

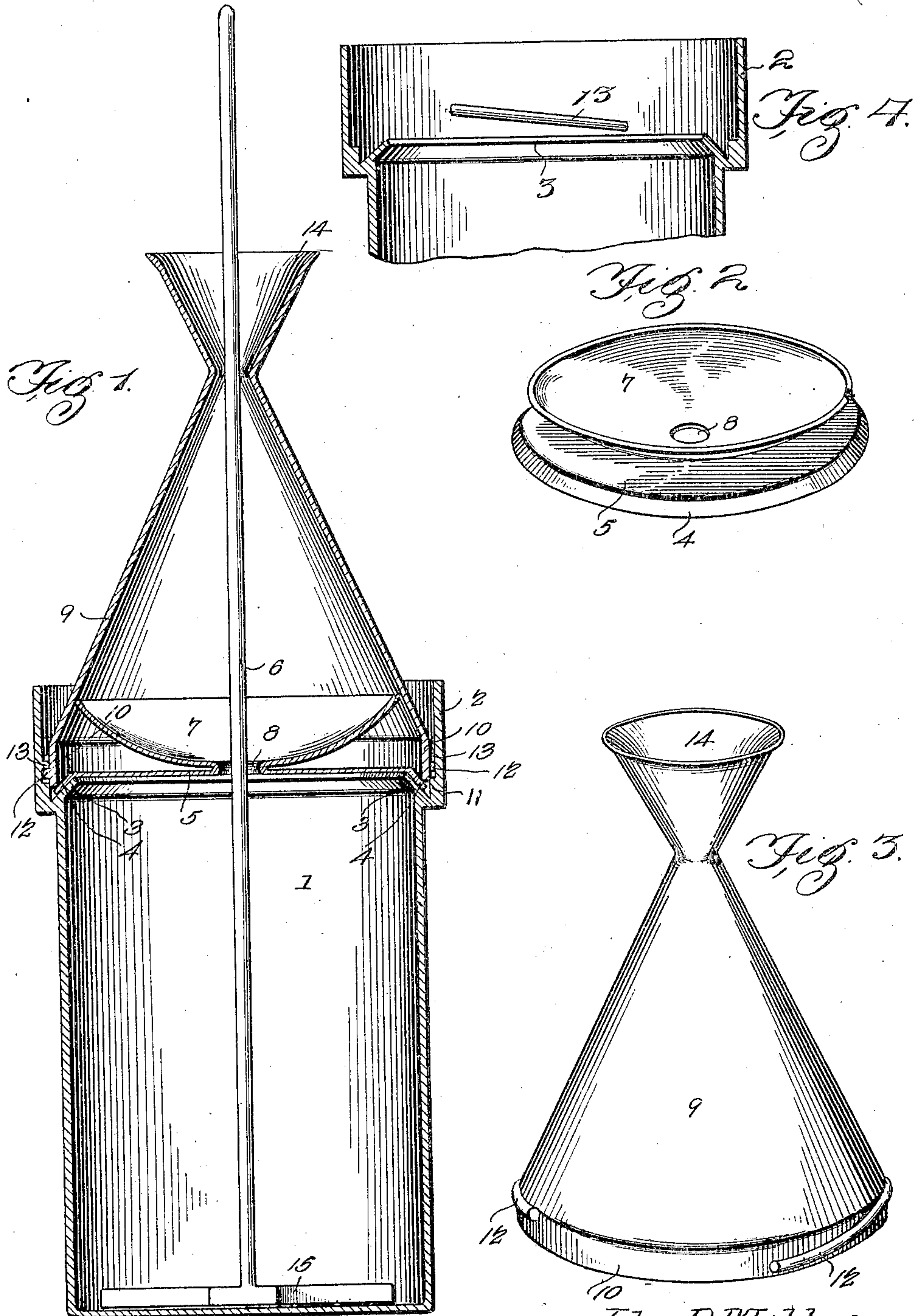
No. 682,334.

Patented Sept. 10, 1901.

J. D. MILLS.  
CHURN.

(Application filed May 17, 1901.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

JOHN DAVID MILLS, OF ARANSAS PASS, TEXAS.

## CHURN.

SPECIFICATION forming part of Letters Patent No. 682,334, dated September 10, 1901.

Application filed May 17, 1901. Serial No. 60,749. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN DAVID MILLS, a citizen of the United States, residing at Aransas Pass, in the county of San Patricio and State of Texas, have invented a new and useful Churn, of which the following is a specification.

The invention relates to improvements in churns.

The object of the present invention is to improve the construction of churns and to provide a simple and comparatively inexpensive one adapted to prevent its contents from splashing out through the top when violently agitated and capable of excluding dust, insects, and other extraneous matter from the interior of the churn during the operation of churning.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a vertical sectional view of a churn constructed in accordance with this invention. Fig. 2 is a detail perspective view of the inner rib. Fig. 3 is a similar view of the outer cover. Fig. 4 is a detail view of a portion of the body, illustrating the construction of the inclined rib or flange.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a cylindrical churn-body having an outwardly-offset upper portion 2 and provided with an interior seat 3, consisting of an inclined annular flange located at the lower portion of the outwardly-offset part 2 and adapted to receive an inclined peripheral portion or flange 4 of an inner lid 5. The inclined seat which extends inward and upward may be constructed in any suitable manner, and the inner lid, which consists of a disk, has its periphery bent downward to form the inclined peripheral flange 4. The said inner lid, which is provided with a central opening to receive a dasher rod or stem 6, supports a bowl 7, centrally secured to the lid at the upper face of the same and pro-

vided with a central opening 8, registering with the opening of the lid. The bowl 7, which forms a funnel, presents a concave upper face and is adapted to catch any of the contents of the churn-body carried upward through the opening of the lid by the upward movement of the dasher, and it will cause such contents to flow back into the churn-body. Also any liquid splashed through the opening of the lid by the dasher will be caught in the bowl and returned to the body.

The churn is provided with an outer conical cover 9, provided at its base with a depending vertical flange 10, fitting against the inclined flange of the inner lid and against a lower vertical wall 11 of the offset upper portion 2 of the churn-body and forced into engagement with those parts by inclined ribs or flanges 12. The inclined ribs or flanges 12, which form opposite cams, are arranged on the exterior of the flange 10 of the cover and engaged beneath corresponding ribs or flanges 13, arranged on the interior of the churn-body and suitably secured to or forming a part of the outwardly-offset upper portion 2 of the said body. The cover is adapted to be rotated to engage it with and disengage it from the churn-body, and its lower edge will be forced tightly against the inclined flange of the lid and the wall 11 of the churn-body by the action of the said cams.

The outer cover is provided at its top with an inverted cone 14, forming a flaring mouth or funnel to return any of the contents of the churn-body to the latter should such contents be carried upward by the dasher-rod to the top of the outer cover. The periphery of the bowl fits against the inner face of the conical cover, and should any of the contents flow down the sides of the conical cover it will be received in the bowl and returned to the body.

The dasher-rod is secured to a suitable dasher 15, which is adapted to be reciprocated vertically by hand; but the improvements herein shown and described are equally applicable to churns operated by machinery, and it will be readily apparent that the inner lid, the outer cover, and the bowl are capable of effectually preventing any of the contents of the body from splashing out at the top and



that dust, insects, and other extraneous matter will be excluded from the churn-body during the operation of churning.

What I claim is—

5 1. A churn comprising a body, an inner lid supported by the body, a funnel arranged upon and supported by the lid, a conical outer cover receiving the funnel, and interlocked with the body and retaining the lid in place,  
10 and a dasher, substantially as described.

2. A churn comprising a body provided with an inclined seat, a horizontal inner lid having an inclined peripheral flange arranged on the inclined seat, a funnel located above and supported by the lid, and the conical outer cover  
15 arranged on the inclined flange of the lid and retaining the latter on the seat, substantially as described.

3. A churn comprising a body, an inner lid,  
20 an outer cover connected with the body and engaging the lid and retaining the latter in place, and an inner funnel arranged above and supported by the lid and fitting against

the inner face of the cover, substantially as and for the purpose described. 25

4. A churn comprising a body provided with an inclined seat and having an offset upper portion, a horizontal lid having an inclined peripheral flange arranged on the inclined seat, the conical cover fitting against the inclined flange of the lid and against the inner face of the churn-body, the funnel arranged above and supported by the lid and having its periphery arranged against the inner face of the conical cover, and means for interlocking the cover with the body whereby the lid  
30 is secured to the seat, substantially as described. 35

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

JOHN DAVID MILLS.

Witnesses:

C. W. SHOWAKER,  
J. HOGG.