July 1, 1930. J. B. FLETCHER 1,769,666

WASHING MACHINE

Filed Dec. 29, 1927

Fig. 1.

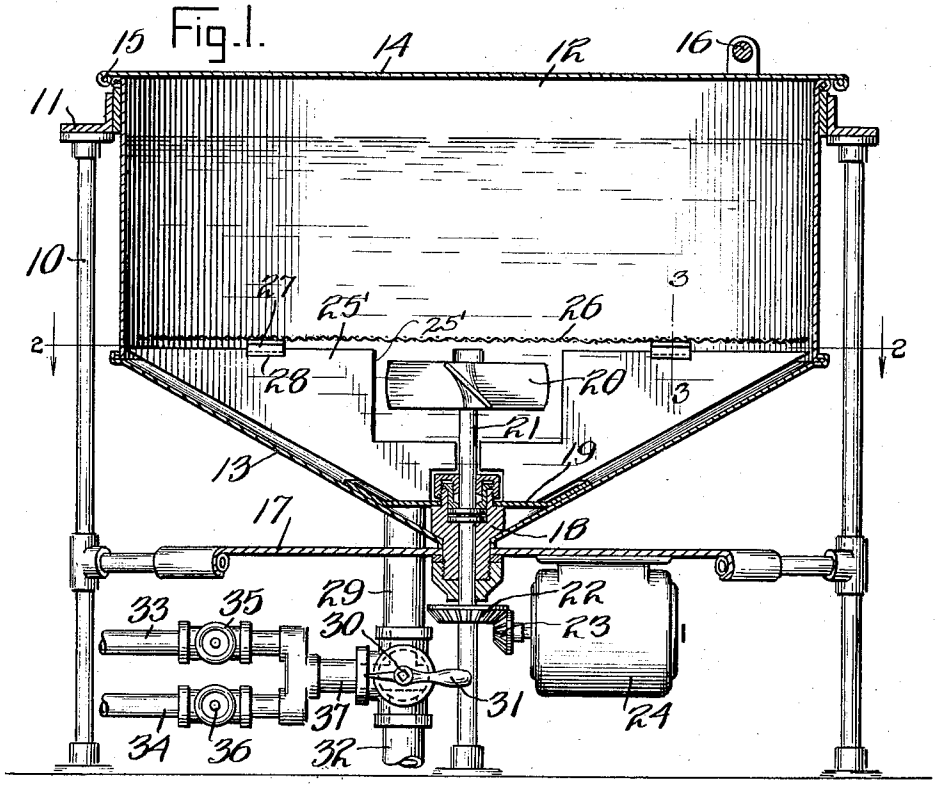


Fig. 2.

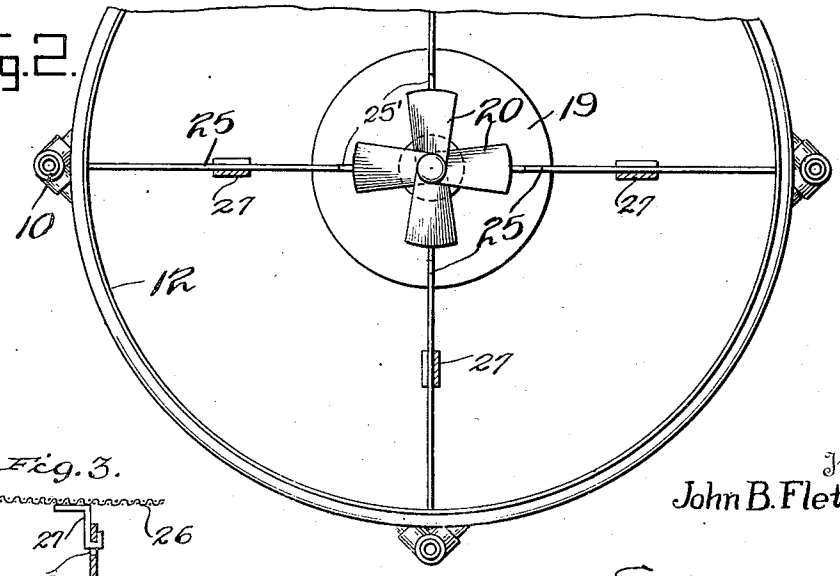
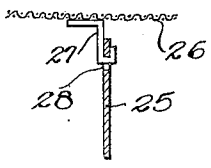


Fig. 3.



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Patented July 1, 1930 1,769,666

UNITED STATES PATENT OFFICE

JOHN B. FLETCHER, OF TAMPA, FLORIDA

WASHING MACHINE

Application filed December 29, 1927. Serial No. 243,385.

My invention relates to a combined washing machine and dry cleaner and it is an object of the invention to provide a device of this character wherein the articles to be cleansed are subjected to an upwardly directed stream of the cleansing solution which is forced against and through them so as to cleanse and thoroughly free them from dirt and other foreign matter.

Another object of the invention is to provide a machine of simple construction which may be easily assembled and taken apart if the same is desired or necessary and one which is devoid of unnecessary parts, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings which are made a part hereof and on which similar reference characters indicate similar parts,

Figure 1 is a central vertical section of a machine illustrating one application of my invention,

Figure 2, a fragmentary section on the line 2—2 of Fig. 1, and Figure 3, a vertical section on the line 3—3 of Figure 1.

In the drawings reference character 10 indicates a frame or stand formed of pipe and provided with an angle-iron member 11 which forms a support for a circular tank 12. The circular tank 12 is provided with a conical bottom 13 and with a lid 14 hinged at 15 and having a handle 16 by means of which it may be lifted and any desired clamping means may be used for fastening the lid in closed position.

The conical bottom 13 of the tank rests upon a support 17 and a stuffing box 18 is supported within an opening in the lower end of the tank and extends through the motor bracket or support 17 for holding the tank firmly in position. A bracket 19 is fastened by means of rivets across the bottom of the tank and forms a false bottom as well as a reenforcing bracket and supporting means for the stuffing box. A propeller 20 is rigidly supported on a shaft 21 which runs through the ball bearing stuffing box 18 with a beveled or mitered gear 22 fixed on the lower end of the shaft and adapted to be driven from a beveled or mitered pinion 23 of the motor 24. A plurality of baffle plates 25 are disposed in the conical bottom portion of the tank spaced slightly from the bottom of the same, there being preferably four in number, each of which has a cut-out portion 25′ to accommodate the propeller 20 and with its lower portion adapted to fit into the stuffing box 18. The baffle plates 25 are designed to prevent rotary action of the water and afford a constant supply of water or other cleansing fluid to the propeller.

In order to support the clothes or other articles to be cleansed, a wire mesh or perforated sub-bottom 26 is placed on the baffle plates 25 just above the propeller 20. By this construction I obtain a much larger agitation and better distribution of force as well as a simplified machine.

The sub-bottom 26 may be retained in position by any desired means but I have shown hooks 27 adapted to extend through slots 28 in the baffle plates 25, the sub-bottom being placed in position and given a partial rotation to secure it in position.

A combination supply and drain pipe 29 has communication with the bottom of the tank and I provide a three-way valve 30 operable by a handle 31 for admitting hot or cold water into the tank, for shutting off the supply, or for permitting the drainage of the contents through a drain pipe 32. Hot and cold water pipes 33 and 34 respectively are provided and have hand valves 35 and 36 for controlling the supply of hot and cold water through the pipe 37 to the three-way valve 30.

It will be obvious to those skilled in the art that various changes may be made in my device without departing from the spirit of the invention, and I, therefore, do not limit myself to what is shown in the drawings and described in the specification, but only as set forth in the appended claims.

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

1. A receptacle, an impeller in the bottom of said receptacle, baffle plates disposed in

upright position in the bottom of the receptacle with their lower edges spaced above the bottom of the receptacle, said baffle plates having portions extending beneath the impeller and with their upper edges terminating in a substantially horizontal plane above the impeller, an article support comprising a flat plate resting upon said baffle plates providing an unobstructed article receiving compartment above the baffle plates, and fastening means for securing said article support upon said baffle plates comprising hooks carried by the article support adapted to enter slots in the baffle plates upon a partial rotation of the article support, substantially as set forth.

2. A washing machine comprising a vertical shaft, an impeller on the upper portion of the shaft, and baffle plates disposed around the impeller the upper edges of the baffle plates terminating in a plane above the impeller, said baffle plates having portions extending beneath the impeller to substantially its axis whereby fluid below the impeller between the baffle plates is prevented from being carried around with the impeller but will be caused to pass inwardly toward the impeller and be operated upon by the same, substantially as set forth.

3. A washing machine comprising a receptacle having a bottom inclined for directing liquid toward its center, a shaft disposed in upright position in said receptacle, an impeller in the bottom of said receptacle mounted on said shaft, baffle plates disposed in upright position with their lower edges spaced slightly from the bottom of the receptacle, the upper edges of the baffle plates being disposed in a substantially horizontal plane above the impeller, said baffle plates being formed with cut out portions at their inner ends to accommodate the impeller between the upper and lower edges of the same and having extensions located beneath the impeller with their inner extremities disposed in close proximity to each other, substantially as set forth.

In witness whereof, I have hereunto set my hand at Tampa, Florida, this twenty-seventh day of December, A. D. nineteen hundred and twenty-seven.

JOHN B. FLETCHER.