

T. F. VANDEGRIFT & J. W. GORDON.  
J. E. VANDEGRIFT, ADMINISTRATOR OF T. F. VANDEGRIFT, DEC'D.  
WASHING MACHINE.

952,388.

APPLICATION FILED AUG. 28, 1909.

Patented Mar. 15, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

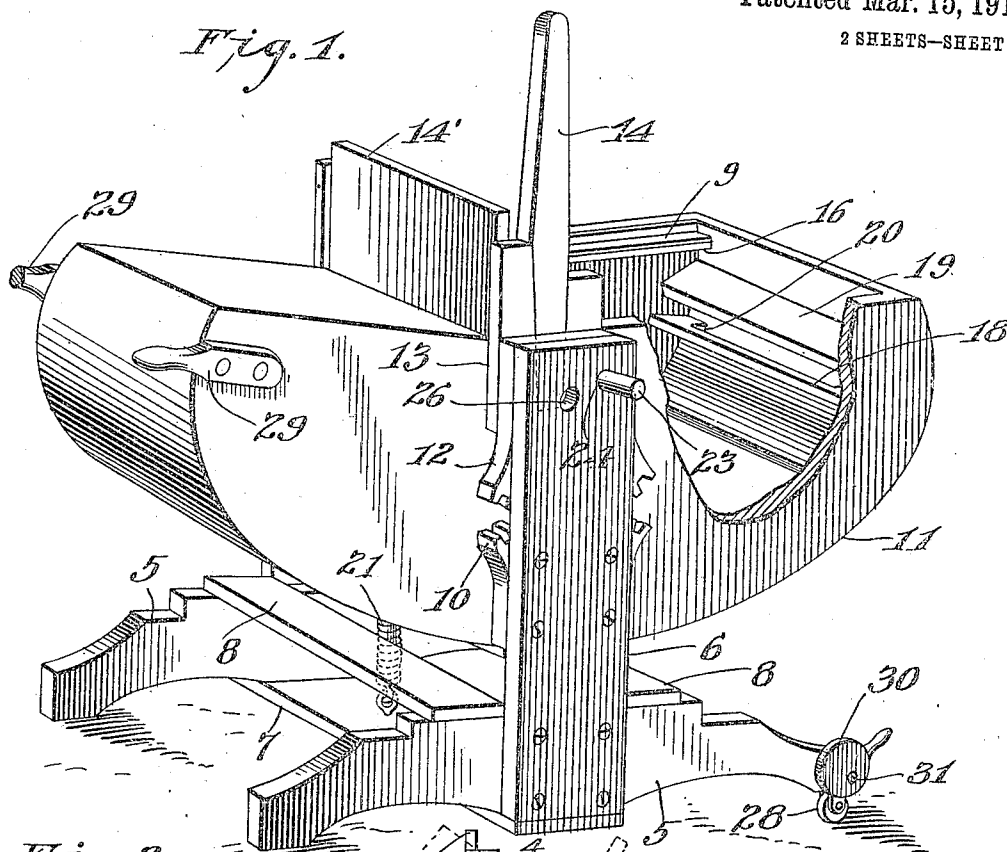
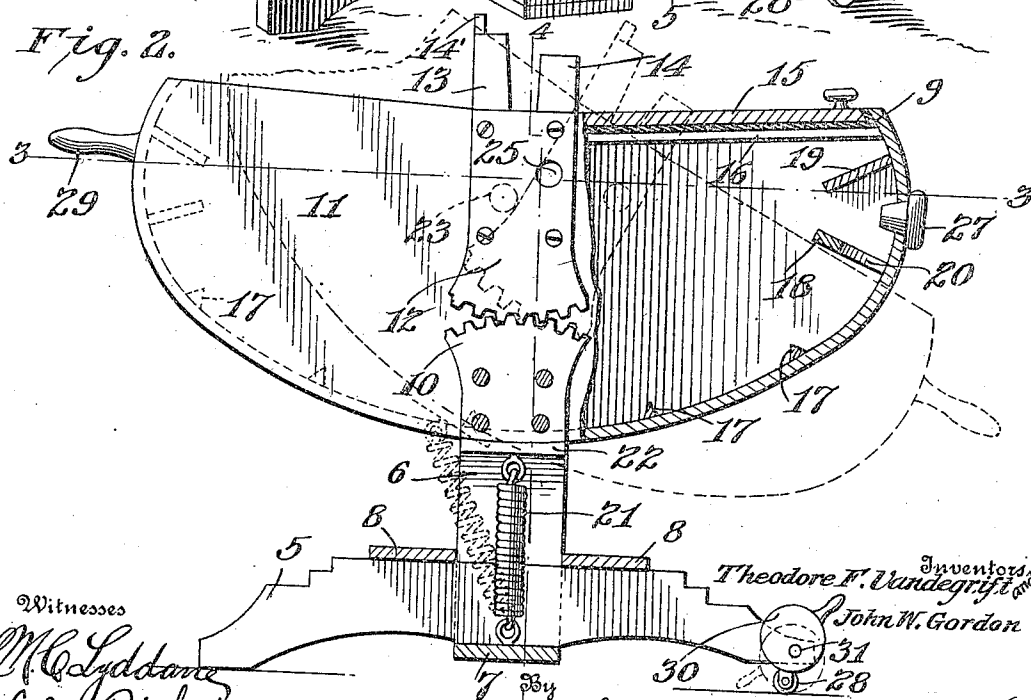


Fig. 2.



Witnesses  
M. C. Lyddane  
E. M. Ricketts

Theodore F. Vandegrift and  
John W. Gordon  
Inventors

By Watson E. Coleman  
Attorney

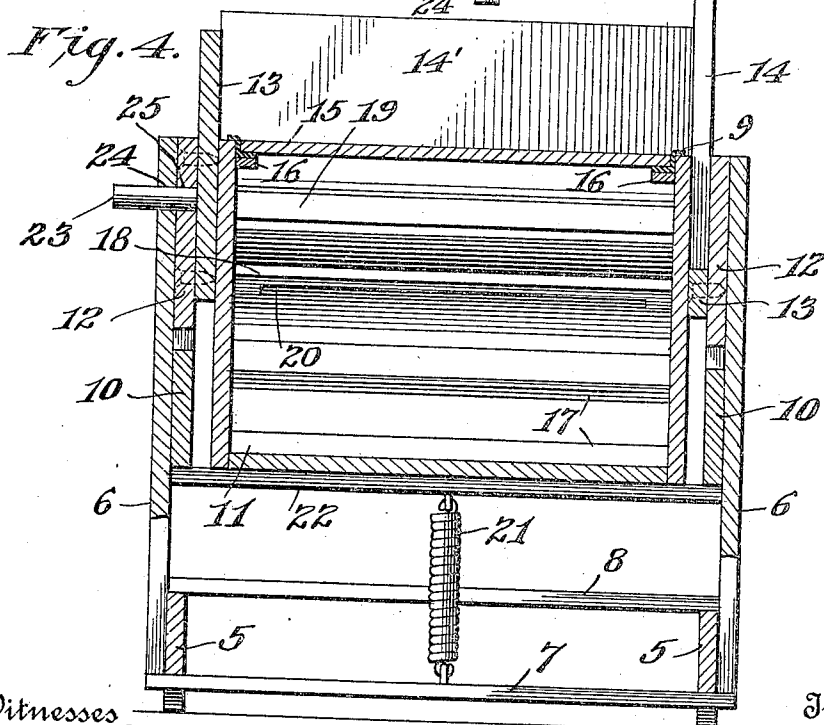
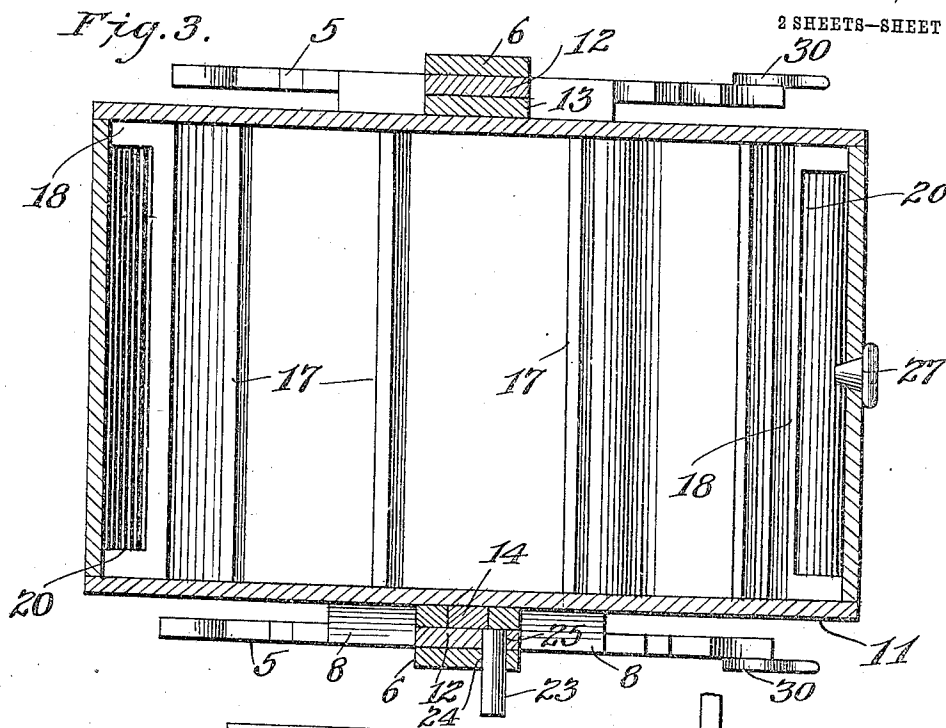
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Witnesses  
*McC. Lyddane*  
*E. M. Clicketto*

Inventors  
*Theodore F. Vandegrift and*  
*John W. Gordon.*  
*By Watson E. Coleman*  
Attorney

# UNITED STATES PATENT OFFICE.

THEODORE F. VANDEGRIFT AND JOHN W. GORDON, OF SHELBYVILLE, INDIANA; JAMES E. VANDEGRIFT ADMINISTRATOR OF SAID THEODORE F. VANDEGRIFT, DECEASED.

## WASHING-MACHINE.

952,388.

Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed August 28, 1909. Serial No. 515,121.

*To all whom it may concern:*

Be it known that we, THEODORE F. VANDEGRIFT and JOHN W. GORDON, citizens of the United States, residing at Shelbyville, in the county of Shelby and State of Indiana, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in washing machines and more particularly to machines of that character wherein an oscillatory clothes receptacle is employed.

The primary object of our present invention is to provide a machine of the above type which is so constructed that the oscillation of the clothes receptacle may be attained with but little labor on the part of the operator.

A further object is to provide means whereby the clothes will be thoroughly rubbed and cleansed.

A still further object is to provide a novel supporting frame and means for locking the clothes receptacle therein when not in use.

With these and other objects in view our invention consists in the combination and arrangement of parts which will be fully described in the accompanying specification and particularly set forth in the appended claims.

In the accompanying drawings wherein we have shown one embodiment of our invention Figure 1 is a perspective view of the machine, partly broken away to more clearly illustrate the interior construction; Fig. 2 is a side elevation, partly in section, one of the frame uprights being removed; Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 2; and Fig. 4 is a transverse section taken on the line 4—4 of Fig. 2.

Referring more particularly to the drawings wherein like reference characters indicate similar parts throughout the several views, 5 indicates the parallel side members of a supporting frame and 6 the vertical uprights thereof. This frame may be of any preferred ornamental configuration to enhance the attractive appearance of the machine. A brace board 7 connects the lower ends of the uprights 6 and is secured to each of the side members 5. Similar brace boards 8 are secured to the upper edges of

the side members and materially increase the rigidity of the supporting frame.

Secured to the opposed inner sides of the uprights 6, by means of screws or other analogous fastening devices, are the arcuate rack segments 10. These rack segments are positioned intermediate the ends of the uprights and are adapted to support the oscillatory clothes receiving receptacle 11 to which is secured upon the sides thereof, the arc shaped rack segments 12 arranged thereon in inverted position to the segments 10. The rack teeth of the segments 10 and 12 are thus intermeshed and when in its normal position the receiving receptacle is horizontally disposed in the supporting frame as clearly shown in Fig. 1. The segments 12 are spaced from the sides of the receptacle 11 by means of the blocks 13 and an operating handle 14 is adapted to be inserted between these blocks upon one side of the machine, by means of which the clothes receptacle may be oscillated. A wringer board 14' is transversely positioned across the top of the machine and secured in position between the blocks 13. To this board a clothes wringer of any desired character may be clamped.

One half of the top of the clothes receptacle is permanently closed, the remaining portions being provided with a removable cover 15 which is seated therein upon the cleats 16 secured to the opposite sides of the receptacle. These cleats are provided with the rubber gasket strips 9 thus forming a watertight closure when the cover is in position. The bottom and ends of the receptacle 11 are rounded as shown and to the interior thereof a plurality of transverse ribs 17 are secured. Five of these ribs are shown in the drawings, though it will be understood that a greater or less number may be employed if desired. They are preferably of tri-angular cross sectional form and provide convenient rubbing surfaces whereby the clothes may be thoroughly cleansed. Also arranged upon the interior of the clothes receptacle at each end thereof are the transverse stop boards 18 and the baffle boards 19 positioned immediately above the same. The boards 18 are provided with the openings 20 which extend the greater portion of their length and are adapted to admit of the passage of the water, while at the same time the clothes are

held from further movement. It will be noted that the boards 18 and 19 are arranged at an angle with relation to each other. Thus as the machine is operated and the clothes are thrown from end to end of the machine, the boards 18 hold the clothes while the baffle boards 19 will throw the saponified water inwardly toward the center of the receptacle. The water will permeate the clothes and as they pass over the ribs 17 all dirt will be completely removed.

To accelerate the oscillatory movement of the clothes receptacle, a heavy coiled spring 21 is secured at its upper end to an eye fastened in the strengthening board 22 secured to the bottom of the receptacle, the other end of said spring being secured to an eye in the brace board 7. Thus it will be seen that as the machine is operated the spring 21 will tend to return the receptacle 11 to its normal horizontal position, rocking the rack segments 12 on the segments 10 secured to the uprights 6, which will greatly assist its oscillatory movement with the requirement of but little exertion upon the part of the operator.

When the machine is not in use the receptacle 11 may be securely held in its horizontal position by means of a pin 23 which is passed through an opening 24 in one of the uprights 6 into a registering opening 25 in the rack segment 12, thus locking the machine against operation. A second opening 26 is provided in the upright to receive the pin 23 which engages the edge of the rack segment 12 and retains the receptacle in an inclined position as clearly shown in dotted lines in Fig. 2. The plug 27 is then removed from the escape opening in one end of the receptacle and the water allowed to drain therefrom after the washing of the clothes has been completed. In this manner the clothes may be quickly removed from the end of the receptacle 6 to which they have gravitated owing to the inclined disposition of the same.

In one end of the parallel frame members the casters 28 are disposed by means of which the machine may be readily moved from place to place. For this purpose the handles 29 are secured to the sides of the receptacle at one end thereof. Cams 30 are pivoted upon the studs 31 which are secured in the ends of the members 5, and are adapted to engage with the floor or other surface to elevate the casters from contact therewith, thus obviating the liability of the inadvertent movement of the machine during the washing operation. Thus a very substantial and rigid support is provided for the clothes receptacle, greatly facilitating the operation of the machine and the quick and thorough cleansing of the clothes.

From the foregoing it will be seen that we have devised a clothes washing machine

which, while of very simple construction, is highly efficient for the purposes in view and will wash a large quantity of clothes in a very short time. In the use of the machine the clothes receptacle is partially filled with water and the clothes or other articles to be washed are then placed therein. Several pieces of soap are also placed in the water and as the receptacle is oscillated the soap will gradually be dissolved. The saponified water is forced through the clothes by the baffle boards 19 as previously described until they have become sufficiently clean. The cleansing action of the water is greatly assisted by the rubbing or rolling contact of the clothes with the transverse ribs arranged in the bottom of the receptacle.

As the various elements employed in the construction of our machine are all of simple formation, no especially designed machinery will be required for their production, thus rendering its manufacture extremely inexpensive.

It will be understood that the machine as above described may be variously modified and we reserve the right to make such changes as we may deem best, within the scope of the claims without departing from the spirit or sacrificing any of the advantages of our invention.

Having thus described the invention, what is claimed is:

1. In a machine of the class described, the combination of a supporting frame, an oscillatory clothes receptacle horizontally positioned in said frame, said receptacle having a rounded bottom and ends and a flat top, one-half of the top being permanently closed, longitudinal cleats secured to the sides of the receptacle adjacent to the open portion thereof to provide a cover seat, transverse V-shaped ribs arranged within the receptacle and secured to the bottom thereof, transverse stop boards secured to the ends of the receptacle and inclined upwardly and inwardly, said boards having elongated openings therein, baffle boards arranged above said stop boards extending downwardly and inwardly in convergent relation thereto, said receptacle having an outlet opening in one end between the stop board and the baffle board, rack segments secured to the opposed inner sides of the frame, rack segments carried by the receptacle engaging with the frame segments, spacing blocks disposed between the receptacle and the rack segments, an operating handle disposed between the blocks on one side of the receptacle, a pin adapted to be positioned in the frame and in an opening in one of the rack segments on the receptacle to hold said receptacle against oscillation, and means adapted to return said receptacle to its normal horizontal position.

2. In a machine of the class described, the

combination of a frame comprising spaced horizontal and vertical members, an oscillatory clothes receptacle mounted between said vertical members, inverted arcuate rack segments secured to the sides of said receptacle in spaced relation thereto, an arcuate rack segment secured to each of said vertical members and engaged with the segments carried by said receptacle, a removable handle adapted to be inserted between one of the segments carried by said receptacle and the side of the receptacle, said segment having an opening therein, the vertical frame member being provided with an opening on each side of its longitudinal center, a pin normally disposed in one of said openings and adapted to enter the opening in said rack segment to hold the receptacle against oscillation, a stop board arranged transversely in each end of the receptacle and inclined inwardly and upwardly, said boards each having an elongated cut-away portion, a baffle board transversely secured

in the receptacle above each of the stop boards and in convergent relation thereto, one end of said receptacle having a water outlet opening disposed centrally between said boards, said receptacle being adapted to be disposed at an inclination in the frame, the pin carried in the vertical frame member being adapted to be positioned in the other of the openings therein and to engage with the vertical edge of the rack segment on the receptacle to retain the same in its inclined position, and a retractile spring adapted to return said receptacle to its normal horizontal position.

In testimony whereof we hereunto affix our signatures in the presence of two witnesses.

THEODORE F. VANDEGRIFT.  
JOHN W. GORDON.

Witnesses:

M. R. MONTGOMERY,  
C. W. COLTON.