No. 792,415. PATENTED JUNE 13, 1905.

C. R. GUSTAVSON.

WASHING OR CHURNING APPARATUS.

APPLICATION FILED MAR. 16, 1905.

FIG. 1.

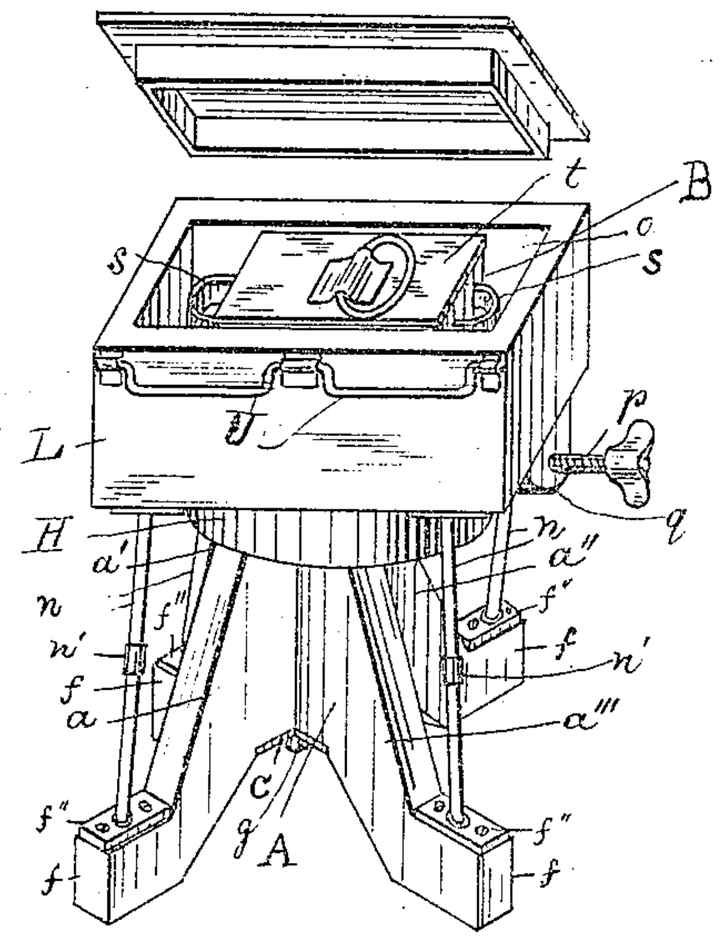


FIG. 3.

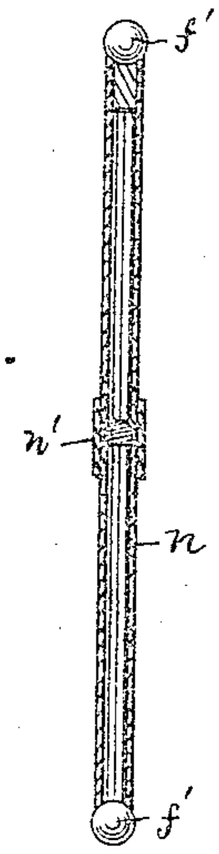


FIG. 4.

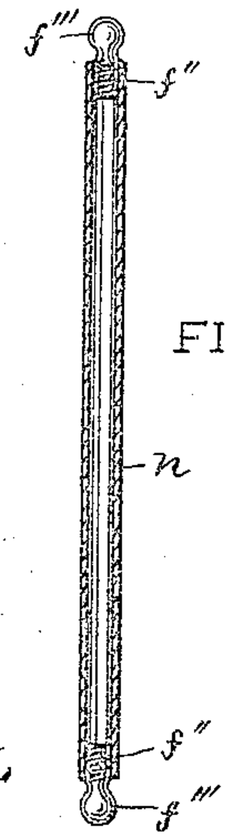
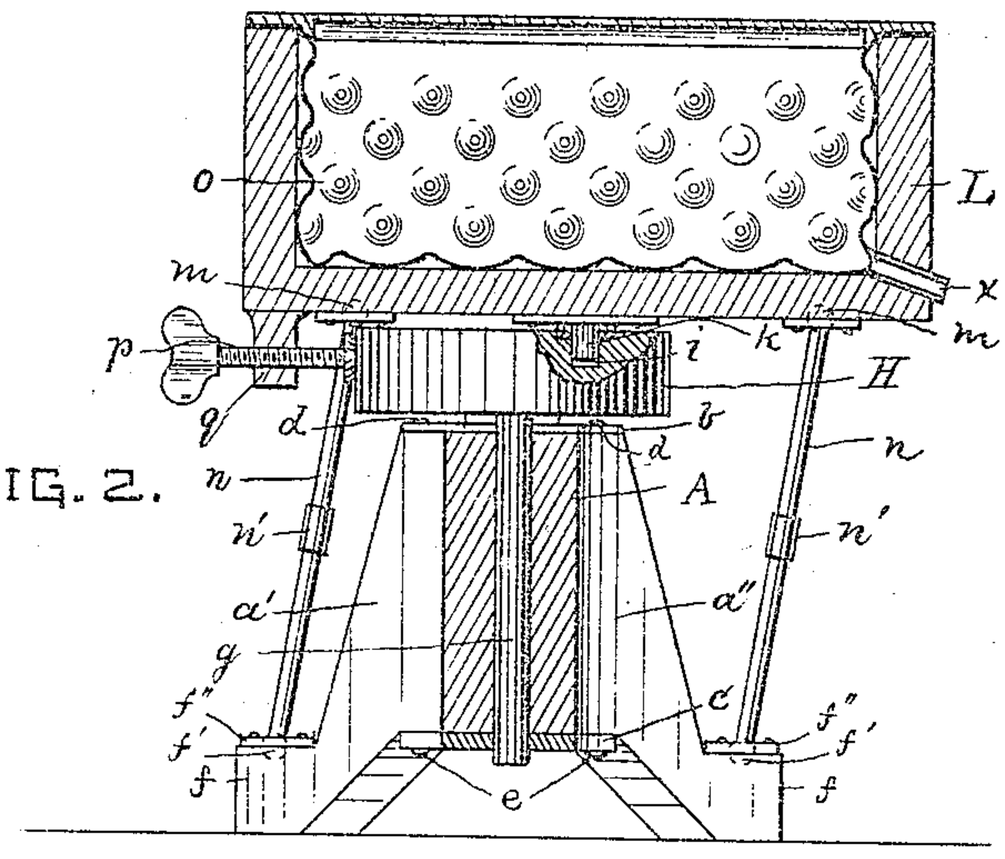


FIG. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CARL R. GUSTAVSON, OF NEWMAN GROVE, NEBRASKA.

WASHING OR CHURNING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 792,415, dated June 13, 1905.

Application filed March 18, 1905. Serial No. 250,881.

To all whom it may concern:

Be it known that I, CARL R. GUSTAVSON, a citizen of the United States, residing at Valley street, Newman Grove, in the county of Madison and State of Nebraska, have invented new and useful Improvements in Washing and Churning Apparatus, of which the following is a specification.

This invention relates to an apparatus for use either as a washing-machine or churn, a cream-container being adapted to fit within the washing-receptacle when the apparatus is used for churning purposes.

The invention consists in the combination of a rectangular receptacle mounted horizontally on roller-bearing supports connected with a suitable stand, and means for causing the receptacle to move in a circular line, so that the clothes or other material within the receptacle shall be dashed successively against the several sides of the receptacle as the same is impelled along its circular way.

The invention also consists in certain combinations and arrangement of parts, as hereinafter fully described and specifically claimed.

The nature of my improvements is clearly shown in the accompanying drawings, whereon—

Figure 1 is a perspective view of the apparatus with cover removed to show the cream-container or churning vessel within the washing-receptacle. Fig. 2 is an elevation of the apparatus, portions of which are shown in section to more fully illustrate the same. Figs. 3 and 4 are sectional views of tubes and ball-bearings for supporting the washing-receptacle in a horizontal position.

The letter A designates a supporting frame or stand, preferably composed of four legs *a a' a'' a'''*, the backs of which abut against one another, and are thus united by top and bottom washers *b c* and securing nails or screws *d e*. The aforesaid legs have outwardly-projecting feet *f*, the upper surfaces of which are provided with ball-bearings *f'* and retaining-plates *f''*, as shown.

A vertical opening is formed in the center of the supporting-frame A and its uniting-washers *b c* to receive the downwardly-projecting stem *g* of a horizontally-operating balance or crank wheel H, the upper surface of which is provided at a suitable distance from its center with a perforation *i* to receive a downwardly-projecting pin *k*, which is secured to the center of the under surface of the washing-receptacle L, as shown in Fig. 2. The under surface of the washing-receptacle is also provided near each corner thereof with ball-bearings *m*, between which and the ball-bearings of the stand metal tubes *n* are arranged to take the weight of the washing-receptacle and allow same to be revolved horizontally either by the operator placing his hand on the top of the receptacle and moving it in a circular direction or by transmitting power from a suitable motor through an ordinary belt to the periphery of the balance-wheel H.

The washing-receptacle is lined with galvanized iron or other non-corrosive material *o*, indented or roughened in order to increase its washing-surface, as well as to resist the impetus of the clothes coming in contact therewith, and thus serve to slightly turn or change the contact-surface thereof as the washing is proceeded with. The washing-receptacle and its lining are provided at one end thereof with a discharge-pipe *x* for the withdrawal of water from the receptacle whenever necessary to do so.

The set-screw *p* is adapted to operate in a lug *q* at one end of the washing-receptacle to permit of the latter being secured in a given position, as shown at Fig. 2, when it is desired to use a wringer or to gain access to the receptacle for any other purpose.

The supporting-tubes *n* of the washing-receptacle L are made adjustable either by forming same in two parts and connecting the said parts by means of a screw-threaded sleeve *n'* or by substituting for the friction-balls *f'* screw-threaded studs *f''*, having rounded heads *f'''*, as shown in Fig. 4, either means permitting of the holding of the washing-receptacle clear of its operating mechanism, thus avoiding all unnecessary friction.

To provide for churning purposes, a rectangular vessel or cream-container B, having handles *s* and cover *t*, is adapted to fit within the washing-receptacle, as shown in Fig. 1,

so that in the operation of the apparatus the cream as it is whirled along is dashed against the several sides of the container, and thus quickly converted into butter.

The sides of the washing-receptacle may be provided with handles, if desired, as indicated at U in Fig. 1.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an apparatus for washing and churning purposes, the combination of a stand having ball-bearings in the base thereof, a receptacle having ball-bearings in the under surface thereof and tubes connected with the upper and lower ball-bearings for supporting the aforesaid receptacle, as set forth.

2. The combination in an apparatus for washing and churning purposes, of a stand having ball-bearings in the base thereof, a receptacle provided on its under side with ball-bearings and tubes connecting the upper and lower ball-bearings, the said tubes provided with means for lengthening or contracting same so as to adjust the height and level of the aforesaid receptacle, as set forth.

3. In an apparatus for washing and churning purposes, the combination of a stand having ball-bearings in the base thereof, a receptacle having its under surface provided with ball-bearings and tubes connecting the upper and lower ball-bearings and thereby supporting the receptacle, with means for causing the receptacle to move in a circle, substantially as set forth.

4. In an apparatus for washing and churning purposes, the combination of a stand having outwardly-projecting feet having ball-bearings in the upper surface thereof, a receptacle provided on its under side with a downwardly-projecting central pin, and near each corner with ball-bearings, extension-tubes between the upper and lower ball-bearings, a balance-wheel having a projecting central stem at one side thereof and a perforation at a distance from the center of the outer surface, the aforesaid stem adapted to operate in the stand and the perforations to receive the central pin of the receptacle, substantially as and for the purpose set forth.

5. The herein-described apparatus, comprising a stand and receptacle, ball-bearings and tubes connecting same, a balance-wheel having at one side a stem adapted to operate in the stand, and in the opposite side a perforation to receive a central stem on the bottom of the receptacle, and a milk-container within the receptacle, as set forth.

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

CARL R. GUSTAVSON.

Witnesses:

CHAS. LETHEBY,

H. HALDERSON.