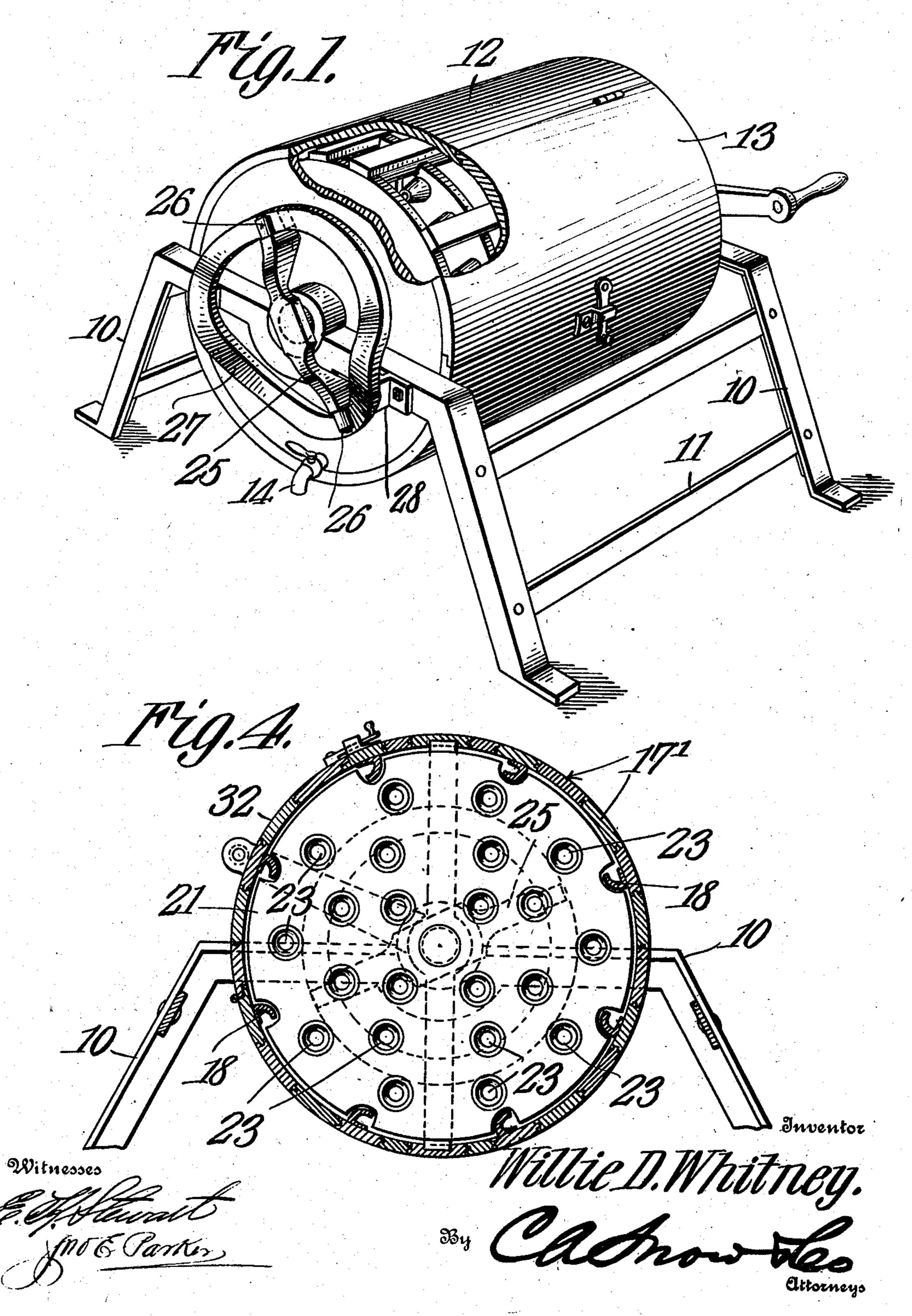
W. D. WHITNEY. WASHING MACHINE. APPLICATION FILED OCT. 14, 1907.

900,333.

Patented Oct. 6, 1908.

2 SHEETS-SHEET 1.



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UNITED STATES PATENT OFFICE.

WILLIE D. WHITNEY, OF HOLLEY, NEW YORK.

WASHING-MACHINE.

No. 900,333.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed October 14, 1907. Serial No. 397,399.

To all whom it may concern:

Be it known that I, WILLIE D. WHITNEY, a citizen of the United States, residing at Holley, in the county of Orleans and State of New York, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention relates to washing machines, and has for its principal object to provide an improved form of washing machine of that general type in which mechanism is employed for alternately squeezing and releasing the clothes for the purpose of forcing the suds therethrough.

A further object of the invention is to improve and simplify the construction of the operating mechanism with a view of minimizing the power required for the operation of the machine.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that various changes in the form, proportions, size and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings:—Figure 1 is a perspective view of a washing machine constructed in accordance with the invention. Fig. 2 is a sectional plan view of the same. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 2. Fig. 4 is a view similar to Fig. 3, illustrating a modification of the invention.

Similar numerals of reference are employed to indicate corresponding parts throughout the several figures of the drawings.

The working parts of the machine are supported on a suitable frame including end
standards or cheek plates 10 and cross bars
11. On the frame is mounted a stationary
cylindrical casing 12 that preferably is
formed of wood, the top of the casing having
a door or cover 13 which may be opened for
the insertion and removal of the suds and
clothing, and at the bottom of the casing is a
tap 14 through which the liquid may run off
after the washing operation is completed.

Mounted within the casing 12 is a cylin-

drical cage 15 comprising a pair of end disks 16 that are connected at intervals by longitudinal bars 17, these bars carrying buckets 18 which act during the rotative movement of the machine to carry up the suds from the 60 bottom of the casing and pour the same down over the clothing.

From each of the disks 16 projects a hollow hub 19 that is mounted in suitable bearings in the frame and through these hubs 65 extend short shafts 20, to the inner end of each of which is secured a perforated disk 21. The periphery of each disk is provided with notches or grooves to receive the buckets, so that the disks are carried around with the 70 cage during the operation of the machine.

To the rear face of each of the disks is secured a frusto conical tube 23 through which the suds are forced as the disks move toward each other during the squeezing operation. 75 During the outward or separating movement of the disks, the suds cannot flow through the smaller ends of the tube with sufficient freedom to completely fill the larger ends, and this creates a slight vacuum at the inner 80 end of each of the tubes, so that the clothes will be caught and pulled apart as the disks separate, thus facilitating the fresh saturation of the clothing during the separation of the disks.

To the outer end of each of the shafts 20 is secured a cross bar 25 comprising a pair of diametrically opposed arms, on the outer ends of which are mounted a pair of antifriction rollers 26. These rollers are slightly spaced 90 from each other and embrace a stationary cam 27 that is carried by brackets 28 projecting from the frame. The cams 27 are provided with any desired number of convolutions for the purpose of effecting reciproca-95 tory movement of the disks one or more times during each revolution of the machine.

The working parts of the machine are supported on a suitable frame including end standards or cheek plates 10 and cross bars

One of the shaft 20 is extended beyond the frame and is provided with a suitable operating member which may be in the form 100 of a handled crank 30.

In the operation of the machine, the cage and disks are rotated and during this rotation the cross bars or slats 17, together with the buckets 18, will act to thoroughly agitate the 105 suds and clothes. During this movement the anti-friction rollers 26 by engagement with the stationary cams 27 will transmit reciprocatory movement to the shafts 26 and the disks will be moved toward and from each 110

other for the purpose of alternately squeezing and releasing the clothes and forcing the suds

through them.

In the modified construction shown in Fig. 5 4, the outer casing 12 has been omitted and the cage is shown as wholly inclosed. In this case it is merely necessary to add a sufficient number of cross bars 17' to form a complete inclosing casing and to provide the casing with 10 a suitable cover or lid, as indicated at 32.

1 claim:—

In a washing machine, a frame, a stationary casing carried thereby, a revoluble cage arranged within the casing and comprising 15 end disks having hollow hubs, and cross bars

uniting the disks, the hubs being mounted in bearings in the frame, short shafts journaled respectively in the hubs, perforated disks arranged at the inner ends of said shaft, arms arranged at the outer end of each shaft, and 20 cams carried by the frame and arranged to engage said arms.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature

in the presence of two witnesses.

WILLIE D. WHITNEY.

Witnesses:

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J. Ross Colhoun, JNO. E. PARKER.