No. 808,380. PATENTED DEC. 26, 1905.

T. E. JONES.

WASHING MACHINE

APPLICATION FILED APR. 11, 1905.

Fig. 1.

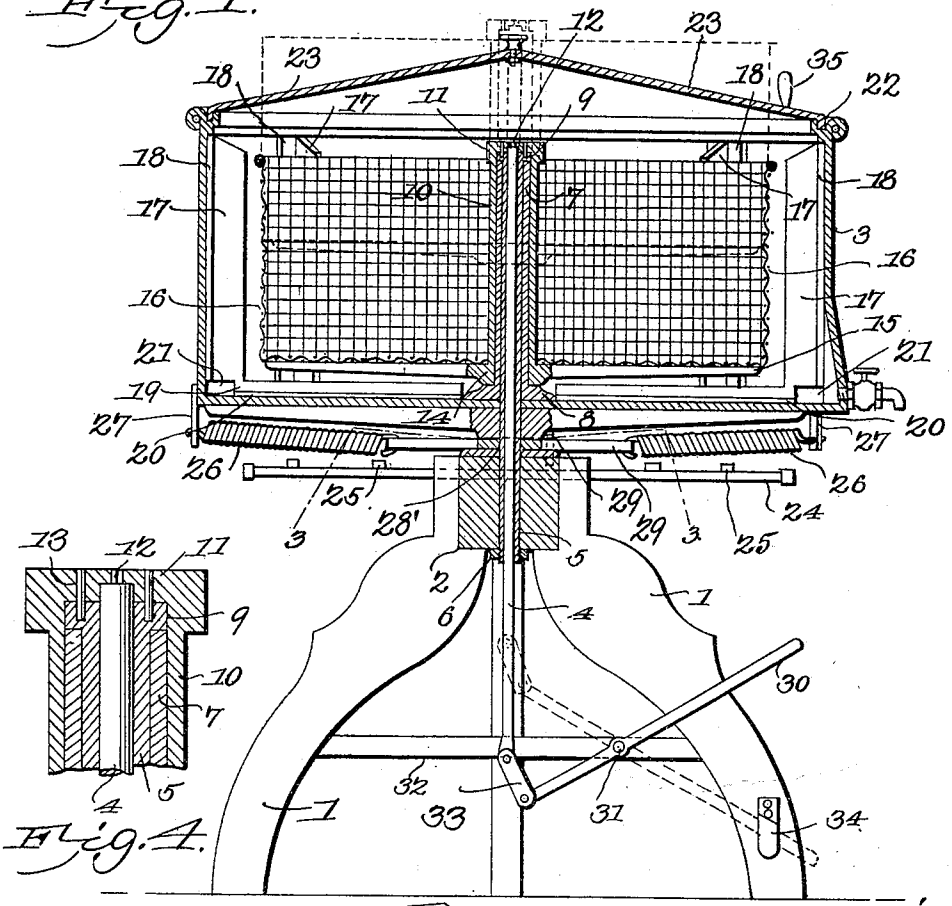


Fig. 4.

Fig. 2.

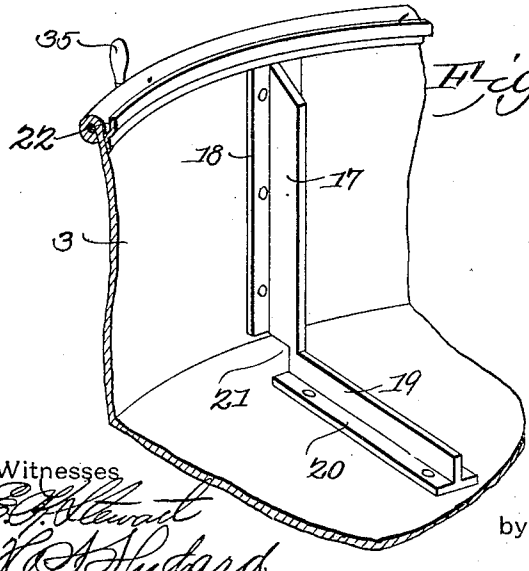
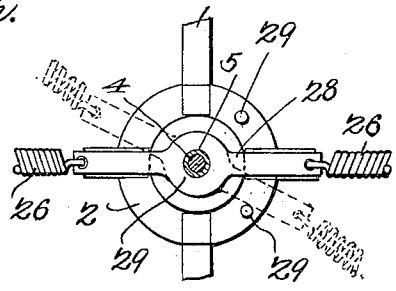


Fig. 3.



Witnesses

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THOMAS E. JONES, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO CHARLES P. ARNOLD, OF CHICAGO, ILLINOIS.

WASHING-MACHINE.

No. 808,380. Specification of Letters Patent. Patented Dec. 26, 1905.

Application filed April 11, 1905. Serial No. 254,940.

To all whom it may concern:

Be it known that I, THOMAS E. JONES, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing-machines, and is particularly designed to provide for washing and rinsing dishes in a simple and improved manner. It is also proposed to impart an oscillating movement to the body of the machine, while the dish-containing receptacle remains stationary, thereby to avoid breakage of the dishes and at the same time to effectually dash the wash-water across the dishes to cleanse the same.

Another object of the invention is to provide for conveniently elevating the dish-containing receptacle for the purpose of draining the wash-water therefrom and to support the dish-containing receptacle in its elevated position to enable the convenient removal of the dishes therefrom after being drained.

The invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a vertical central sectional view of a dish-washing machine embodying the features of the present invention, the dish-containing receptacle being shown elevated in dotted lines. Fig. 2 is a fragmentary perspective view, looking at the interior of the body of the machine, to show the dasher-blades therein. Fig. 3 is a detail plan section on the line 3 3 of Fig. 1. Fig. 4 is a detail enlarged sectional view taken through the top of the supporting means for the dish-containing receptacle.

Like characters of reference designate corresponding parts in each and every figure of the drawings.

The present machine includes a supporting stand or frame made up of leg-standards 1, which are connected at their upper ends by a head-block or top 2, rising a suitable distance above the top of the leg-standards. Upon this top or head rests the body 3 of the machine, which is in the nature of a metallic tub or receptacle open at its top and capable of rotating concentrically upon the stand. A non-rotatable endwise-movable upright bar 4 rises centrally through the head or top 2 of the stand and extends a suitable distance into the receptacle 3 and also below the head or top 2. Surrounding the upright bar 4 is a stationary tube 5, which projects downwardly through the head or top 2 of the stand and is provided upon its lower end with a nut 6 to hold the tube in place. Within the tub and surrounding the tube 5 is a tubular standard 7, which has a base 8, resting upon the bottom of the tub, with its upper end overlapped by an external annular flange 9 upon the tube 5, so as to support the latter. A sleeve 10 embraces the tubular standard 7 and is provided at its upper end with a cap or closed end 11, engaging over the top of the standard 7 and provided with a central non-circular opening for the reception of the reduced non-circular upper terminal 12 of the bar 4 to prevent rotation of the sleeve 10 upon the standard. If desired, pins 13 may be carried by the top of the tube 5 or the under side of the cap 11 for engagement with sockets in one or the other of these members as a further guard against rotation of the sleeve 10. The lower end of the sleeve 10 is provided with an annular base 14, from which radiate arms 15, so as to form a spider upon which is supported a perforate or reticulated dish-containing receptacle or basket 16, there being an annular space between the sides of the tub and the basket and also a space between the bottoms of the tub and the basket.

Within the tub there is a series of substantially radial upstanding dasher-blades 17, preferably in the nature of metallic blades having longitudinal flanges 18, riveted or otherwise secured to the upright walls of the tub, and provided at their lower ends with substantially radial bottom extensions 19, secured to the bottom of the tub by means of flanges 20, there being a notch or opening 21 between the connected ends of the upstanding and horizontal dasher-blades to permit of the water having access to all parts of the bottom of the tub.

At the top of the tub there is an internal

annular channel 22, in which fits the peripheral edge of a removable cover 23, which is carried by the tub independently of the basket 16. For heating the water within the tub there is a gas-burner 24, supported by the stand beneath the bottom of the tub and provided with a plurality of burner members 25.

A pair of diametrically opposite helical springs 26 are located beneath the bottom of the tub with their outer ends connected to suitable brackets or projections 27, depending from the tub, their inner ends being loosely hooked into the opposite terminals of a cross-head 28, having a central bearing-opening 28′, through which passes the tube 5, around which the cross-head has a limited rotation, its rotatable movement being limited by means of opposite stop projections 29, rising from the head or top of the stand 2 in the path of the swinging movement of the cross-head.

Beneath the top of the stand there is a vertically-swinging lever 30, fulcrumed intermediate of its ends, as at 31, upon a cross-bar 32, connecting opposite legs of the stand. At the inner end of the lever there is a link 33, which is pivotally connected to the lever and also to the lower end of the upright rod 4, whereby the basket 16 may be elevated into the dotted-line position by depressing the outer free end of the lever. A suitable clip or fastening device 34 is carried by one of the leg-standards for engagement by the lever 30 when depressed, thereby to support the basket 16 in its elevated position.

In practice the dishes to be cleansed are placed in the basket 16, and after the cover 23 has been placed upon the tub the latter is rotated or oscillated upon its vertical axis by manipulation of a handle 35, fixed to one side of the tub. As the basket 16 is fixed to the tube 5 against rotation, there is no shaking and consequent breakage of the dishes, and as the tub is worked back and forth the dasher-blades 17 and 19 dash the water into the basket and across the dishes, so as to effectually cleanse the latter. After the dishes have been thoroughly cleansed the cover 23 is removed and the lever 30 is depressed and engaged with the fastening device 34, so as to elevate the basket to a position above the level of the water within the tub, thereby to permit of the wash-water draining from the dishes. Clean hot water may of course be poured over the dishes in the elevated position of the basket to effectually remove all of the wash-water therefrom. When the basket is in its elevated position, the dishes may be conveniently removed therefrom without requiring that the entire basket be taken out of the tub. When starting to oscillate the tub, the cross-head 28 and the springs 26 swing with the tub around the vertical axis afforded by the upright bar 4 until the cross-head is stopped by one of the projections 29, whereupon the springs become extended and tend to return the tub to its original position, when pressure upon the handle 35 is removed, whereby the springs serve to aid in the operation of the tub. By providing for an initial bodily movement of the springs with the tub they do not offer any resistance to the initial rotatable movement of the tub, and therefore the latter acquires a certain amount of momentum before the resistance of the springs is felt; but this momentum added to the power applied to rotate the tub is sufficient to overcome the tension of the springs without requiring any appreciable additional effort upon the part of the operator.

Having fully described the invention, what is claimed is—

1. A washing-machine comprising a working body having upstanding dashers carried by the sides and bottom thereof and arranged in pairs with the side dasher of each pair connected to the adjacent bottom dasher and there being an opening through the connected ends of said dashers for the passage of the wash-water, and a stationary basket supported within the body above the bottom dashers and between the side dashers.

2. In a washing-machine, the combination with a support, of a rotary working body mounted thereon, a vertically-movable rod mounted upon the support and piercing the bottom of the body, a stationary basket contained within the body and carried by the rod, and means to move the rod upwardly to elevate the basket for draining the same.

3. In a washing-machine, the combination with a support, of a vertically-movable rod carried thereby, a stationary tube carried by the support and embracing the rod, a body rotatable around the tube as an axis, a dish-containing basket having a central upstanding sleeve surrounding the tube with its upper end closed and supported upon the top of the vertically-movable rod, and means to elevate the rod with the basket supported thereon.

4. In a washing-machine, the combination with a support, of a vertically-movable rod carried thereby, a tube carried by the support and embracing the rod with its upper end provided with an external annular shoulder, a body mounted upon the support and rotatable around the tube as an axis, a hollow standard within the body and surrounding the tube with the flange of the latter resting upon the top of the standard, a dish-containing receptacle having a central upstanding sleeve embracing the standard with its upper closed end supported upon the top of the rod, and means to elevate the rod with the basket thereon.

5. In a washing-machine the combination of a rotary body, a basket contained within

the body, and means working through the bottom of the body for raising and lowering the basket.

6. In a washing-machine, the combination of a rotary body, a basket contained within the body, and foot-controlled means working through the bottom of the body for raising and lowering tne basket.

7. In a washing-machine, the combination of a body, a basket contained therein, and means working through the bottom of the body for raising and lowering the basket.

8. In a washing-machine, the combination with a body and a basket contained therein one of said elements being rotatable, of means piercing the bottom of the body for raising and lowering the basket.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THOMAS E. JONES.

Witnesses:
G. K. OGDEN,
H. D. OGDEN.