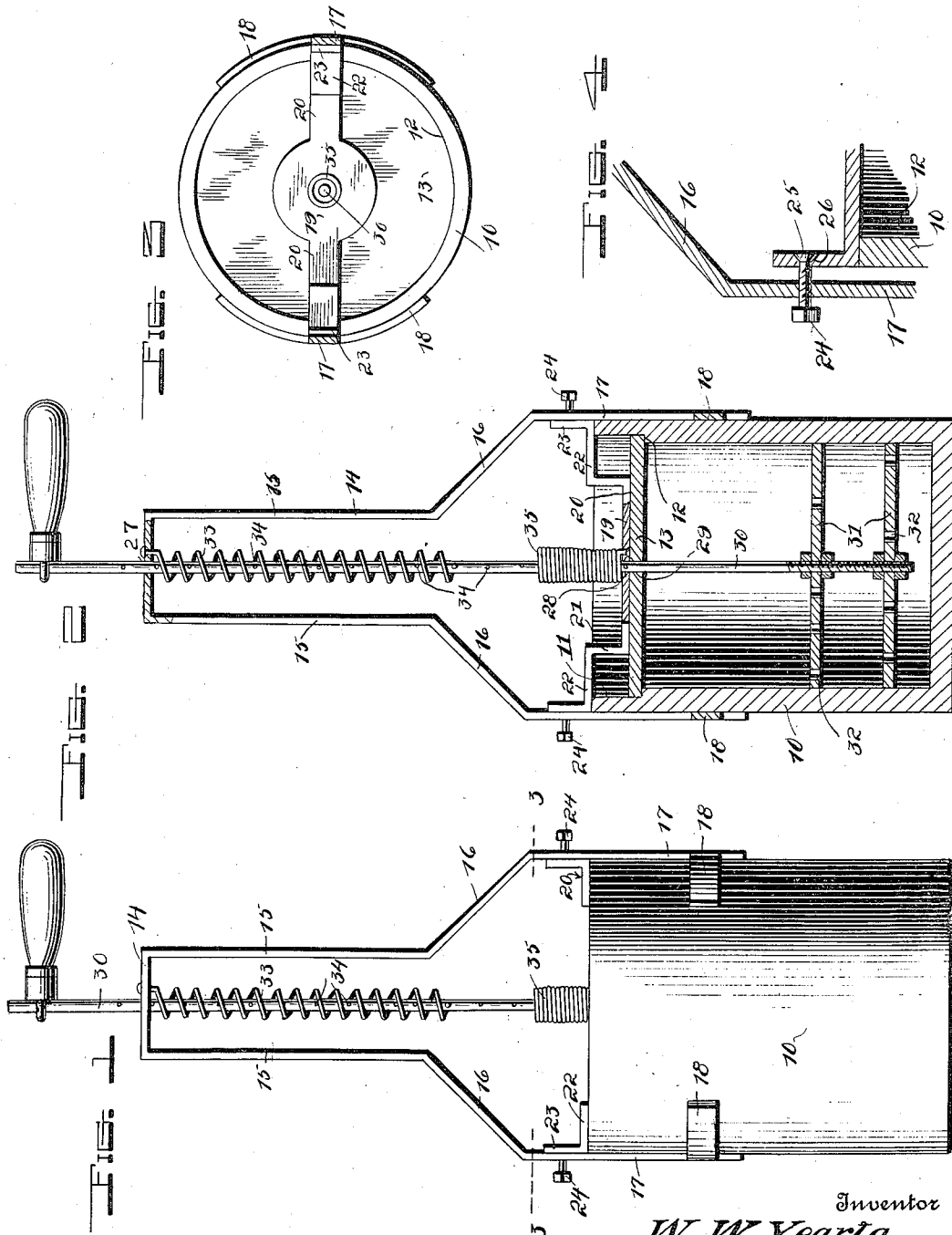


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 COMBINED CHURN COVER CLAMP AND DASHER ROD.
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Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM W. YEARTA, OF BAINBRIDGE, GEORGIA.

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1,052,549.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM W. YEARTA, a citizen of the United States, residing at Bainbridge, in the county of Decatur, State of Georgia, have invented certain new and useful Improvements in Combined Churn Cover Clamps and Dasher Rods; and I do hereby 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.

This invention relates to churns and has for an object to provide a novel means for clamping the cover to the churn body.

A further object of the invention is to provide a novel dasher rod in combination with the churn cover clamping means, the rod being equipped with spaced helical springs one of which is under compression while the other is extended, these springs serving to facilitate reciprocation of the dasher rod with minimum manual exertion.

With the above objects in view the invention consists of certain novel details of construction and combination of parts herein-after fully described and claimed, it being understood that various modifications may be made in the minor details of construction within the scope of the appended claims.

In the accompanying drawing forming part of this specification:—Figure 1 is a side elevation of a churn equipped with my invention. Fig. 2 is a longitudinal sectional view through the churn with parts of my invention in section. Fig. 3 is a cross sectional view taken on the line 3—3 Fig. 1. Fig. 4 is a fragmentary sectional view showing the relative positions of the clamp parts released.

Referring now to the drawing in which like characters of reference designate similar parts, 10 designates a churn body having an internal annular rabbet 11 in the throat with a resultant annular shoulder 12 upon which the cover 13 of the churn bears marginally.

The combined cover clamp and dasher rod comprising the subject-matter of this invention consists of a yoke 14 the branches of which are directed in parallelism as shown at 15 near the bight of the yoke, thence bent outwardly from each other as shown at 16, and finally again directed in parallelism as shown at 17. The yoke is formed of spring strap metal and the termi-

nals of the yoke branches are designed to bear longitudinally upon the opposite outer sides of the churn body near the mouth of the churn. Each branch is equipped near the extreme ends with a pair of lateral arcuate fingers 18 which are designed to conform to the contour of the outer face of the churn body.

For drawing the yoke branches into clamping engagement with the churn body, and at the same time clamping the churn cover in position, I provide a circular disk 19 which is provided at diametrically opposite points in the edge with alined arms 20, the disk being adapted to bear flat upon the top face of the cover. The arms 20 are offset upwardly from the disk as shown at 21, and are then directed outwardly in the same plane as shown at 22, these outwardly directed portions being adapted to bear upon the top edge of the churn body. The outwardly directed portions 22 are terminally bent upwardly as shown at 23. The upwardly directed portions 23 extend upwardly along the inner faces of the yoke branches, and set screws 24 are threaded through the yoke branches and are engaged through these upwardly directed portions, being terminally equipped with conical heads 25 which are swiveled in conical recesses 26 formed in the inner faces of the upwardly directed portions 22.

By tightening both set screws, the spring branches of the yoke are drawn tightly toward each other and into snug clamping engagement with the outer face of the churn body. It will now be seen that the yoke is tightly clamped to the churn, and that the disk 19 carried by the yoke is anchored stationary in snug engagement with the top face of the churn cover.

Formed in the bight of the yoke, and in the center of the disk are alined openings 27 and 28, these openings alining with the dasher rod opening 29 formed in the center of the churn cover. A dasher rod 30 is slidably fitted in these alining openings and is equipped at the lower end with a pair of spaced dashers 31, these dashers having orifices 32 therein and out of alinement. A helical spring 33 is seated on the dasher rod near the bight of the yoke and is fixedly secured at one end to the bight of the yoke the opposite end of the spring being selectively engaged in any one of a series of openings 34 formed in the rod. The spring expands

as the rod is depressed. A helical spring 35 is seated on the rod near the disk 19 and is fixedly secured at one end to the latter, the opposite end of the spring being fixedly secured selectively in any one of the series of openings 34. This spring is contracted as the rod is depressed.

During reciprocation of the dasher rod the springs 33 and 35 are alternately compressed and expanded, one of these springs being under compression while the other is expanded. This action of the springs serves to minimize the manual exertion of churning while at the same time the springs serve to hold the dashers normally centrally disposed in the churn.

What is claimed, is:—

1. A churn cover clamp comprising a yoke having resilient branches adapted to exteriorly engage the churn body at opposite points, a churn cover engaging member between said branches having portions adapted to engage the top edge of the churn body, and set screws threaded through said branches and swivelly engaged with said cover engaging member, said set screws

serving to draw said branches toward said member and into clamping engagement with the churn body.

2. The combination of a yoke having resilient branches adapted to exteriorly engage opposite sides of a churn body, a churn cover engaging member between said branches having terminal portions extending along the inner faces of said branches, set screws threaded through said branches and swivelly engaged with said member, a dasher rod slidably carried by said yoke and said member, a helical spring fixed at one end to said rod and fixed at the opposite end to said yoke, and a helical spring fixed at one end on said rod and fixed at the opposite end to said member, one of said springs being under compression while the other is expanded during reciprocation of said rods.

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

WILLIAM W. YEARTA.

Witnesses:

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