

L. M. WILSON.  
WASHING MACHINE.  
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917,826.

Patented Apr. 13, 1909.

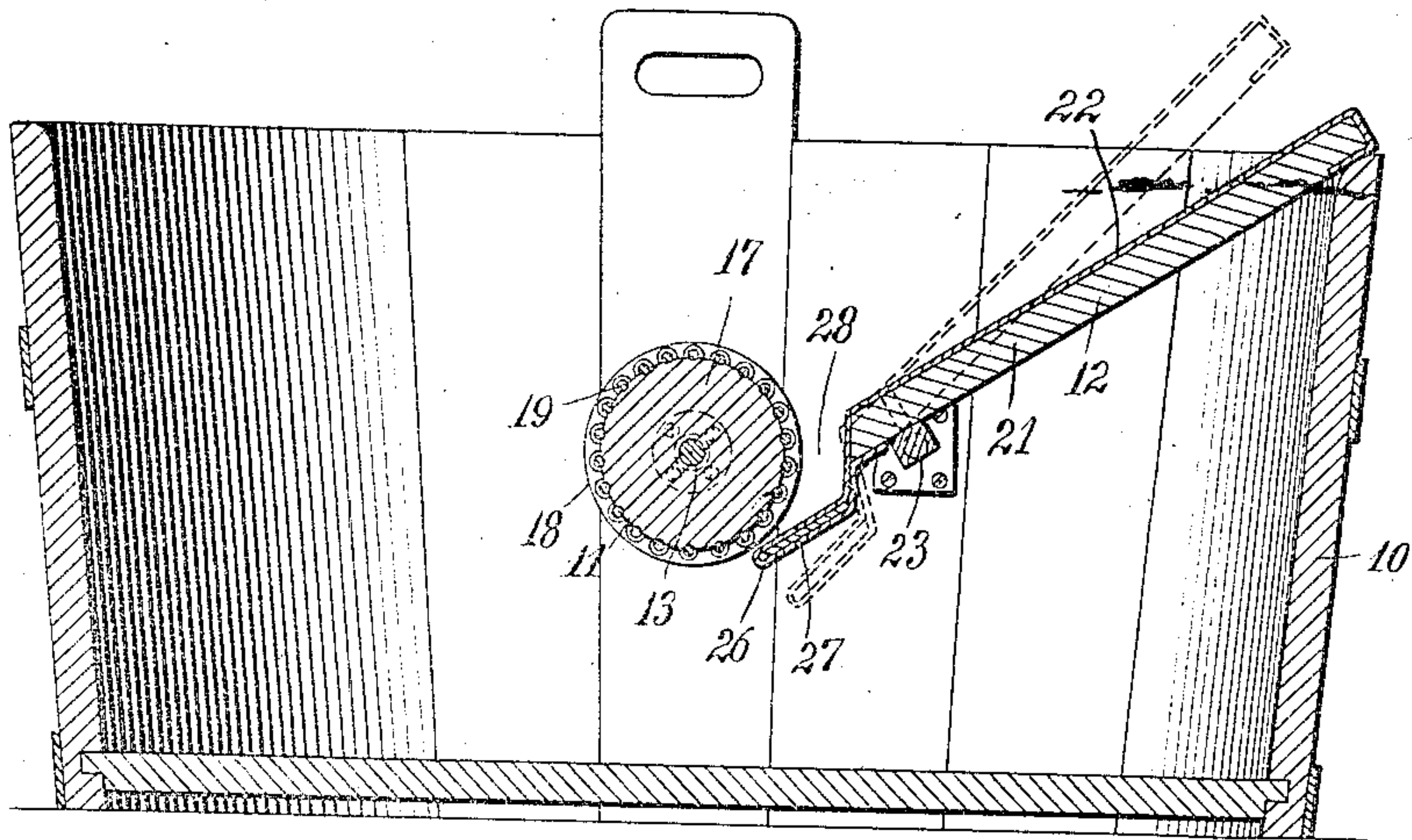


Fig. 1

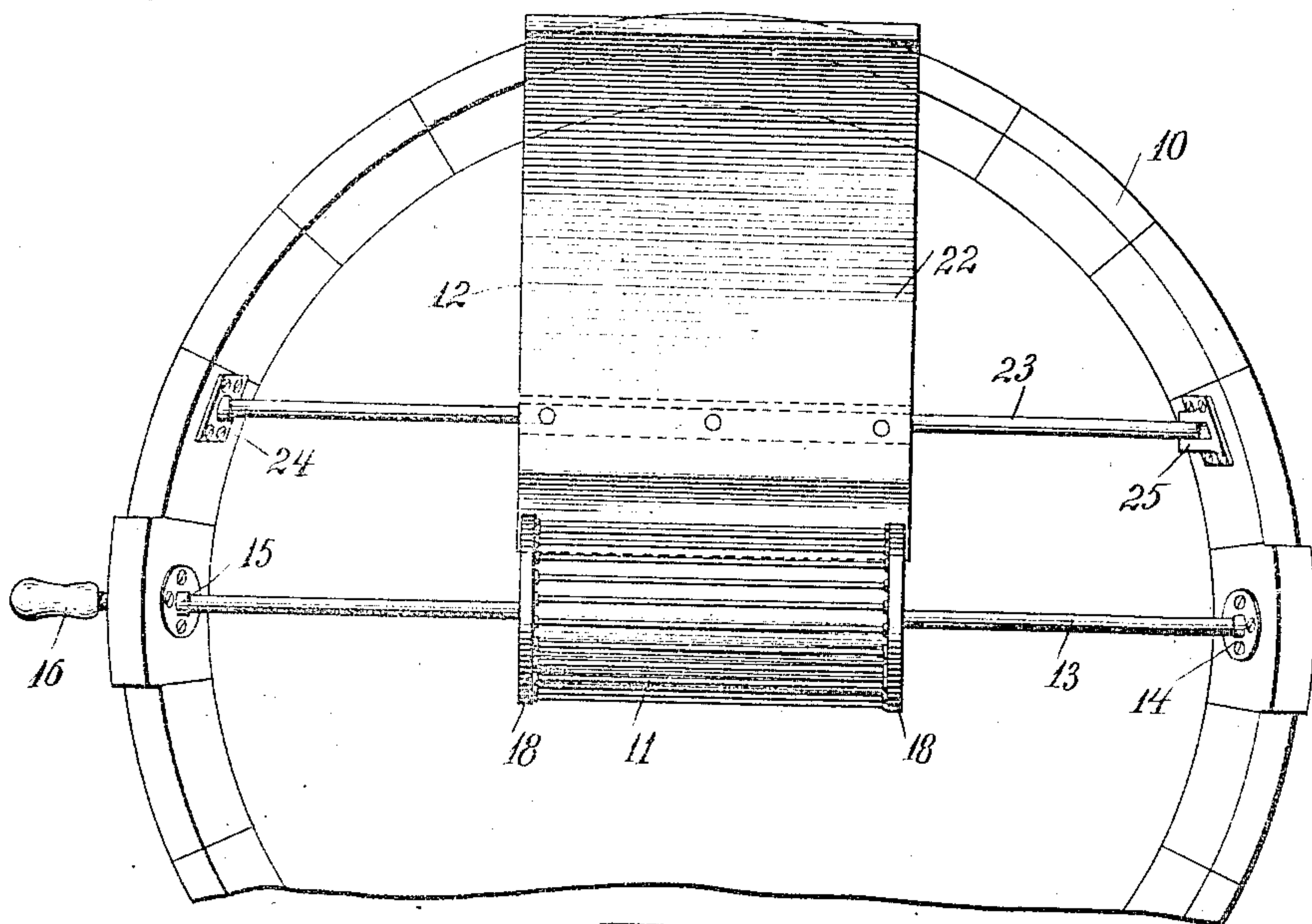


Fig. 2

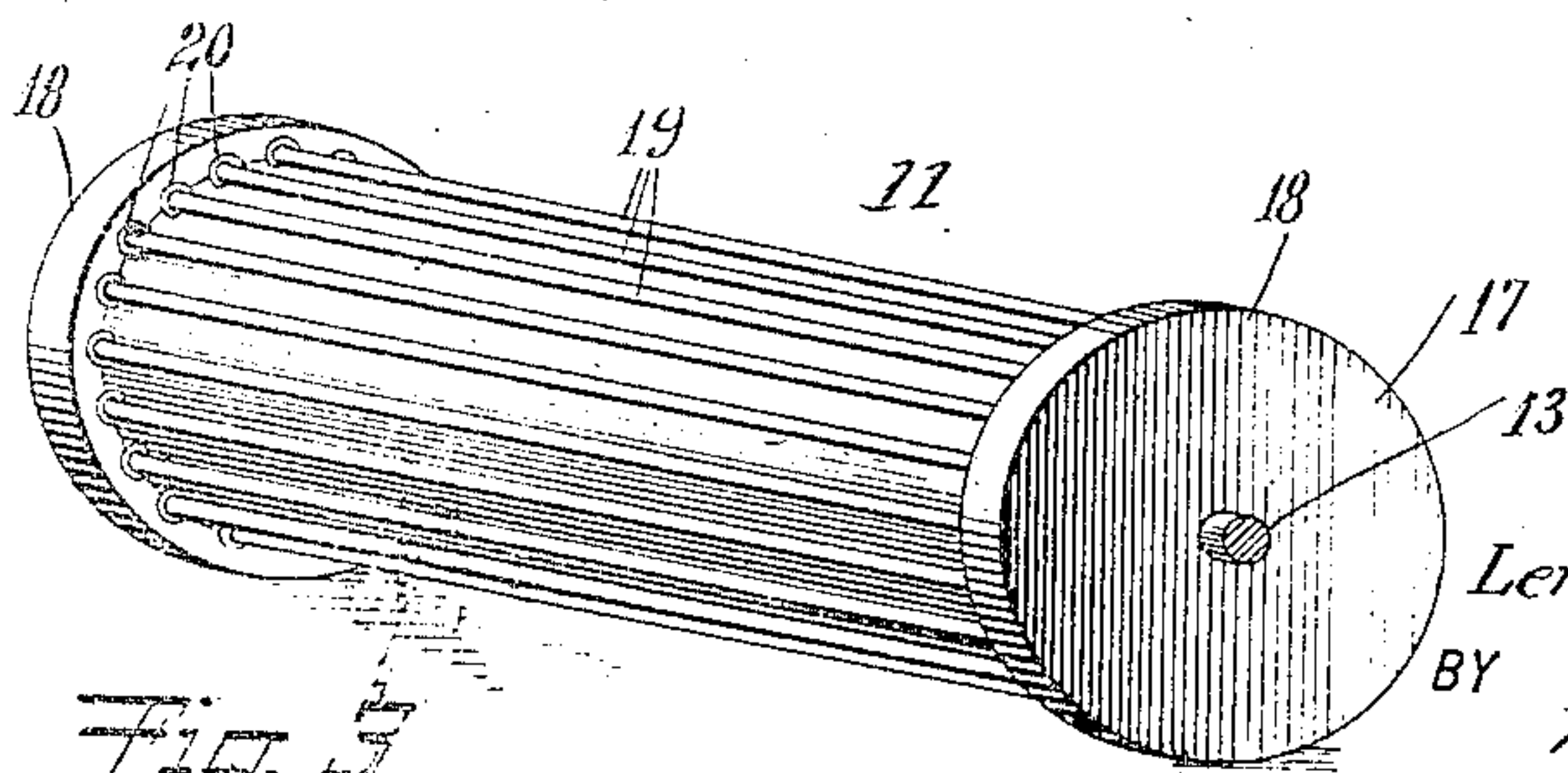


Fig. 3

WITNESSES  
E. G. Bromley,  
C. M. Fairbank

INVENTOR  
Lemuel Milton Wilson.  
BY *Mum Co*  
ATTORNEYS



## UNITED STATES PATENT OFFICE.

LEMUEL MILTON WILSON, OF BLAIRSTOWN, NEW JERSEY.

## WASHING-MACHINE.

No. 917,826.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed July 8, 1908. Serial No. 442,452.

*To all whom it may concern:*

Be it known that I, LEMUEL MILTON WILSON, a citizen of the United States, and a resident of Blairstown, in the county of Warren and State of New Jersey, have invented a new and Improved Washing-Machine, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in washing machines, and more particularly to that type of washing machine which includes a rotatable substantially cylindrical body mounted within a tub or other suitable container, and having adjacent thereto a pivotally mounted board movable in respect to said rotatable member and serving to support the articles being washed and to hold them in engagement with said rotatable member.

One object of my invention is to provide certain improvements in the rotatable member, whereby the surface thereof operates more efficiently upon the clothes or other articles being washed, and whereby the rotation of said member serves to convey water to the upper side of said member.

A further object of the invention is to provide certain improvements in the pivoted board, whereby the lower portion thereof which comes adjacent the rotatable member is reinforced and forms a chamber or recess for receiving the clothes.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a vertical section through a washing machine constructed in accordance with my invention; Fig. 2 is a top plan view thereof partly broken away; and Fig. 3 is a perspective view of the rotatable member.

In the specific form of washing machine illustrated in the accompanying drawings, I employ a tub 10 of any suitable character, and within the tub I mount a rotatable member 11 and a board 12. The rotatable member is substantially cylindrical in form, and is mounted upon a shaft 13, one end of which fits within a socket 14 in one side of the tub, and the opposite end of which extends through a packing box 15 in the opposite side of the tub and terminates in an operating crank or handle 16. The rotatable member is preferably formed of a solid wooden cylinder 17, of a length somewhat

less than the diameter of the tub, and adjacent the ends of the cylinder are outwardly-extending flanges 18, each having a smooth periphery of somewhat greater diameter than the body of the cylinder. The outer surface of the cylinder intermediate the two flanges is provided with a plurality of grooves extending longitudinally thereof from one flange to the other, all of said grooves being substantially parallel to each other and to the axis of the rotatable member. Within each groove is mounted a small rod 19, extending substantially from one flange to the other and rigidly secured in place by means of staples or other suitable fastening members 20. The rods are preferably circular in cross section and the curvature of the grooves is substantially the same as the curvature of the outer surfaces of the rods, but the depth of each groove is approximately only one-third the diameter of the corresponding rod. As the rods are of greater diameter at a slight distance away from the periphery of the body 17 than they are at said surface, it is evident that as the cylinder rotates, water will be carried to the upper side thereof by each of the rods. The cylinder itself is not subjected to any material wear, as its outer surface is protected by the rods, but any one of the rods may be very readily removed and replaced by a new one in case it becomes worn, bent, or objectionable for any other reason.

Adjacent the cylinder and within the tub, I provide the board 12 previously referred to. This board is formed with a body portion 21, preferably formed of wood and covered upon its outer surface by a sheet 22 of zinc or other suitable material. The lower end of the board is rigidly secured on its under side to a pivot 23, extending across the tub and held at its ends in suitable bearings 24 and 25. One of these bearings is preferably provided with an open top whereby the pivot and the board secured thereto may be readily removed from the tub. The board is of such form and the pivot 23 is so disposed, that when the upper end of the board rests against the upper edge of the tub, the lower end of the body of the board comes a short distance from the surface of the cylinder and at an elevation approximately even with the axis of said cylinder. The sheet metal 22 at the lower end of the body of the board is extended across the end at an angle to the upper surface, and is then



bent downwardly substantially parallel to the upper surface to form an offset 26. This offset may be reinforced by a core or center 27, of wood, metal or other similar material, and the piece of sheet metal is bent beneath this reinforcement and terminates adjacent the under surface of the body of the board where it preferably rests against the under side of said body. The lower end of the extension 26 comes closely adjacent the cylinder surface and is adapted to contact with the flanges 18, 18, when the upper end of the board is against the upper edge of the tub, as illustrated in solid lines in Fig. 1. Between the end of the body of the board and the adjacent surface of the cylinder and above the offset, is formed a recess or chamber 28, into which the clothes may be forced by hand as the cylinder is rotated. This supports the clothes from below and from behind, so that when pressure is applied to the upper surface, they are forced against the cylinder with any degree of pressure desired. The cylinder may be rotated in either direction desired, and the board may be moved on its pivot, as indicated in dotted lines in Fig. 1, to bring the lower end thereof at any desired distance from the surface of said cylinder.

30 Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A washing machine, including a container, a substantially cylindrical rotatable member within said container, a board 35 pivoted adjacent its lower end and within said container and having its upper end adapted to rest against the wall of said container, said board having at its lower end an extension substantially parallel to the body of the board but out of alinement therewith, and a sheet metal covering for the upper surface of said board, the lower end of said board and both sides of said extension. 40

2. In a washing machine, a container, a rotatable member mounted therein and having an outer substantially cylindrical surface and outwardly-extending flanges adjacent the ends thereof, said surface having a plurality 45 of grooves extending longitudinally thereof, and a plurality of rods disposed within said grooves and presenting outer curved surfaces and having their ends disposed adjacent said flanges, and means for holding articles 50 to be washed adjacent said rotatable member.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LEMUEL MILTON WILSON.

Witnesses:

MORGAN W. VAN TASSELL,  
R. CRAIG, Jr.