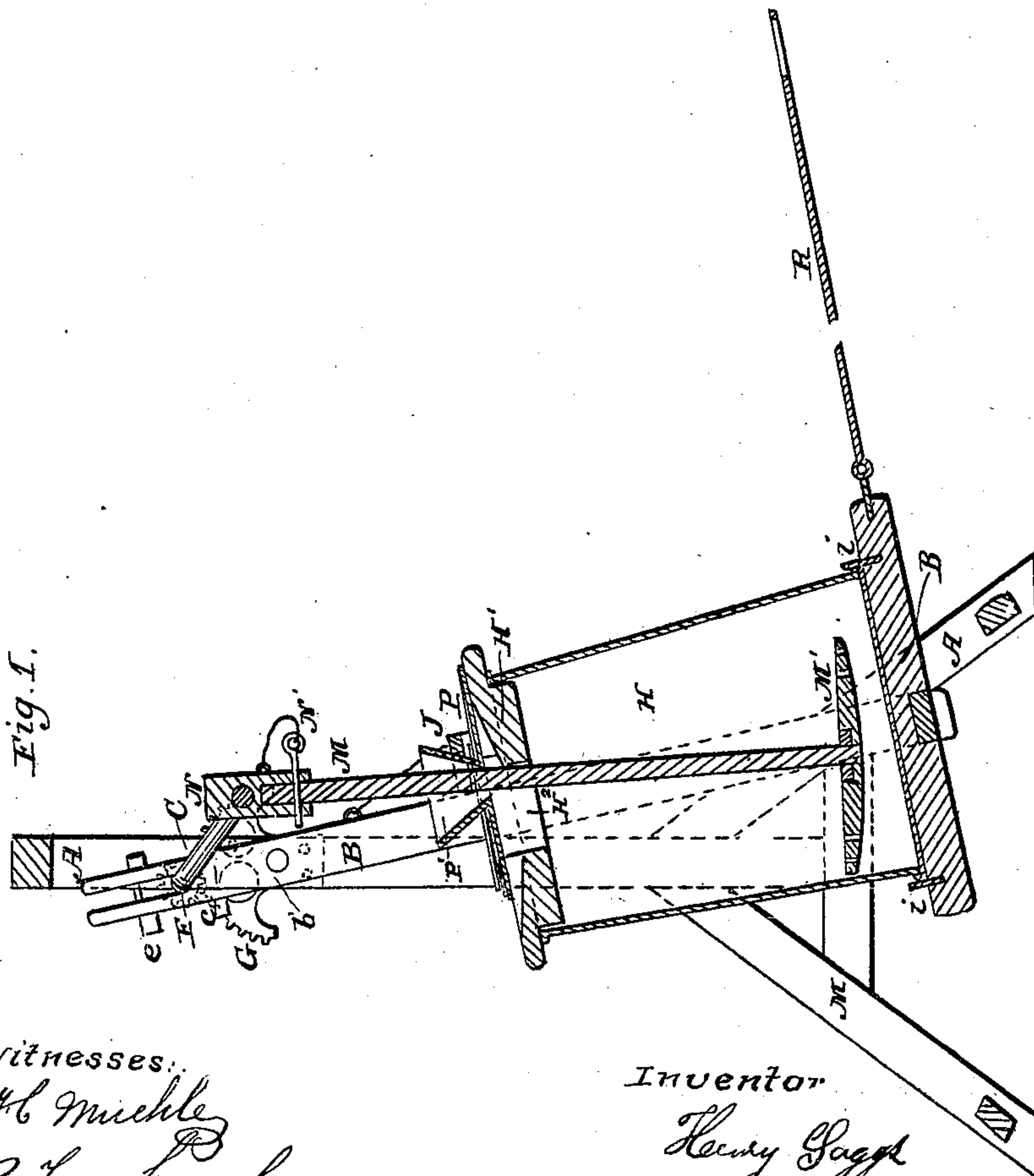
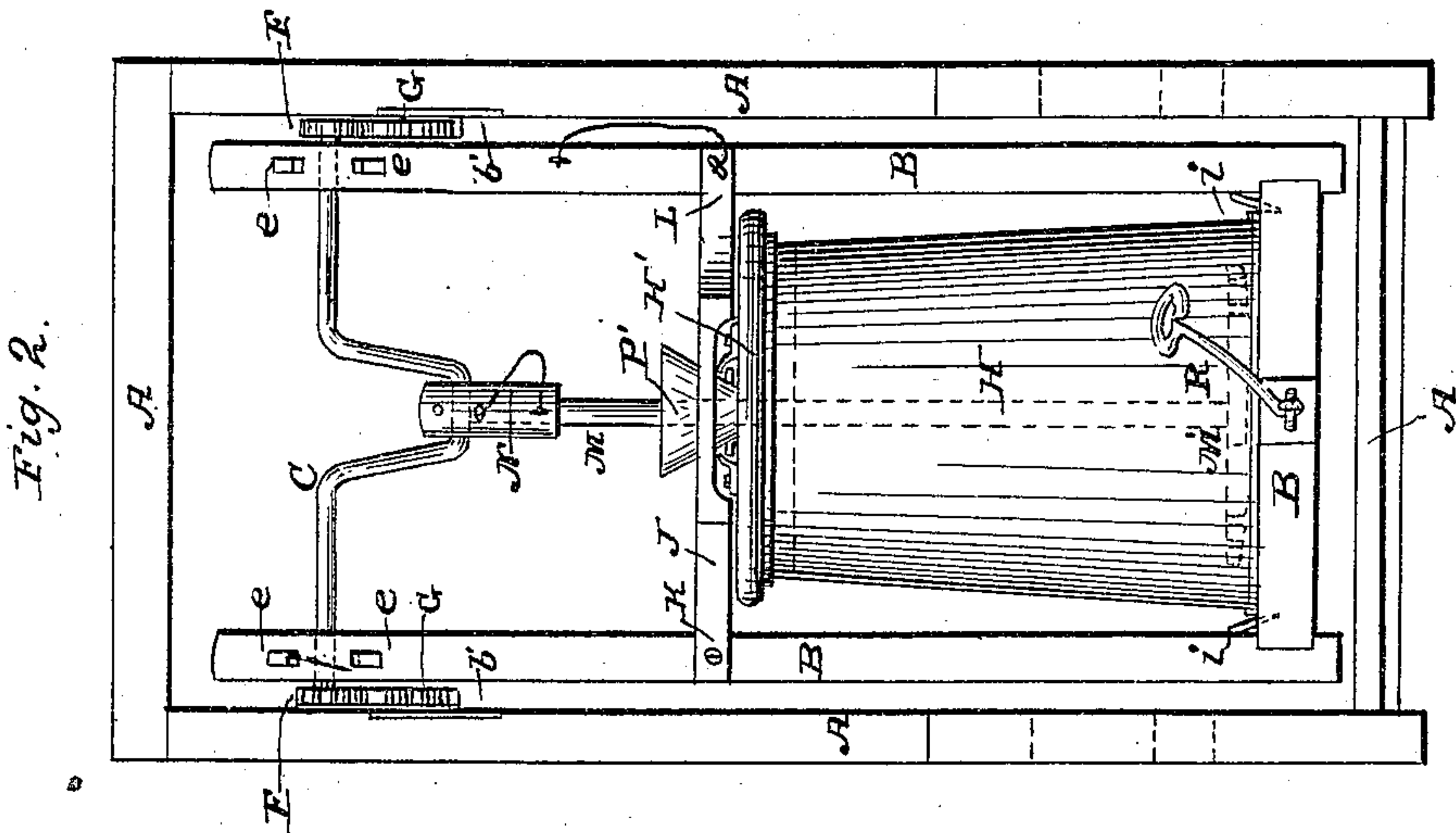


H. SOGGS.

Device for Operating Churns.

No. 40,775.

Patented Dec. 1, 1863.



Witnesses:
B. H. Mickle
E. B. Forbush

Inventor
Henry Soggs

UNITED STATES PATENT OFFICE.

HENRY SOGGS, OF COLUMBUS, PENNSYLVANIA.

IMPROVEMENT IN DEVICES FOR OPERATING CHURNS.

Specification forming part of Letters Patent No. 40,775, dated December 1, 1863.

To all whom it may concern:

Be it known that I, HENRY SOGGS, of Columbus, in the county of Warren and State of Pennsylvania, have invented a new and Improved Churn; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure I is a vertical section, and Fig. II a front elevation.

The nature of this invention relates to placing and operating the churn in a vibrating frame in such a manner that the swinging of the frame will communicate a twofold perpendicular movement to the dash-blades at each vibration; also, in adapting and operating a sliding cover over the vent in the top of the churn in such a manner that this sliding cover will prevent the cream from escaping through the vent, and at the same time keep the vent open for the ingress and egress of the air.

Letters of like name and kind refer to like parts in each of the figures.

A represents a movable self-supporting frame, which may be built of light wood in a common manner, so that it may be moved from place to place, and used at any place about the house where it may be most convenient.

B represents a vibrating or swinging frame, which is connected with and inside of the frame A, so that it may swing upon the fulcrum-pins *b'*. Near the top of this frame is placed a crank, C. This crank works in adjustable journal-boxes, which are placed in slots in the upper ends of the frame-posts. These boxes are made adjustable by means of wedges *e*, passing through the posts above and below the boxes. On either end of the crank-shaft is a pinion, F, which works in a gear-segment, G, to give motion to the crank. The gear-segment is made fast to the frame A.

H represents the churn, which may be of any common form and material. It is placed upon the bottom pieces of the swinging frame, and is held in place by means of the pins *i* and the clamp J. One end of this clamp is connected to the frame by means of a screw-bolt, K, upon which it may turn up to a perpendicular position when the churn is put in or taken out of the frame. When the churn

is put into the frame, this clamp is brought down so as to rest upon the top of the churn and hold it down firmly, the opposite end being held by the pin L.

M represents the dash-rod and M' the dash-blades, which are of ordinary construction.

N is a journal-box, which forms the connection between the crank and the dash-rod. The lower end of this box is prolonged and made hollow, so that the end of the dash-rod may enter therein and be held by the pin N'.

H' represents the cover of the churn, which is made to fit snugly, so that the cream or milk cannot escape. This cover has a large opening or vent, as shown at H², the wood contiguous to the opening being beveled off, so that what cream or milk may be thrown up through the vent will run back again into the churn. A sliding cover, P, having a funnel-shaped mouth, P', through which the dash-rod passes, is placed over the vent, so that as the churn vibrates the dash-rod will cause this cover to move back and forth over the vent in a manner to prevent the escape of the cream or milk, and at the same time keep the vent open for the admission of air.

R is a rod or cord connected to the swinging frame, and extending a sufficient length to enable a person by means of it to sit or stand at some distance from the churn and give it a swinging motion.

Operation: The cream is put into the churn and the dash put into its place in the churn and the cover put on. The churn is then set into the swinging frame, and the pins *i* put into their proper holes and the clamp J brought down to its place and fastened by the pin L, so that the churn will be held firmly in its place in the frame. The dash-rod is then connected to the journal-box N and held by means of the pin N'. The operator will then cause the frame B to vibrate or swing upon the pins *b'* by means of a push or pull upon the rod R. This swinging of the frame will cause the pinions F to move over the segment-gear G, and thereby give the proper motion to the crank-shaft to move the dash-blades quickly up and down in the cream, a double movement or two up and two down motions being communicated to the dash-blades at each vibration of the frame. This also gives a compound motion to the cream—*i. e.*, the swinging of the

churn with the frame will give the cream a wave motion and the dash-blades a quick percussive motion. The distance the frame may swing is controlled by the operator. He may give it a full sweep, so as to cause the pinions to travel over all the cogs in the gear-segment, or any less distance, and thereby obtain such motion of the dash-blades and cream as may be desired. The labor is quite easy and the "churning" is quickly done. The vent-cover P will slide back and forth sufficiently to allow the dash-rod to play up and down perpendicularly, or nearly so.

What I claim as my invention, and desire to secure by Letters Patent, is—

Placing and operating the churn H in the swinging frame B, (including the necessary operating mechanism,) in combination with the sliding vent-cover P P', so that the vent-cover will slide back and forth on the top of the churn, and allow the dash-rod a free perpendicular play, substantially as described.

HENRY SOGGS.

Witnesses:

B. H. MUEHLE,
E. B. FORBUSH.