

924,461.

Patented June 8, 1909.

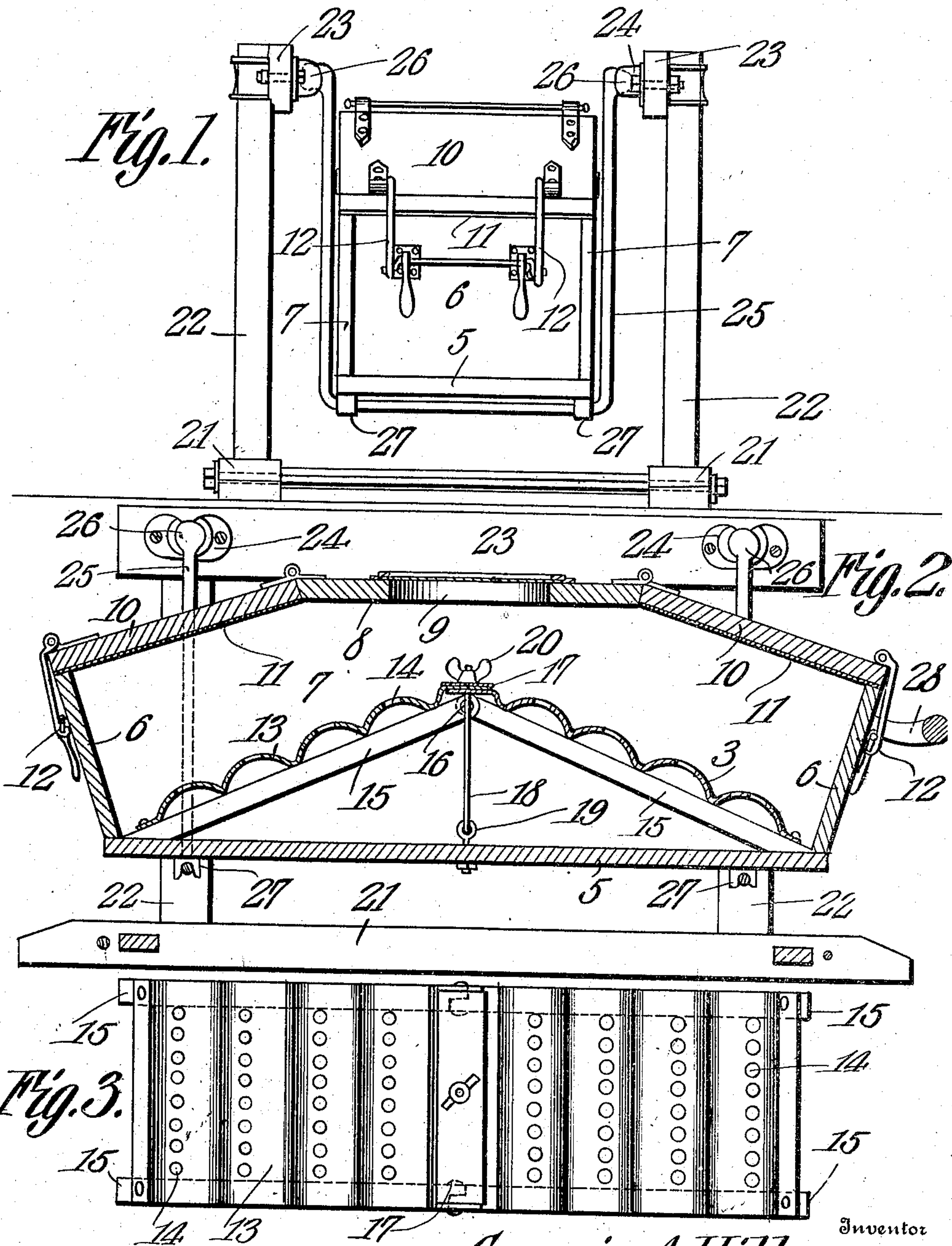


Fig. 3.

Inventor

Georgia A. Hill.

Witnesses

E. J. Hill
W. A. Schmidt

By *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

GEORGIA ANNA HILL, OF TOMLINSON, ARKANSAS.

CHURN.

No. 924,461.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed November 7, 1908. Serial No. 461,558.

To all whom it may concern:

Be it known that I, GEORGIA A. HILL, a citizen of the United States, residing at Tomlinson, in the county of Mississippi and State of Arkansas, have invented a new and useful Churn, of which the following is a specification.

This invention relates to vibrating churns, and has for its object to provide a churn of this kind which is simple in structure, easy to operate, and efficient in action.

The invention also has for its object to provide the churn with a false bottom which is so shaped that it facilitates the formation of butter, and also to make said bottom removable in order that all parts of the churn may be thoroughly cleaned.

With these objects in view the invention consists in a novel arrangement and combination of parts to be hereinafter described and claimed, reference being had to the drawing hereto annexed, in which:—

Figure 1 is an end view of the churn. Fig. 2 is a central longitudinal section. Fig. 3 is a plan view of the false bottom removed.

Referring more particularly to the drawing, the churn-body is a box-like structure comprising a bottom 5, inclined end walls 6, side walls 7, and a top 8—provided with a glazed sight-opening 9, and having at its ends hinged sections or doors 10 through which access to the interior of the churn-body is had. The doors are inclined and are provided with a gasket 11 so that a perfect joint may be obtained. Suitable latches 12 are also provided for holding the doors tightly closed during the churning operation.

The churn-body contains a false bottom comprising corrugated sheet-metal plates 13 provided with perforation 14, and inclined in opposite direction from the middle of the churn-body toward the ends thereof. The plates are connected at their longitudinal edges to a supporting frame consisting of a pair of bars 15 which are hinged together as indicated at 16. The inner ends of the plates 13 lap and their joint is covered by a plate 17. Through this plate and the lapped ends of the plates 13 passes a rod 18 which is connected at one end to an eye-bolt 19 secured to the bottom 5 of the churn-body, on the inside thereof, and is threaded at its other end to receive a wing-nut 20 which engages the plate 17 for clamping the lap-

ping edges of the plates 13 tightly together. The hinged ends of the bars 15 are spaced from the bottom 5 of the churn-body, and their free ends extend into the corners of said bottom and the end-walls 6 of the churn-body, whereby the aforementioned inclination of the false-bottom is had. The rod 18 securely holds the same in place.

By the false-bottom herein described the milk is given a rotary cascade motion at every oscillation of the churn-body which results in a more rapid formation of butter, and the milk rolling down the inclines will have a tendency to continue the motion and thus make the operation easier. The hinge-connection between the bars 15 enables the false-bottom to be readily removed from the churn-body through either one of the doors 10 upon unscrewing the wing-nut 20 and partly folding the bars.

The supporting-frame of the churn-body comprises a base 21, and a pair of standards 22 rising therefrom on opposite sides thereof, between which the churn-body is supported. The standards on the respective sides of the base; are connected by bars 23 on the inner faces of which are secured socket-pieces 24 which serve as bearings for U-shaped hangers 25 which support the churn-body, said hangers having ball-shaped ends 26 which are received in the socket-pieces. The hangers extend beneath the churn-body, on the bottom of which are seats 27 into which the hangers extend. Each end of the churn-body is supported by one of the hangers herein described.

One end of the churn-body is fitted with a handle 28 for operating the same.

It will be seen from the foregoing that I have provided a churn which is simple in construction and highly efficient in operation, and by making the false bottom removable all parts of the interior of the churn are accessible for cleaning purposes.

What is claimed is:—

1. The combination with a churn body, of a frame therein oppositely inclined from a common point in the direction of the bottom of the churn body, and a false bottom supported on said frame, said false bottom consisting of perforated corrugated plates.

2. The combination with a churn body, of a folding and removable frame therein, said frame being oppositely inclined from a common point in the direction of the bottom of

the churn body, and a false bottom supported by said frame, said false bottom consisting of perforated corrugated plates.

3. The combination with a churn-body of
5 a foldable frame therein, and a false bottom supported by said frame.

4. The combination with a churn-body, of
pivottally connected bars therein having
their pivoted ends spaced from the bottom
10 thereof, and their free ends extending at a
slant to the end walls of the churn-body, and
a false bottom mounted on said bars.

5. The combination with a churn-body, of
pivottally connected bars therein having their
15 pivoted ends spaced from the bottom thereof,

and their free ends extending at a slant to
the end walls of the churn-body, a false bot-
tom secured to the bars, said bottom compris-
ing plates which lap at the hinged ends of
the bars, and fastening means passing 20
through said lapped ends of the plates and
connected to the churn-body.

In testimony that I claim the foregoing as
my own, I have hereto affixed my signature
in the presence of two witnesses.

GEORGIA ANNA HILL.

Witnesses:

A. F. BARHAM,
D. F. TAYLOR.