E. HACKER.

WASHING MACHINE.

APPLICATION FILED SEPT. 5, 1908.

914,717. Patented Mar. 9, 1909.

Fig. 1.

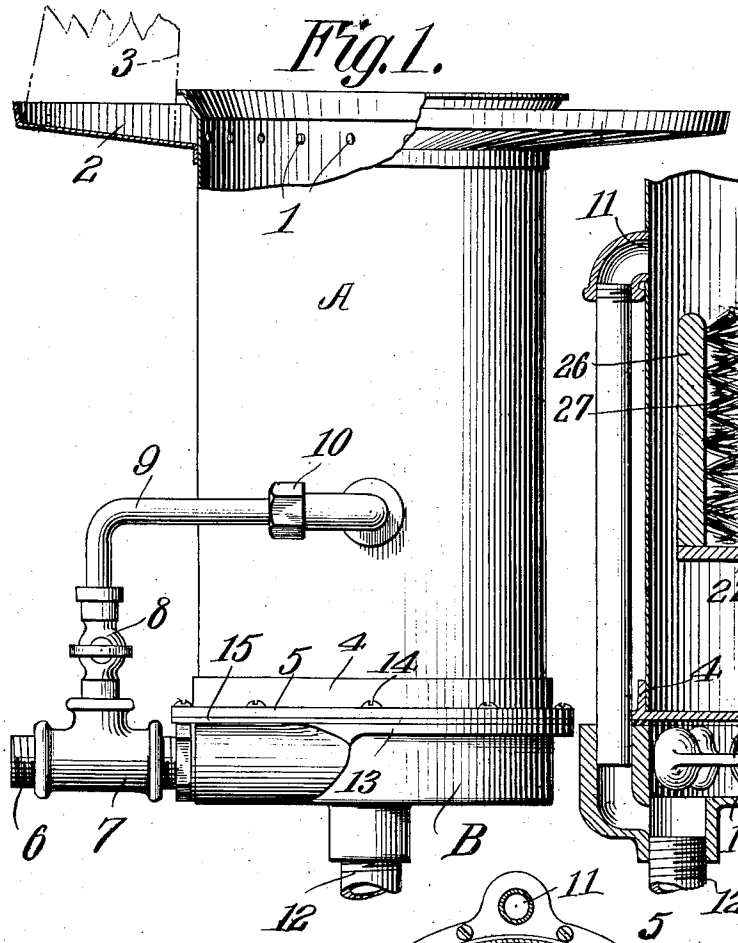


Fig. 2.

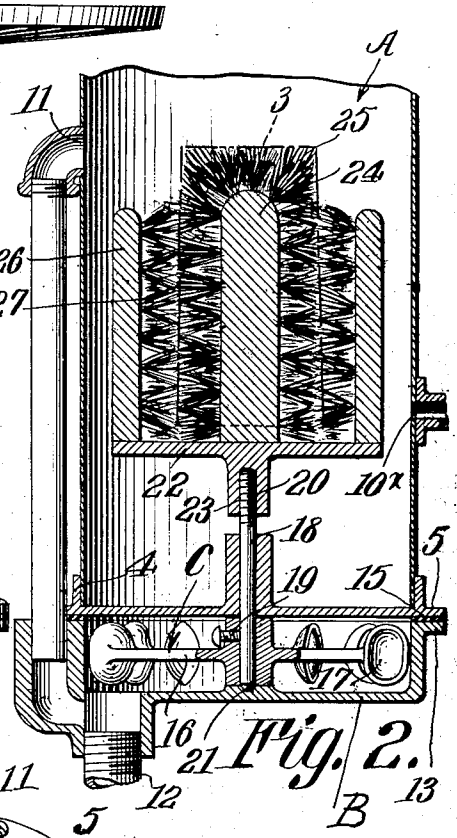
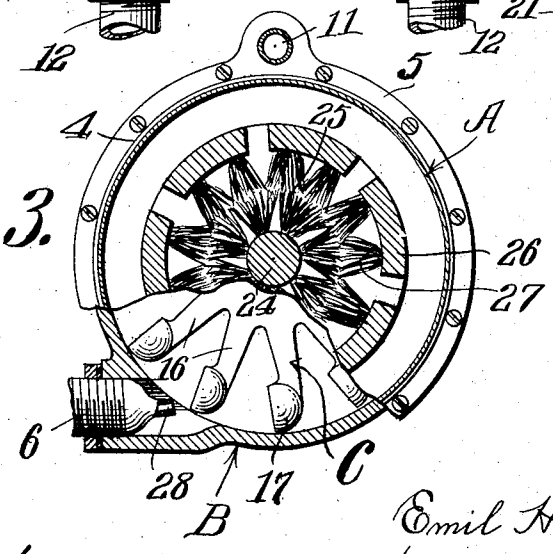


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

EMIL HACKER, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-HALF TO JOSEPH GOLDMAN, OF BALTIMORE, MARYLAND.

WASHING-MACHINE.

No. 914,717. Specification of Letters Patent. Patented March 9, 1909.

Application filed September 5, 1908. Serial No. 451,841.

To all whom it may concern:

Be it known that I, EMIL HACKER, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

My invention relates to washing machines and more particularly to the washing or rinsing of drinking glasses or other similar vessels, which are more or less in constant use.

In the construction of my device the washing of the glasses and the operating of the machine is accomplished by a single source of power, the machine being so constructed that a fresh and more or less clean supply of running water is afforded during washing operation, the soiled or polluted water being more or less discharged from the device by reason of the pressure of inflow of the unpolluted water into the machine.

The device is cheap of manufacture, simple in operation and effective in the purpose for which it is intended.

With the foregoing objects in view, my invention consists in other novel features of construction and combinations of parts which will be hereinafter described and pointed out in the appended claims.

In the accompanying drawings forming a part of this specification, Figure 1 is a side elevation of the invention with the parts broken away. Fig. 2, is a central sectional elevation of the same, the view being taken at right angles to that of Fig. 1, and Fig. 3 is a sectional plan view.

A indicates a cylindrical receptacle open at one end, and provided with perforations 1 in the upper end portion thereof.

2 is a tray or shelf, laterally extended from the upper end portion of the receptacle, upon which the glasses 3 are deposited for the purpose of draining them.

Secured on the lower end portion of the receptacle A is a ring 4, provided with a flange 5.

6 indicates a supply pipe conveying fluid under pressure; 7 a T coupling; 8 a valve, from which is extended a pipe 9 leading and discharging into the receptacle A, at a point indicated 10^x, and 10 indicates a union joint by which the connection of the pipe is facilitated.

11 indicates an overflow pipe leading from the upper end portion of the receptacle and discharging into the discharge pipe 12.

B indicates a casing, provided with a laterally extended flange from the upper end portion thereof, the said flange corresponding to the flange 5 on the ring 4, the casing being secured to the ring 4 on the lower end of the receptacle A by means of the screws 14, interposed between these said flanges is a packing 15. Secured within the said casing is a revoluble water wheel C, composed of a plurality of blades 16 on the ends of which are provided cup shaped disks 17. Secured within the casing B, and extended within the receptacle A is a vertical shaft 18, to which the wheel C is secured on the lower end thereof by means of a set screw 19, the upper end of the said shaft being threaded at 20; the shaft being supported within the casing by means of the step bearing 21. Secured on the upper threaded end portion 20 of the said shaft is a frame 22, threaded at 23 to receive the said shaft. The frame is provided with a central arm 24 which is provided with bristles 25. Surrounding this central arm is provided a plurality of arms 26 provided with bristles 27.

My device is operated as follows: Fluid under pressure is supplied through pipe 6, and directed by nozzle 28 into the casing against the disks 17 causing the wheel C to rotate, and by reason of the shaft 18 this motion is transmitted to the frame 22 carrying thereon the brushes 25 and 27. Fluid is also supplied through pipe 9 (which is connected with the supply pipe 6) to the receptacle A, the pressure being controlled by the valve 8, the fluid being permitted to fill the receptacle to a predetermined depth by reason of the over flow pipe 11, through which the surplus fluid is discharged into the outlet 12, this outlet also affording means for the discharge of the fluid from the casing C. By reason of this construction the brushes are made to rotate, and a supply of clean water is constantly passing through the receptacle A, the polluted or soiled water being carried off through the overflow pipe 11. A glass 3 indicated by dotted lines in Fig. 2 to be washed, is firmly grasped by the operator on the lower end thereof, and placed over brush 25, and firmly held in the position indicated by the glass 3, for a brief

period of time, the brushes in the mean time having been set in motion; while the brush 25 is washing the interior of the glass the brushes 27 wash it exteriorly. The glass is then removed from over the brush 25 and deposited on the shelf 2, where it is permitted to drain, the drainage passing through the perforations 1 back into the receptacle A, the washing of additional glasses being accomplished by simply repeating the operation just described.

Slight changes and alterations might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention and hence I do not wish to limit myself to the exact construction as herein set forth, but—

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

1. In a machine of the character described, comprising a cylindrical shaped receptacle, having a plurality of perforations in the upper end portion thereof, a laterally extended shelf secured around the said upper end portion, a supply pipe leading into the said receptacle, a valve secured on the said pipe, an overflow pipe leading from the said receptacle, a casing secured beneath the said receptacle, a rotatable water-wheel secured within the said casing, a pipe discharging thereinto, means directing the discharge against the said wheel, causing the said wheel to rotate, a frame secured within the said receptacle, a plurality of brushes carried by the said frame, means connecting the said wheel with the said frame and for transmitting motion thereto, substantially as described.

2. In a machine of the character described, comprising a cylindrical shaped receptacle, a plurality of perforations in the upper end thereof, a laterally extended shelf secured around the said upper end portion, a supply pipe discharging into the said receptacle, means on the pipe for controlling the supply, an overflow pipe leading from the said receptacle, a metal ring secured on the lower end of the said receptacle, having a laterally extended flange provided thereon, a casing having a laterally extended flange provided on the upper end portion thereof, means securing the flange on the said ring to flange on the said casing, a packing interposed between the said flanges, a supply pipe discharging into, and an outlet leading from the said casing, a rotatable water wheel composed of a plurality of blades and having cup shaped disks formed on the ends thereof, means directing the said discharge against the said blades, a vertical shaft carried by the said wheel and extended within the said receptacle, a frame carried by the said shaft, a plurality of brushes carried by the said frame, substantially as described.

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

EMIL HACKER.

Witnesses:
MARY M. MAGRAW,
E. WALTER BREWINGTON.