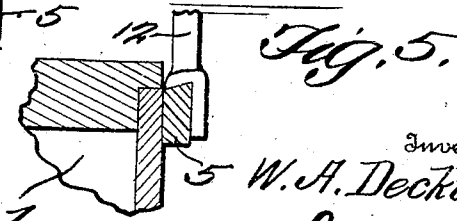
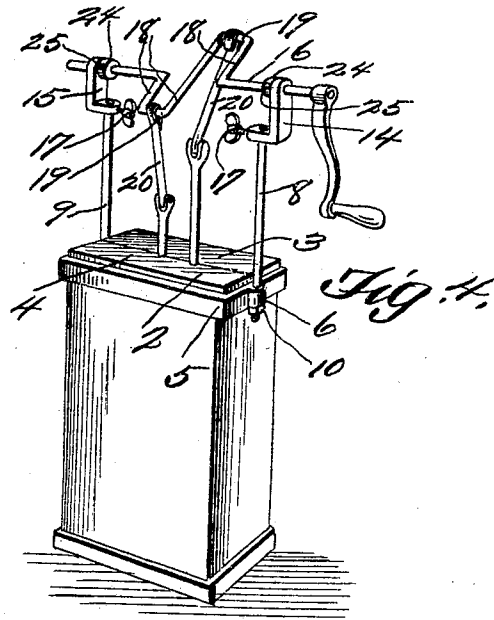
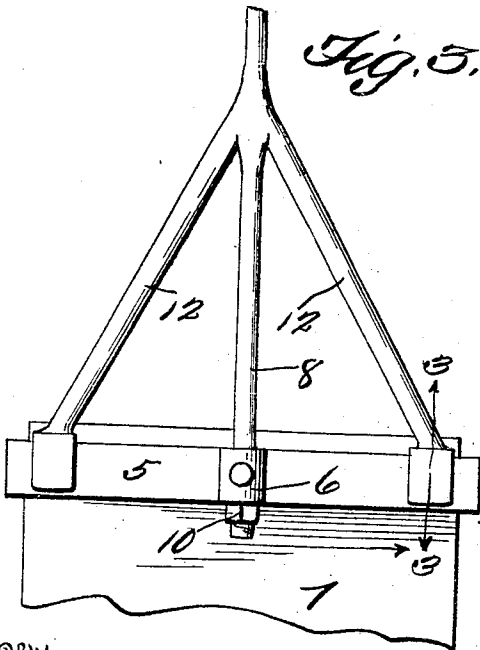
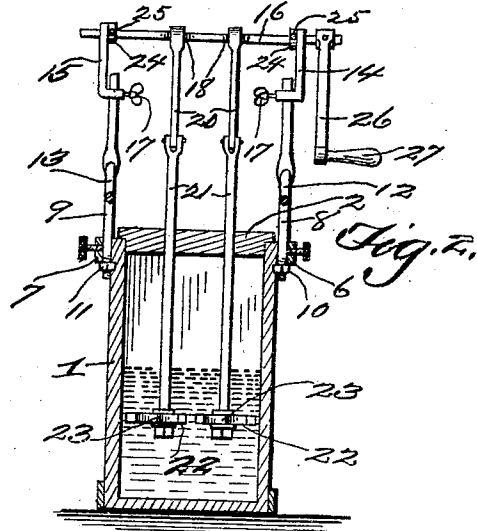
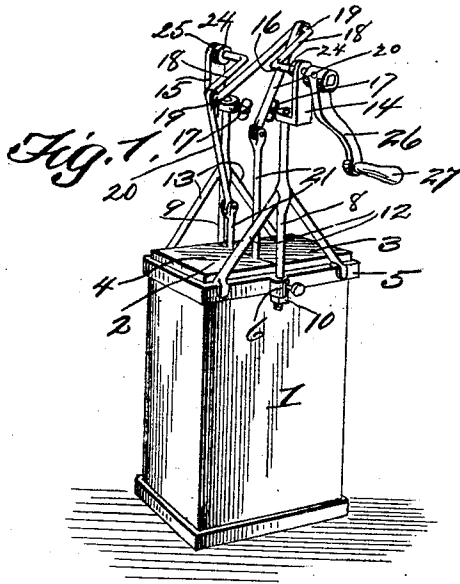


W. A. DECKER.
CHURN.

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962,947.

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Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM A. DECKER, OF CROWLEY, TEXAS.

CHURN.

962,947.

Specification of Letters Patent. Patented June 28, 1910.

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To all whom it may concern:

Be it known that I, WILLIAM A. DECKER, a citizen of the United States, residing at Crowley, in the county of Tarrant and State of Texas, have invented a new and useful Churn; 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 pertains to a new and useful churn, in which vertically reciprocating dashers are employed, and the main feature of the invention is to provide means for vertically operating the dashers.

A further feature of the invention is to provide means for vertically adjusting the crank shaft to which the dashers are coupled, so that (when the cream or milk in the churn is rather low or at a considerable height) the dashers may be easily adjusted, in order to attain the best results.

The invention affords a further structure, which comprises a band which surrounds the cream receptacle adjacent its upper portion, and provided with sockets, in which standards are supported. On the standards, brackets (in which the crank shaft is journaled) are adjustably mounted, whereby the crank shaft may be adjusted vertically.

An essential feature of the invention is the provision of devices integral with the standards and so arranged as to engage the band surrounding the receptacle, and held in such engagement by means of members carried by the lower ends of the standards.

In the drawings, a certain form of churn is disclosed, but in experimenting and reducing to practice this form of churn, if the applicant finds it necessary to alter various parts thereof, for instance details of the structure, he is entitled to do so, provided the alterations fall within the scope of the appended claims.

In the drawings, Figure 1 is a perspective view of a churn embodying the features of the invention. Fig. 2 is a sectional view through the churn, in order to disclose the detail structure of the band surrounding the receptacle of the churn, showing the crank shaft and the dashers in different positions. Fig. 3 is a detail view showing the bracing means for the standards. Fig. 4 is a perspective view of a churn embodying

detail modifications. Fig. 5 is a vertical sectional view taken on line 3—3 of Fig. 3.

Relative to the several views of the drawings, 1 represents the receptacle of the churn, which is provided with a cover or closure 2, consisting of two parts 3 and 4, portions of which are received within the receptacle. Surrounding the outside of the receptacle adjacent its upper portion is a band 5, made of any suitable material, and provided with sockets 6 and 7. Received by these sockets are the standards 8 and 9, the lower ends of which are provided with threaded members 10 and 11. Integrally carried by the standards are the resilient angularly arranged bracing members 12 and 13, which engage the band on each side of the standards, in order to brace the standards. To insure the bracing of the standards by the bracing members, the members threaded to the lower ends of the standards may be tightened, or screwed closely against the band. In this manner, considerable rigidity is afforded for the standards and their braces.

Adjustably received upon the standards are L-shaped bracket members 14 and 15, in the upper ends of which the crank shaft 16 is journaled. Penetrating the portions of the brackets which receive the standards are thumb screws 17, which extend sufficiently through said portions of the bracket so as to engage the standards, whereby the bracket may be held securely in various adjusted positions.

The crank shaft consists of a single rod so bent or formed as to form the arms 18. These arms are in the form of loops and are provided with horizontal portions 19, forming bearings, to which the pitman rods 20 are connected. The lower ends of the pitman rods have connected thereto piston rods 21, which extend through the cover or closure of the churn. Secured to the lower ends of the piston rods are the dashers 22, the ends of which have V-shaped recesses 23, through which the cream or other material works as the dashers are reciprocated in the receptacle. The cream or other material also works between the two dashers and also between the outside longitudinal portion thereof and the sides of the receptacle.

The ends of the crank shaft rotate within the bearings of the brackets, and to prevent lateral movement of the crank shaft, when

being rotated, collars 24 are secured to the crank shaft by means of set screws 25. These collars engage the adjacent faces of the brackets, in order to obviate lateral sliding movements of the crank shaft.

The crank shaft is provided with a suitable crank 26 (which is provided with a handle 27), and by rotating or turning the crank, a reciprocatory movement will be imparted to the dashers. By reciprocating the dashers in this manner, the cream within the receptacle will be churned until the proper result is obtained.

The invention having been set forth, what is claimed as new and useful is:—

1. In a churn, a receptacle having a closure, a band surrounding the upper portion of the receptacle and provided with sockets, standards received by said sockets and provided with means extending laterally and downwardly to engage the band to afford rigidity for the standards, members carried by the lower ends of the standards to insure rigidity between the standards and the said means and the band, a crank shaft adjustably supported upon the standards, dashers movable within the receptacle, and connec-

tions between the dashers and the crank shaft.

2. In a churn, a receptacle having a closure, a band surrounding the upper portion of the receptacle and provided with sockets, standards received by said sockets and provided with integral members extending laterally and downwardly of the standards to engage the band to afford rigidity for the standards, members carried by the lower ends of the standards to insure rigidity between the standards, said integral members and the band, brackets adjustably mounted on the standards and having means to hold the brackets in adjusted positions, a crank shaft journaled in the brackets, dashers movable within the receptacle, and connections between the dashers and the crank shaft.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM A. DECKER.

Witnesses:

A. F. CLARK,
T. J. BOVELL.