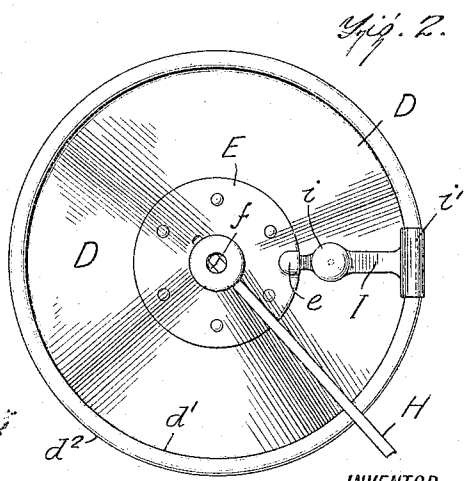
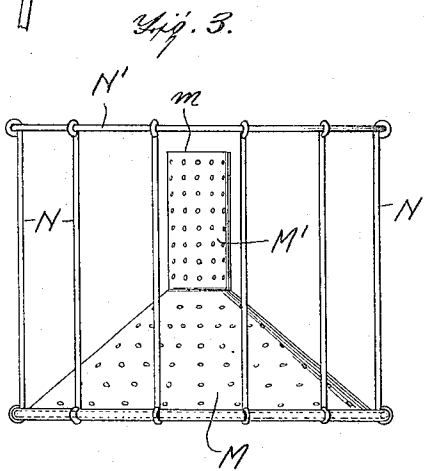
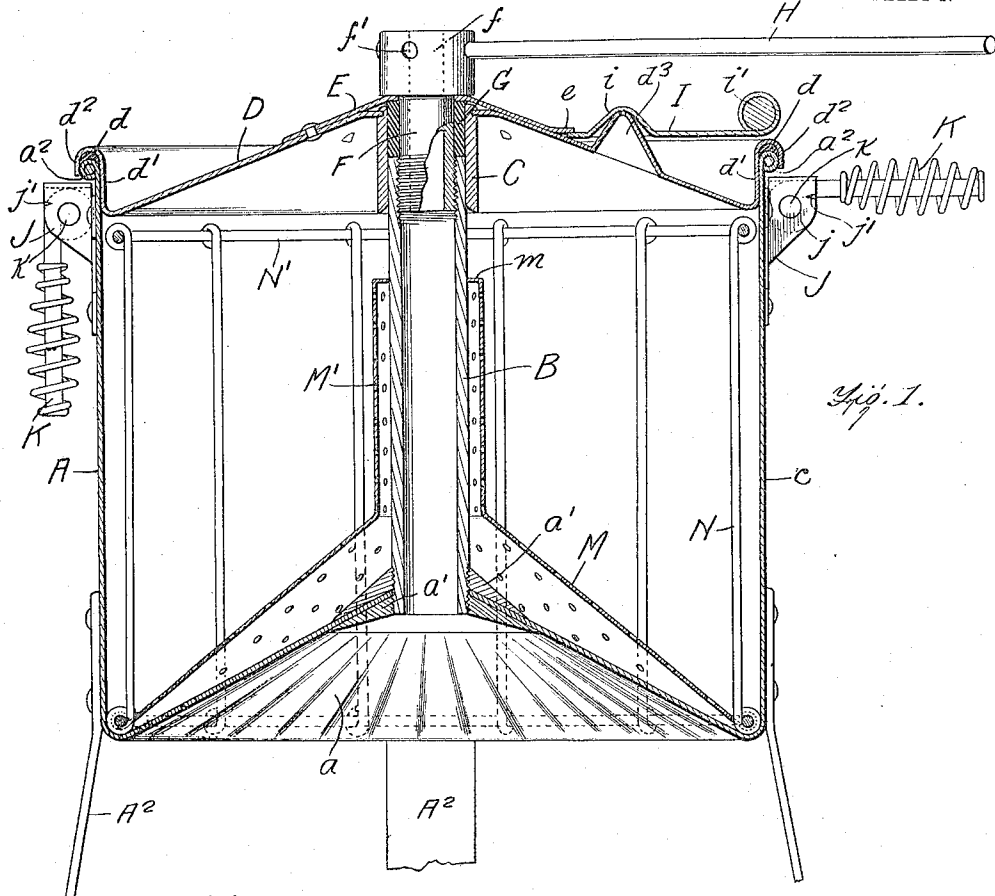


T. J. NASH.
 WASHING MACHINE.
 APPLICATION FILED OCT. 21, 1913.

1,123,785.

Patented Jan. 5, 1915.

2 SHEETS-SHEET 1.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 4.

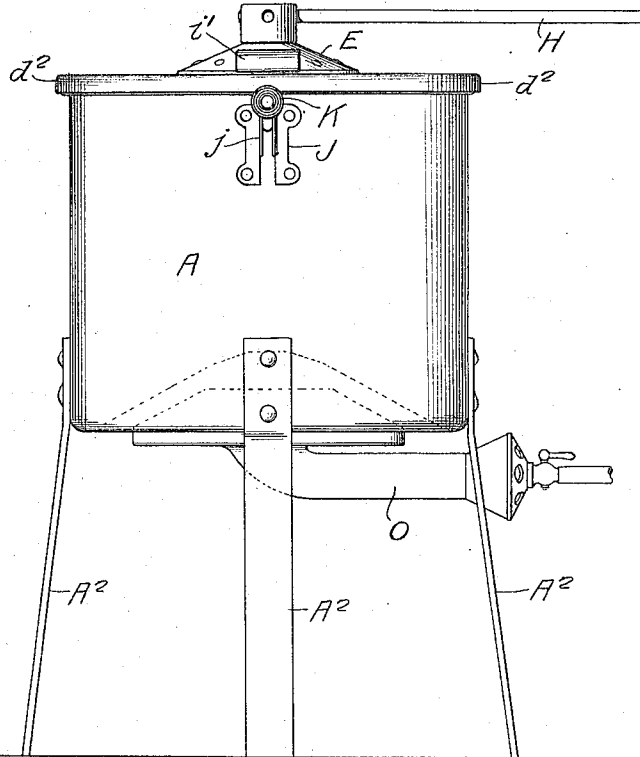


Fig. 5.

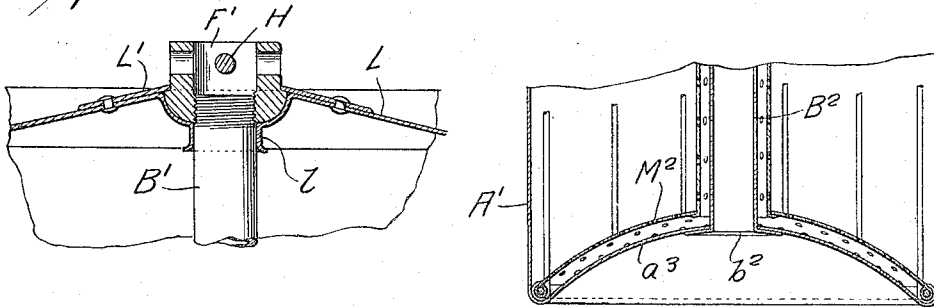
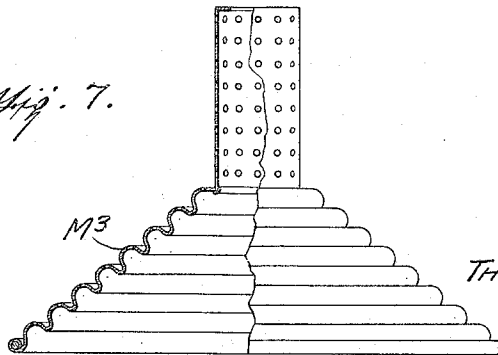


Fig. 6.

Fig. 7.



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THOMAS J. NASH, OF LINCOLN, NEBRASKA.

WASHING-MACHINE.

1,123,785.

Specification of Letters Patent.

Patented Jan. 5, 1915.

Application filed October 21, 1913. Serial No. 796,438.

To all whom it may concern:

Be it known that I, THOMAS J. NASH, a citizen of the United States, and resident of Lincoln, in the county of Lancaster and State of Nebraska, have invented an Improvement in Washing-Machines, of which the following is a specification.

My present invention relates to a washing machine of that type in which the clothes are boiled, my object being to provide a construction in which all of the heat energy will be confined within the machine through the coöperation of elements certain of which assist in maintaining a thorough circulation of the heated wash water through the clothes.

A further object of my invention is to provide a machine the parts of which may be readily assembled and dissembled when desired.

Referring now to the accompanying drawings in which my invention is illustrated, and which form a part of this specification, Figure 1, is a central vertical section through the body of my improved washer. Fig. 2, is a top plan view thereof. Fig. 3, is a side elevation of the inner removable frame of the washer. Fig. 4, is a side elevation of the complete washer. Fig. 5, is a central vertical section through the upper central portion of the washer illustrating a slightly modified form of screw connection. Fig. 6, is a similar view through the lower portion of the body of the washer illustrating a slightly modified form at its lower end, and Fig. 7, is a side elevation partly broken away and in section illustrating a slightly modified form of diaphragm.

Referring now to these figures and particularly to Figs. 1 to 4 inclusive I provide a washer consisting of a body A, the concaved conical base a of which is provided with a central opening and with reinforcing pieces a' which opening and reinforcing pieces are threaded to receive the lower threaded end of a central tube B which rises within the body A and has an upper internally threaded end terminating substantially flush with the upper edge of the body. The upper edge of the body surrounding its upper open end is preferably curled in order to reinforce the same as indicated at a^2 , either with or without an internal reinforcing rib or ring.

The cover D is substantially cone shaped and provided with an opening at its central

upper portion, the surrounding edge of its said opening being extended into an upper annular groove of a depending central tube C which telescopingly receives the upper end of the upright tube B when the cover is placed in position upon the body A as indicated in Fig. 1. The outer circular edge of the cover D is provided with an upwardly projecting annular rim d' , having an outwardly and downwardly curved flange d^2 forming a downwardly opening annular pocket within which may be disposed suitable packing d to bear against the upper reinforced edge a^2 of the body A, it being noted from Fig. 1 that, in the assembled position of the parts, the rim d' bears against the inner face of the body A adjacent its upper edge, and the flange d^2 depends upon the outer surface of the body.

Upon its upper surface the cover D is provided with a supplemental piece E, this piece having a central opening of less diameter than the tubular piece C and being adapted to receive through its opening the upper portion of the shank of a tubular screw member F externally threaded at its lower end for engagement within the upper internally threaded end of upright tube B. The member F is also provided with an upper head f which rests upon the outer surface of plate E and which bears downwardly upon the same when the member F is screwed tightly within tube B, a washer or packing ring G being preferably disposed within the tubular piece C between the inner edge of the supplemental piece E and the upper end of upright tube B.

The upper head f of the screw F is provided with transverse openings f' to receive one end of a readily detachable handle H whereby the screw member may be turned in order to move the same within the upper end of tube B, the effect of which is to firmly and tightly seat the cover on the body.

At one side of the supplemental plate E, its extreme outer edge is up set as indicated at e , to receive one end of a lever I, this lever being provided adjacent said end with a boss i seated upon an apertured boss d^3 of the cover, the opposite end of the lever having a weight i' for the purpose of holding it in proper position. From this it will be understood that the forward end of the lever and the up set portion e of the plate E coöperate to form a pivot upon which the lever is movable.

At relatively opposite outer sides of the body are arranged handle brackets J, having parallel vertically extending side ears j , through which is extended a transverse pivot bolt k , these side ears being connected at their upper ends and provided adjacent their said upper connected ends with indented portions, as particularly shown at j' in Fig. 1 whereby when the handles K, the inner ends of which are bent around the bolt k between the ears j , are raised to horizontal positions, the said indented portions j will serve to retain the same in place, (see right Fig. 1.)

As indicated in Fig. 5 the upper inner portion of a cover L, otherwise corresponding to cover D may be depressed to form a tubular portion l for receiving the upper externally threaded end of an upright tube B', in which event the lower portion of a screw member F' will be internally threaded to engage the said end of tube B' and will have a lower shoulder by which it may be confined by engagement of the inner edges of a supplemental piece L' therewith.

As shown particularly in Figs. 1 and 3, a removable frame or clothes rack is disposed within the body A and preferably comprises a lower reticulated diaphragm M which is conical in form and the lower outer edge of which rests upon the base of the body A. From the upper inner portion of diaphragm M extends a reticulated tube M' of greater diameter than, and adapted to surround, the upright tube B as particularly shown in Fig. 1 and having an inwardly projecting annular flange m at its upper end the inner edge of which engages the outer surface of said tube B.

Although supported upon the base a of the body A, the lower outer edge of the diaphragm M is spaced therefrom by the lower coiled ends of a series of upright rods N connected to the diaphragm in a circular series therearound and in turn connected at their upper ends by a surrounding ring N' whereby to form a clothes-receiving and holding frame, rods N being spaced from the inner surface of the body A.

As indicated in Fig. 6, the body A' may be provided with a dome-shaped base a^3 and the lower end of an upright tube B² may be flanged as indicated at b^2 for connection with the central portion of the dome-shaped base a^3 , and in this case the diaphragm M² will be of similar shape to the base a^3 .

As shown in Fig. 7 a conical diaphragm M³ may be corrugated to assist in the circulation.

In operation the clothes are placed within the inner removable frame and this frame disposed within the body A of the washer in the position best shown in Fig. 1, after which the cover D, is placed in proper position and clamped through the means described. The

body is then placed over a burner of any suitable form, for instance as indicated at O in Fig. 4, and to this end may be supported upon legs A². The water within the body A when heated rises through the perforations of the diaphragm M and upwardly into its tube M' and through the perforations of this tube into and through the clothes, the circulation being maintained by the sinking of water cooled by its contact with the clothes and with the wall of body A, between the lower outer edge of the diaphragm M and the base a of the body. During this operation all of the heat energy is being conserved within the washer and is prevented from escape unless it should rise above a safety point or at any predetermined point upon which the lever I is forced upwardly by the pressure in order to permit of its relief through the apertured boss d^3 . Thus due to the means by which the body of the washer is held tightly closed and the cooperation of those means by which a free and effective circulation is maintained, I am enabled to thoroughly wash and cleanse the clothes in a very short time.

It is to be understood that when the operation of cleansing the clothes has been completed, the inner removable frame may be withdrawn from the body after the cover is removed and the clothes thus permitted to drain at some convenient outside point.

I claim:—

1. In a washing machine, the combination of a body having an upright central tube rising from its base, said tube being open at both ends and having an upper threaded end, a cover for the body having its outer edge formed to snugly fit the upper edge of the body and provided with a central opening, a threaded member rotatably held in the cover opening for engagement with the threaded upper end of the tube, and a handle for turning the threaded member.

2. In a washing machine, the combination of a body, an upright tube rising centrally from the base of the body, said tube being open at both ends and having an upper threaded end, a cover having its outer edge formed to snugly fit the upper edge of the body and having a central opening, and tubular member depending from the opening to receive the upper end of the upright tube, a threaded member rotatably held in the cover opening for engagement with the upper threaded end of the upright tube, and a handle for operating said member, all for the purpose described.

3. In a washing machine, the combination with a closed body having a base and an upright tube rising centrally therein, of a removable frame disposed within the body and consisting of a conical reticulated diaphragm, a circular series of vertical rods having their lower ends coiled about the

lower outer edge of the said diaphragm whereby to space the same from the base of the body, an upper surrounding ring with which the upper ends of said rod are engaged and a reticulated tube rising centrally from the diaphragm and surrounding the upright body tube in spaced relation, all for the purpose described.

4. In a washing machine, the combination with a closed body having a tube rising centrally from its base, a reticulate member disposed within the body and consisting of a lower conical diaphragm and a tube rising centrally from the diaphragm and surrounding the body tube in spaced relation, and means engaging the lower outer edge of the conical diaphragm and resting upon the base of the body to support the said edge of the diaphragm in spaced relation to the said body base, all for the purpose described.

5. In a washing machine, the combination of a body open at its upper end, a tube opening at its lower end through the base of the

body and rising centrally therein, said tube being also open at its upper end and threaded adjacent thereto, a cover having its outer edge formed to snugly fit the upper edge of the body and having a central opening and a depressed portion surrounding the opening and forming a depending tube to receive the upper end of the central body tube, a tubular nut having a shouldered portion disposed within the depressed portion of the cover to surround the threaded end of the body tube and having internal threads whereby to engage said tube, a supplemental piece secured upon the upper surface of the cover and engaging the shouldered portion of the screw to rotatably confine the same, and a handle for turning the screw, all for the purpose described.

THOMAS J. NASH.

Witnesses:

FRED C. FOSTER,
MABEL C. SMITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."