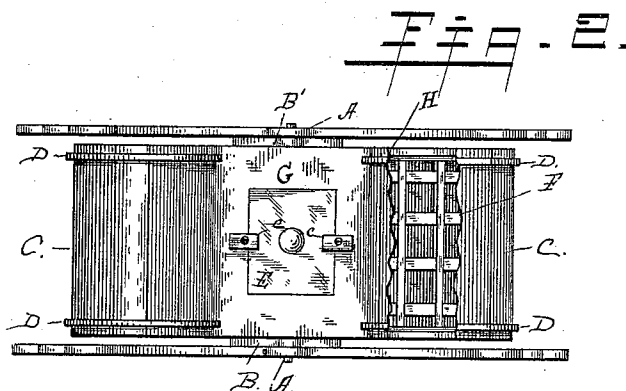
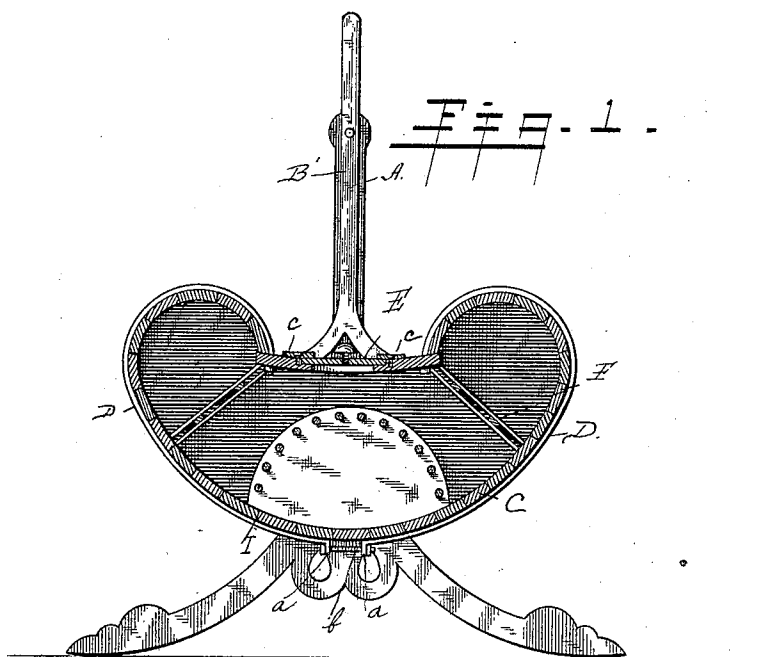


(No Model.)

H. G. ELLSWORTH.
CHURN.

No. 466,072.

Patented Dec. 29, 1891.



Witnesses

Just Blackwood
my Claret

By *his* Attorneys

Inventor
Hiram G. Ellsworth
Smith & Clay

UNITED STATES PATENT OFFICE.

HERMON G. ELLSWORTH, OF LOCKPORT, NEW YORK.

CHURN.

SPECIFICATION forming part of Letters Patent No. 466,072, dated December 29, 1891.

Application filed November 19, 1889. Serial No. 330,835. (No model.)

To all whom it may concern:

Beit known that I, HERMON G. ELLSWORTH, a citizen of the United States, residing at Lockport, in the county of Niagara and State of New York, 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.

My invention relates to certain new and useful improvements in churns.

The nature of the invention will be understood from the following description when taken in connection with accompanying drawings, in which—

Figure 1 is a longitudinal section through the churn, and Fig. 2 a top plan thereof with a portion broken away.

In the drawings, A A represent two standards, which are suitably expanded at their lower ends to form feet, and thus give a steady support to the churn.

B B' are two arms, which are pivoted to the upper ends of the standards, the arm B preferably reaching to the top of the standard, to which it is pivoted, and the arm B' extending a suitable distance above its standard, thus forming a handle by means of which the churn may be operated.

Arms B B' are secured at their lower ends to the body of the churn C upon opposite sides thereof and at points equidistant from the ends thereof.

The churn-body is of a peculiar form, approximately as illustrated in Fig. 1 of the drawings, and comprises the flat top G, the vertical side walls H, and the longitudinally-curved transverse wall I, which wall forms the bottom of the body and continues up above the horizontal plane of the flat top G, and is then curved inwardly and downwardly, and is connected to said flat top G at the transverse edges thereof, whereby it will be seen that two wings are afforded at each end of the churn, which extend above the plane of the flat top thereof, for a purpose presently pointed out. The transverse wall I is preferably formed of a series of staves D, which are arranged edge to edge and are held in position and tightened or relaxed by means of bands

D, which are connected at one end to the flat top G and take around upon the outside of the body to the bottom thereof, where their ends are angularly bent at *a* to receive connecting and adjusting bolts *f*, as better illustrated in Fig. 1 of the drawings.

Arranged diagonally within the churn-body and extending from the transverse ends of the flat top F in an outward and downward direction to the transverse wall I are open-work frames F, which, by reason of their location, serve to separate the wings of the body from the main portion thereof and serve to break the cream as it is thrown up into the wings.

By the peculiar construction of the body embodying the wings it will be readily perceived that when said body is swung an upwardly-curved impetus will be imparted to the cream, which will dash up through the frames F and strike against the upper curved wall of the wings, whence it will be sprayed or dashed back through the frames. Thus it will be seen that at each movement of the body the cream will be greatly agitated and the formation of the particles of butter accelerated. In the flat top G, I cut a rectangular opening, which is normally closed by the door E, fastened by the turn-buttons *c*, through which opening the charge of cream is poured into the body.

I am well aware of the patent granted to G. W. Cook February 28, 1844, numbered 3,460, which discloses a working-body churn of approximately semicircular form depressed in the middle of its top, so as to afford upper end wings, and which also discloses open-work frames within the body between the main portion and end wings thereof, and I therefore make no claim to such construction.

What I claim is—

The working-body churn, substantially as described, consisting of the standards A, the arm B', pivotally connected at its upper end to the upper end of one of the standards and connected at its lower end to the churn-body, the arm B, pivotally connected at an intermediate point in its length to the other standard at the upper end thereof and connected at its lower end to the churn-body, the said churn-body comprising a flat top wall, two vertical side walls, and a longitudinally-curved

transverse wall forming the bottom of the
body, said curved transverse wall being curved
up above the horizontal plane of the flat top
and then curved inwardly and downwardly to
5 the transverse edges of said top, whereby two
wings are formed at each end of the churn
extending above the plane of the flat top, and
open-work frames arranged within the body
between the main portion and wings thereof,

all adapted to operate substantially as and for the purpose specified.

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

HERMON G. ELLSWORTH.

Witnesses:

CHARLES HICKEY,
A. T. HOPKINS.