

No. 753,909.

PATENTED MAR. 8, 1904.

E. L. PATTERSON.
DRIVING MECHANISM FOR WASHING MACHINES.
APPLICATION FILED OCT. 7, 1903.

NO MODEL.

Fig. 1.

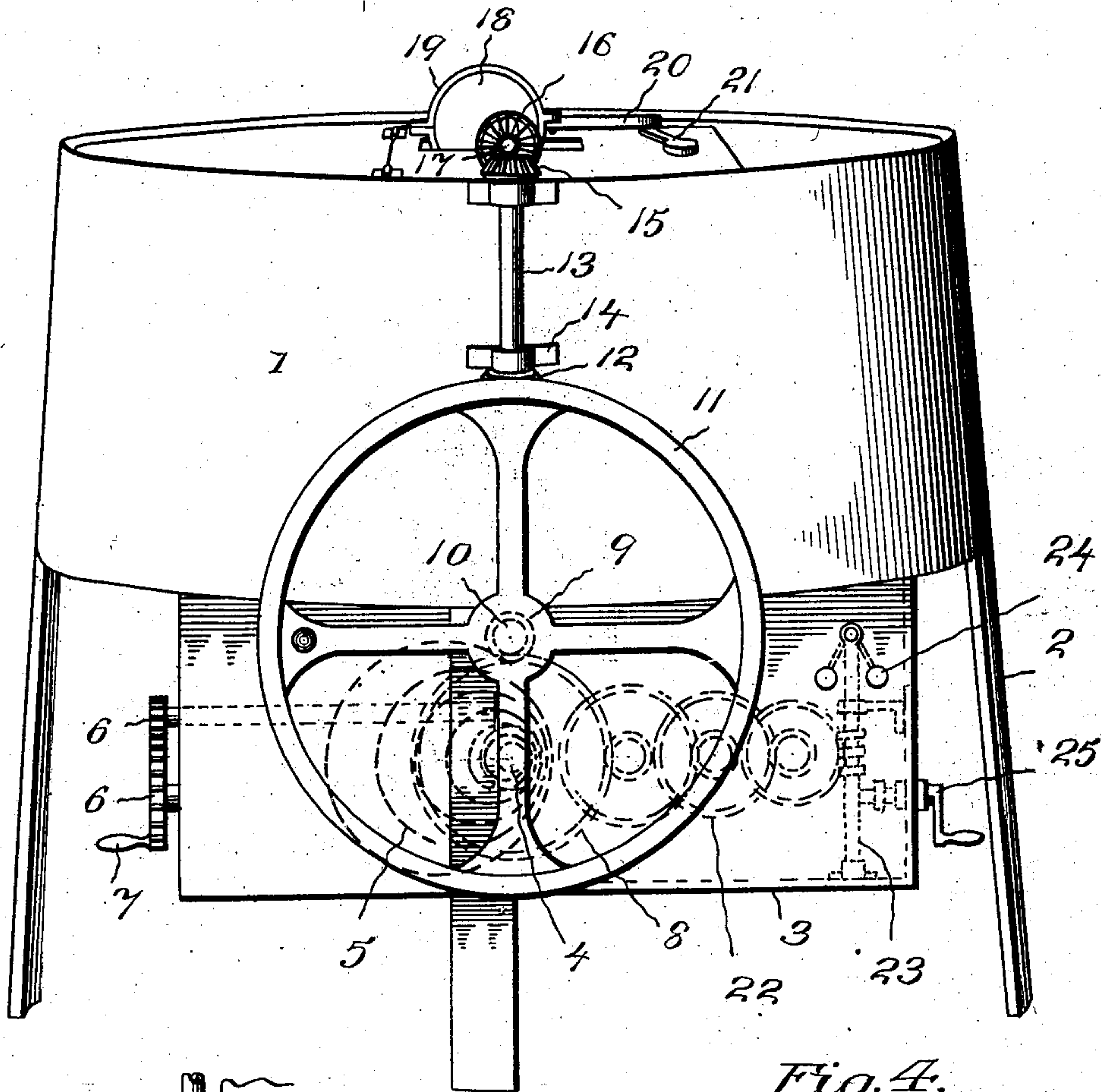


Fig. 3.

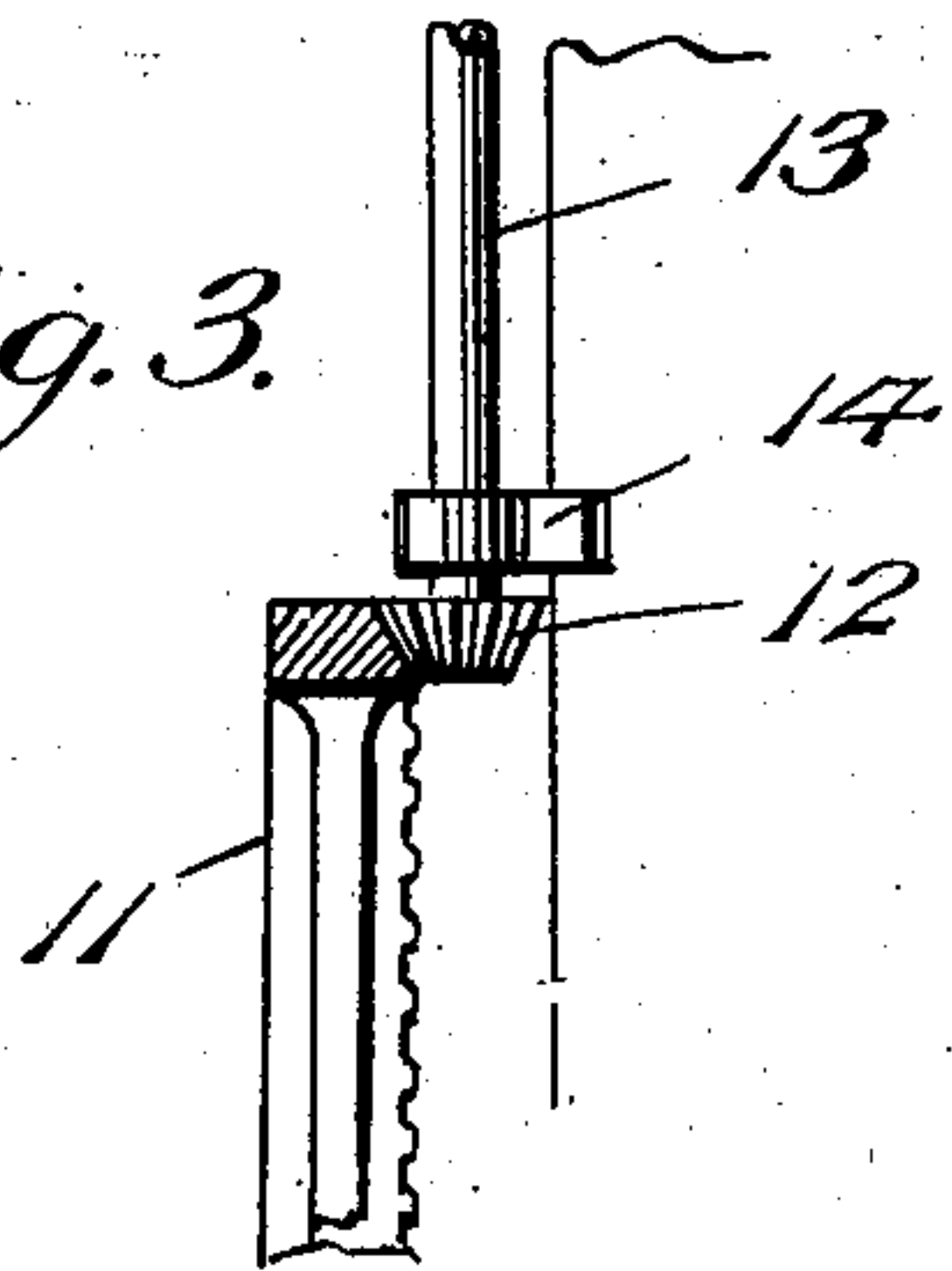


Fig. 2.

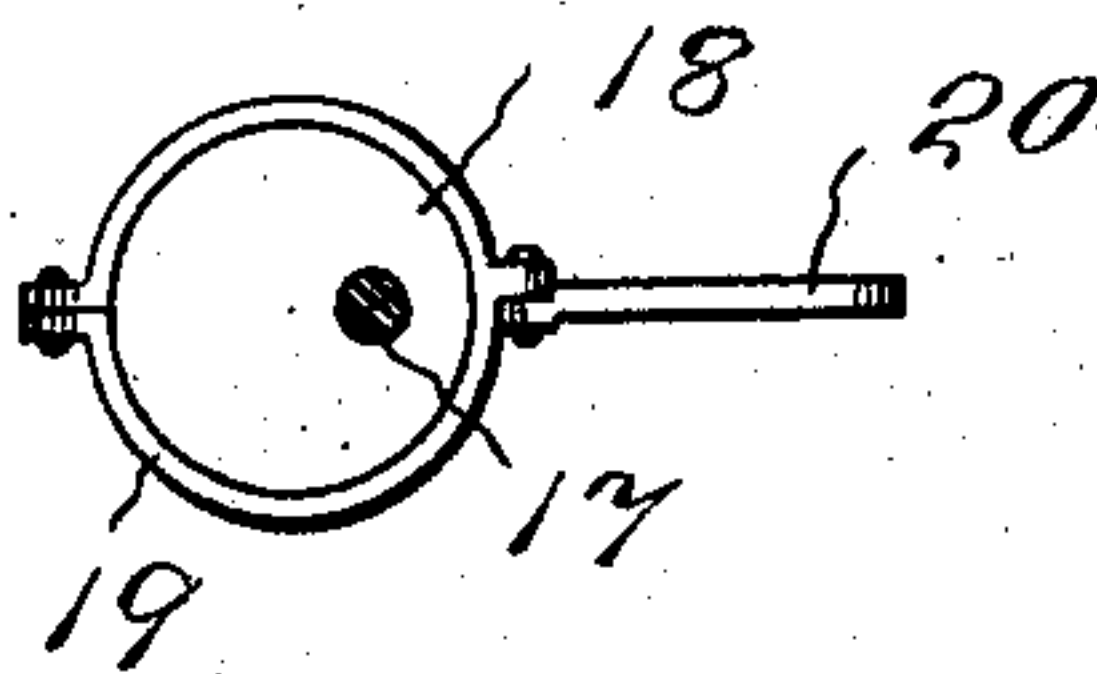
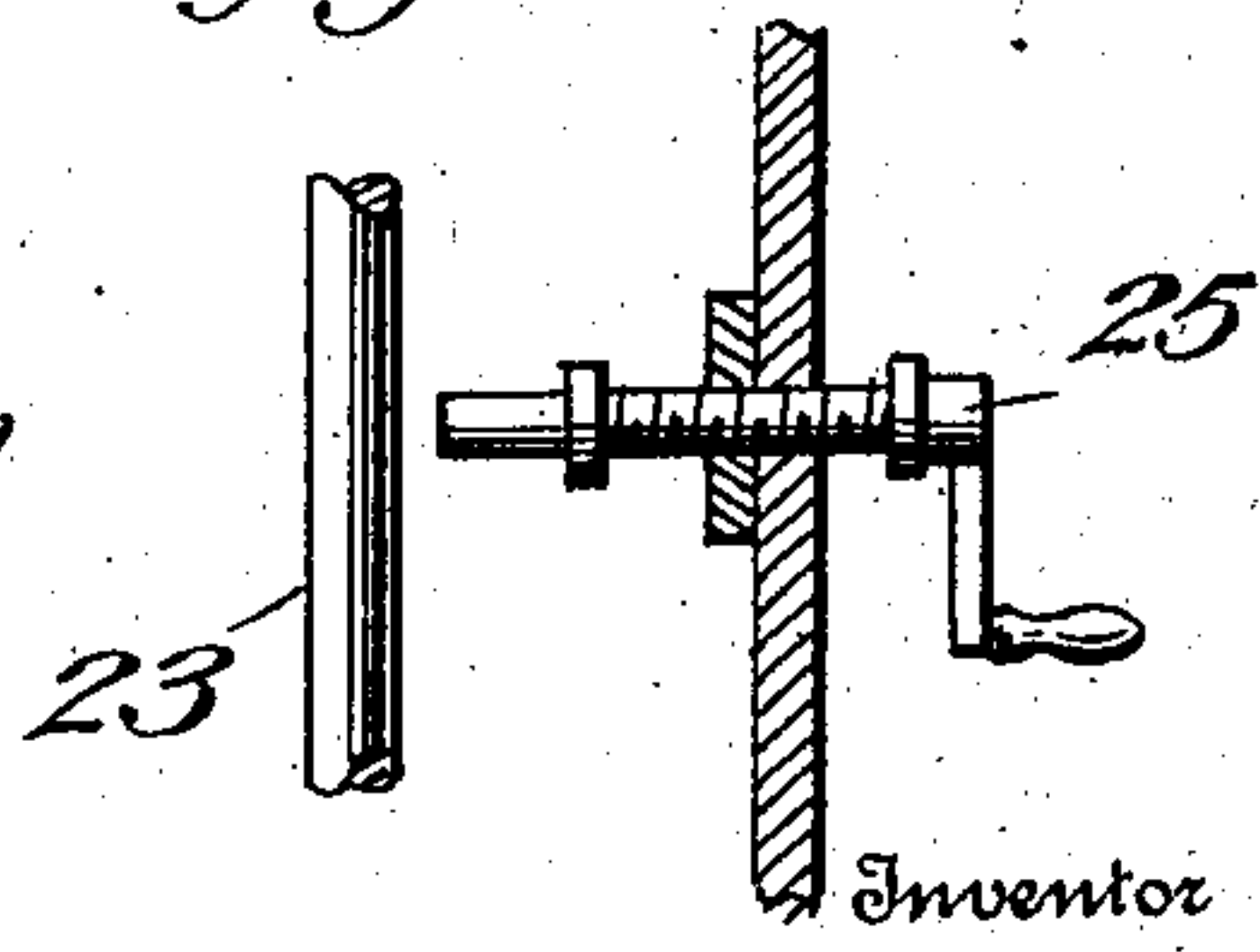


Fig. 4.



Witnesses

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EARL LIEBER PATTERSON, OF BEAVERFALLS, PENNSYLVANIA.

DRIVING MECHANISM FOR WASHING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 753,909, dated March 8, 1904.

Application filed October 7, 1903. Serial No. 176,148. (No model.)

To all whom it may concern:

Be it known that I, EARL LIEBER PATTERSON, a citizen of the United States, residing at Beaverfalls, in the county of Beaver and State of Pennsylvania, have invented new and useful Improvements in Driving Mechanism for Washing-Machines, of which the following is a specification.

My invention relates to new and useful improvements in mechanism for automatically operating the rubber usually employed in connection with the washing-machines. Its object is to provide simple and inexpensive mechanism which may be readily connected to any form of washing-machines and which is adapted to transmit motion from a suitable motor to the rubber.

With the above and other objects in view the invention consists in the novel construction and combination of parts hereinafter more fully described, and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a washing-machine having my improved motor connected thereto. Fig. 2 is a detail view of an eccentric employed in connection with the motor. Fig. 3 is an edge view of a portion of the fly-wheel and showing the gear meshing therewith, and Fig. 4 is a detail view of the brake mechanism.

Referring to the figures by numerals of reference, 1 is the body of a washing-machine, which is supported upon suitable standards 2. A casing 3 is secured to and depends from the bottom of the body 1, and within this casing is journaled a shaft 4, having a spring 5 connected thereto. This spring is adapted to be wound upon the shaft in any suitable manner, as by means of gears 6, adapted to be rotated by a handle 7, and a gear 8 is secured to the shaft 4 and meshes with a similar gear 9, fastened on a shaft 10. Secured on this last-mentioned shaft is a fly-wheel 11, having gear-teeth upon its inner face adapted to mesh with a gear 12, secured on a shaft 13. This shaft is journaled in brackets 14, fastened to one side of the body, which has a second gear 15, secured thereto and meshing with a gear 16. This gear is secured to a shaft 17, journaled on the body of the washing-machine, and the shaft

is secured within an eccentric 18. This eccentric is inclosed by a strap 19, to which is pivoted a link 20. The other end of the link is fastened to an arm 21, which is arranged at the upper end of a rubber (not shown) located within the body 1. A train of gears 22 extends from the gear 8 and serves to transfer motion therefrom to a worm 23, located within the casing 3 and provided with a centrifugal governor 24. A suitable brake, such as a screw-threaded crank-shaft 25, is preferably mounted in one end of casing 3 and is adapted to be brought in contact with the worm 23 and prevent the rotation thereof.

After the spring 5 has been wound upon the shaft 4 the worm 23 is released by the brake 25, and rotary motion is thus transmitted from shaft 4 to the worm 23, and the governor 24 limits the rotation of the several parts. Gear 8 meshes with the small gear 9 and, as is obvious, rotates the fly-wheel 11. Gear 12 is thus rotated and motion is transmitted from the gears 15 and 16 to shaft 17, and the eccentric 18 causes a reciprocating motion of the link 20, and arm 21 is therefore moved backward and forward and produces the desired movement of the rubber to which it is connected.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus fully described my invention, what I therefore claim as new, and desire to secure by Letters Patent, is—

1. In a washing-machine, the combination with the body thereof and an arm upon the body adapted to be connected to a rubber; of a shaft journaled upon the body; an eccentric secured on the shaft, means connecting the eccentric and arm for imparting a reciprocating movement to the arm, a motor, a toothed fly-wheel thereon, and means for transmitting rotary motion from the said fly-wheel to the eccentric.

2. In a machine of the character described, 100

the combination with a body having an arm thereon adapted to be connected to a rubber within the body; of a motor secured to and depending from the body, a toothed fly-wheel on the motor, shafts journaled upon the side and top of the body respectively, means for transmitting rotary motion from one shaft to the other, a gear upon the side shaft meshing with the teeth on the fly-wheel, an eccentric secured

to the top shaft, a strap inclosing the eccentric, and a link connecting the strap and arm. 10

In testimony whereof I affix my signature in presence of two witnesses.

EARL LIEBER PATTERSON.

Witnesses:

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