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T. F. YAGLE
WASHING MACHINE
Filed Sept. 10, 1923

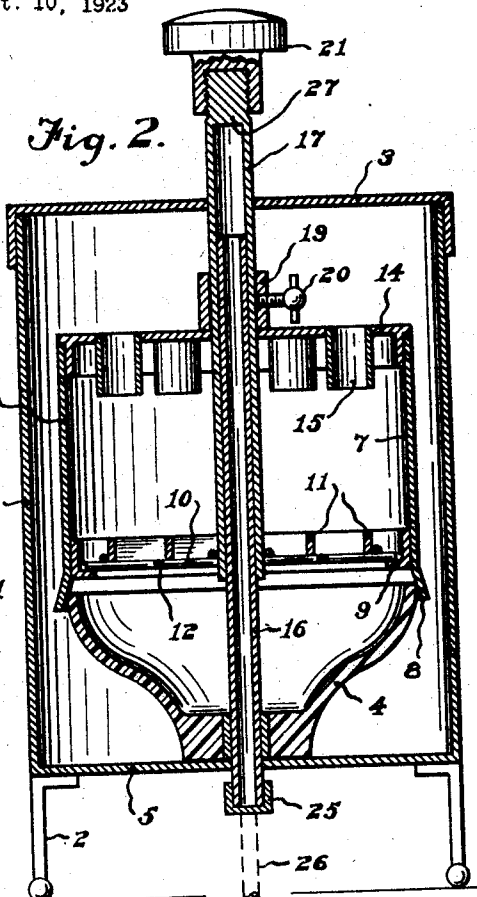
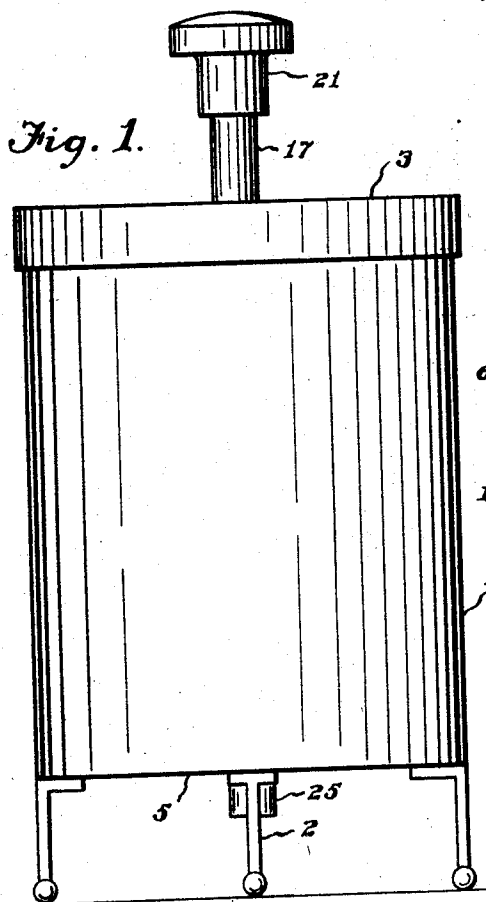


Fig. 3.

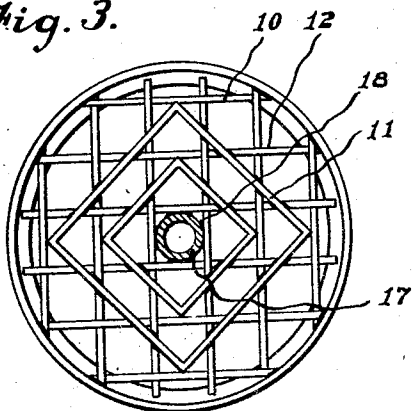
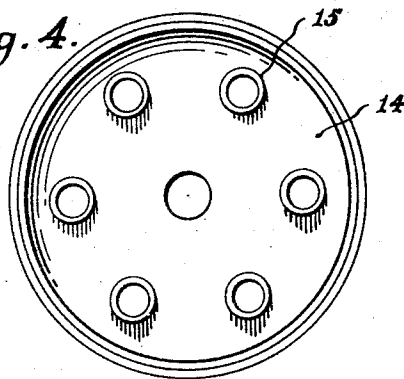


Fig. 4.



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WASHING MACHINE.

Application filed September 10, 1923. Serial No. 661,995.

To all whom it may concern:

Be it known that I, THEODORE F. YAGLE, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Washing Machines, of which the following is a specification.

This invention relates to "washing machines" and an object of the invention is to provide a washing machine including a vertically reciprocable cleanser co-operating with a suction cup for forcing a detergent liquid through the clothes being washed.

A further object of this invention is to provide a washing machine as specified which may be manually operated or may be operated by power, and one which is simple in construction and will thoroughly cleanse clothing or analogous article without injury to the fabric.

Other objects of the invention will appear in the following detailed description and in the accompanying drawings; wherein:

Fig. 1 is a side elevation of the improved washing machine.

Fig. 2 is a vertical section through the washing machine.

Fig. 3 is a top plan of a clothes support employed in the washing machine.

Fig. 4 is a bottom plan of the dasher.

Referring more particularly to the drawings, the improved washing machine comprises a cylindrical container 1, which is supported by suitable supporting legs 2, and has a removable cover 3 mounted upon its upper end.

A flexible suction cup 4 is placed centrally within the container or receptacle 1 and rests upon the bottom 5 of the receptacle as clearly shown in Fig. 2 of the drawings presenting an upwardly opening cup, the walls of which are flexible so as to permit flexing of the cup by downward movement of the clothes container or dasher 6 for creating a suction through the clothes container. The clothes container 6 comprises a cylindrical shell 7, the lower end of which is outwardly flared as shown at 8 for engaging over the upper edge of the cup 4. A supporting ring or annulus 9 is carried within the shell 7 at the inner edge of the flared portion 8 and it carries a foraminous clothes supporting bottom 10

which has a plurality of upwardly extending rectangular frames 11 carried thereby and disposed with their sides at oblique angles to the cross rods or wires 12 of the foraminous bottom 10.

A removable cover 14 is carried by the shell 7 and it has a plurality of depending tubes 15 carried thereby which extend downwardly into the shell for a short distance below the cover 14, and provide means for the ingress and egress of a detergent fluid into and from the shell 7.

An axial tube 16 extends through the bottom 5, cup 4 and upwardly through the shell 7; this forms a support upon which the operating sleeve 17 slides. The operating sleeve 17 has its lower end soldered or otherwise suitably connected to the foraminous bottom 10 as shown at 18 in Fig. 3 of the drawings and it extends upwardly through the covers 14 and 3.

A clamping sleeve 19 is slidably mounted on the sleeve 17 and is held in adjusted positions by a thumb screw 20, the sleeve 19 is provided for holding the cover 14 tightly clamped in place on the shell 7. A removable operating head 21 is mounted upon the upper end of the sleeve 17.

In operation the covers 3 and 14 are removed and the clothes or analogous articles to be washed are placed within the shell 7 after which the cover 14 is mounted upon the shell 7 and clamped in place by the clamping sleeve 19. The detergent liquid or washing fluid is then placed in the cylindrical container 1 and the clothes container 6 is forced downwardly by downward pressure on the head 21 which compresses the suction cup 4 causing an upward pressure through the clothes container 6. The reflexing of the suction cup 4 will force the container 6 upwardly and cause a suction through the tubes 15 and through the clothes in the container for forcing the detergent fluid through the clothes. The continued depression and reflexing of the suction cup will cause it to go back and forth forcing the fluid through the clothes or thoroughly cleansing them without subjecting the clothes to the rough treatment to which they are subjected by reprobated types of washing machines using reciprocatory or rotary dashes.

If it is desired to operate the washing machine by power, the cap 25 can be removed from the lower end of the tube 16 and a

shaft 26 as shown in dotted lines in Fig. 2 of the drawings may be inserted longitudinally through the tube 16 and connected to the sleeve 17 in any approved manner. The shaft 26 may be connected to any suitable type of prime mover.

It is of course, to be understood that minor changes in the construction and arrangement of the parts may be made without in any way departing from the spirit of my invention, and I therefore, do not limit myself to the exact details of construction herein shown and described except as set forth in the appended claims.

What I claim is:—

1. A washing machine comprising a receptacle, a flexible stationary suction cup therein, a reciprocatory clothes container engaging said suction cup, a stationary axial tube in said receptacle, a sleeve connected to said container and slidable on said tube to permit reciprocatory movement of the container for flexing said suction cup to force a detergent fluid through the container.

2. A washing machine comprising a receptacle, a flexible stationary suction cup therein, a reciprocatory clothes container engaging said suction cup, a stationary axial tube in said receptacle, a sleeve connected to said container and slidable on said tube to permit reciprocatory movement of the container for flexing said suction cup to force detergent fluid through the container, a removable cover for said container, a plurality of relatively short tubes carried by said cover, and opening out through the

cover to permit the passage of fluid through the cover.

3. A washing machine comprising a receptacle, a flexible stationary suction cup therein, a reciprocatory clothes container engaging said suction cup, a stationary axial tube in said receptacle, a sleeve connected to said container and slidable on said tube to permit reciprocatory movement of the container for flexing said suction cup to force a detergent fluid through the container, a removable cover for said container, a plurality of relatively short tubes carried by said cover, and opening out through the cover to permit the passage of fluid through the cover, a foraminous bottom for said container and upstanding clothes supporting frames carried by said foraminous bottom.

4. A washing machine comprising a receptacle, a flexible stationary suction cup therein, a reciprocatory clothes container engaging said suction cup, and a stationary axial tube in said receptacle, a sleeve connected to said container and slidable on said tube to permit reciprocatory movement of the container for flexing said suction cup to force a detergent fluid through the container, a removable cover for said container, a plurality of relatively short tubes carried by said cover, and opening out through the cover to permit the passage of fluid through the cover, a clamping sleeve slidable upon said first frame sleeve and adapted to clamp said cover in position upon said container.

In testimony whereof I affix my signature.

THEODORE F. YAGLE.