

No. 811,291.

PATENTED JAN. 30, 1906.

F. H. HALSTEIN.  
 WASHING MACHINE.  
 APPLICATION FILED SEPT. 27, 1904.

*Fig. 1.*

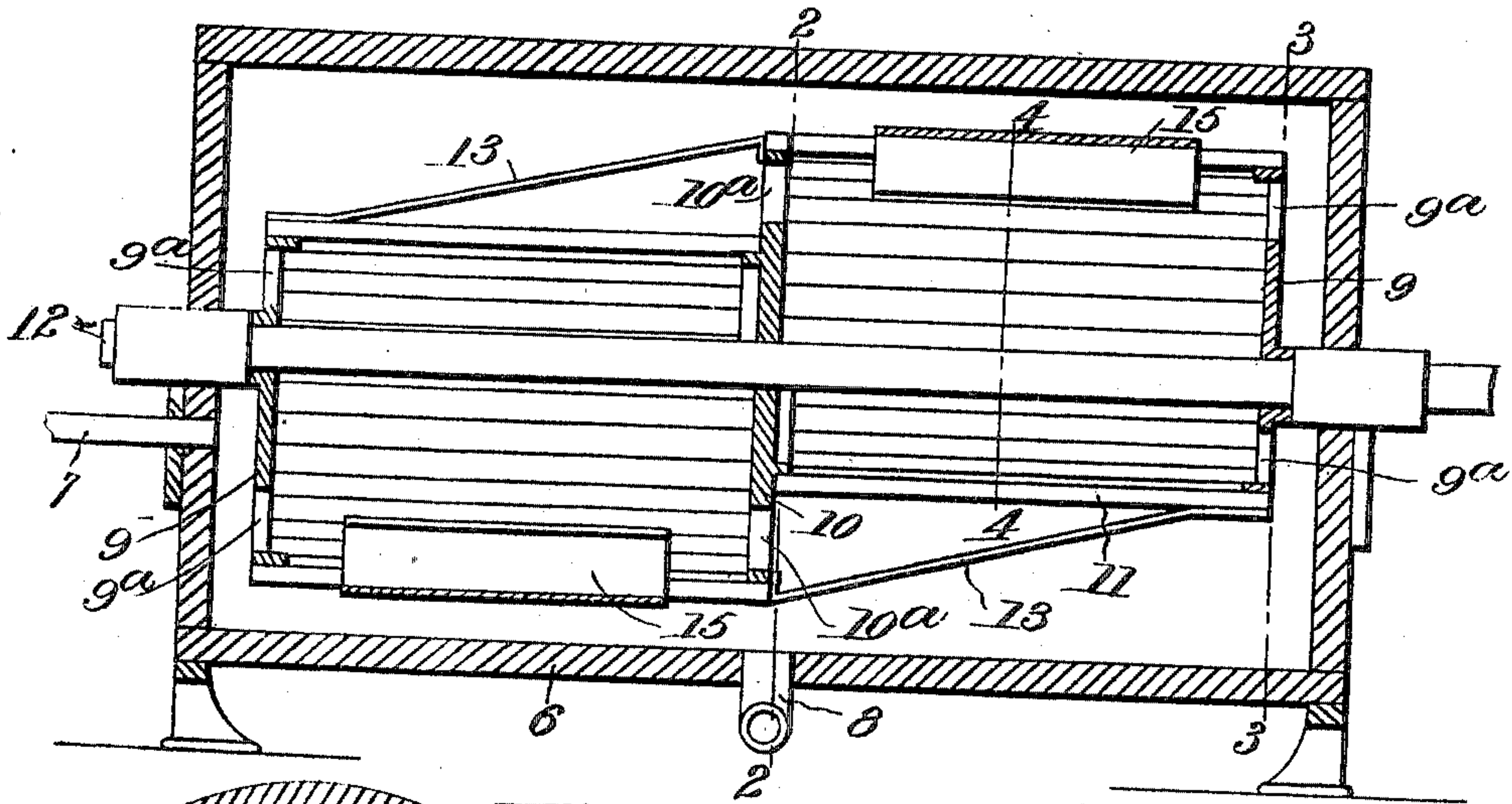


Fig. 2.

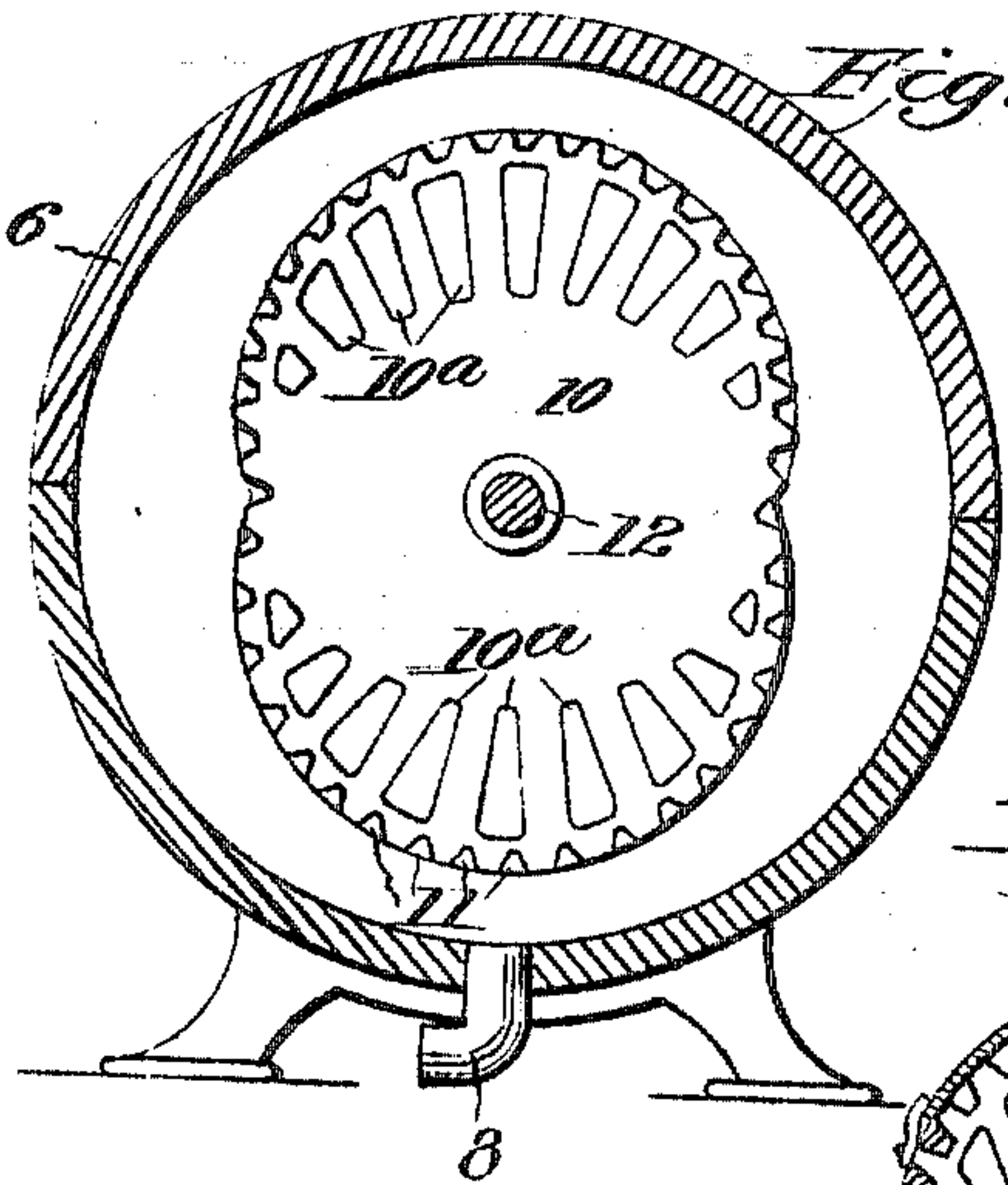
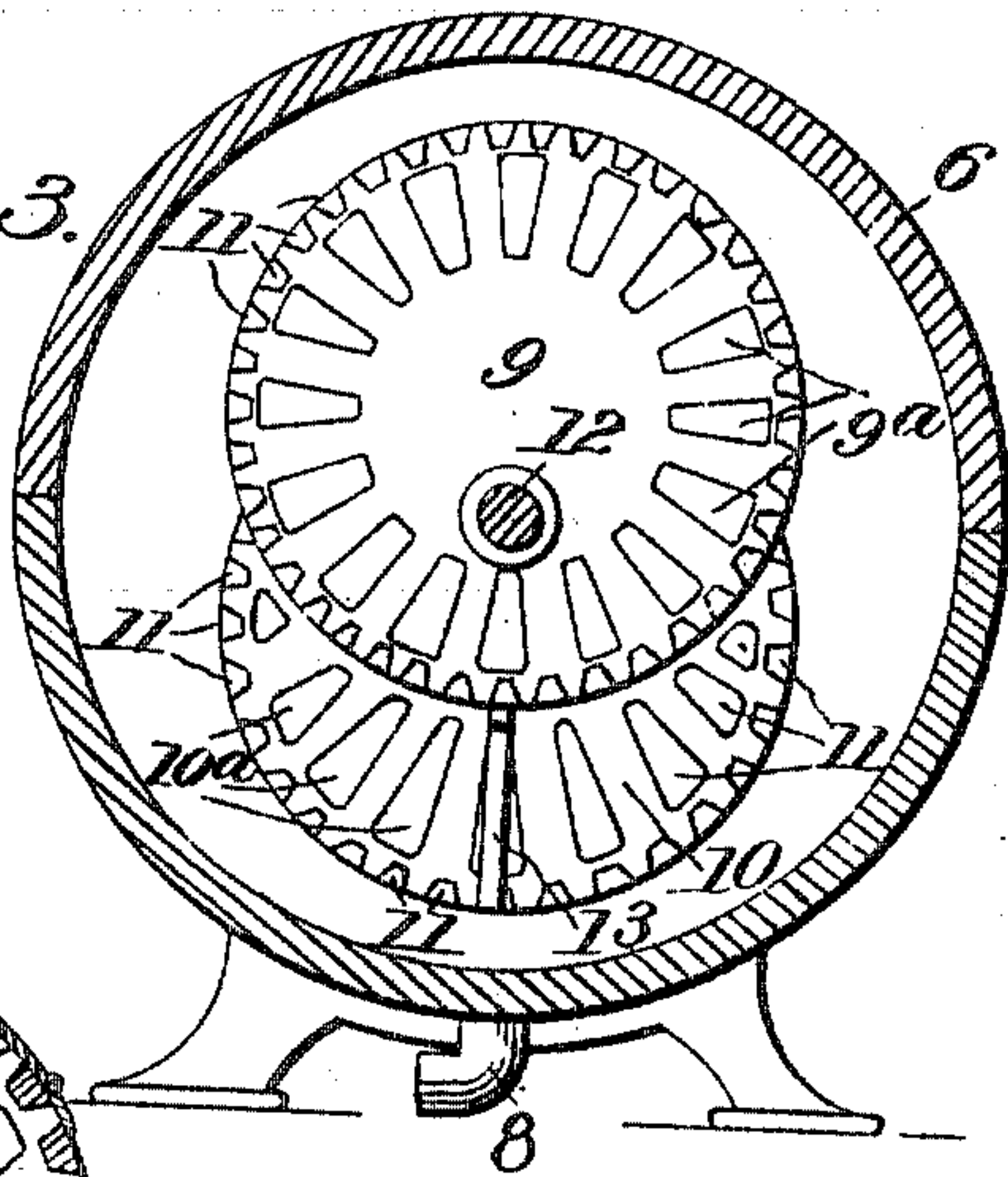


Fig. 3.



*Fig. 4.*

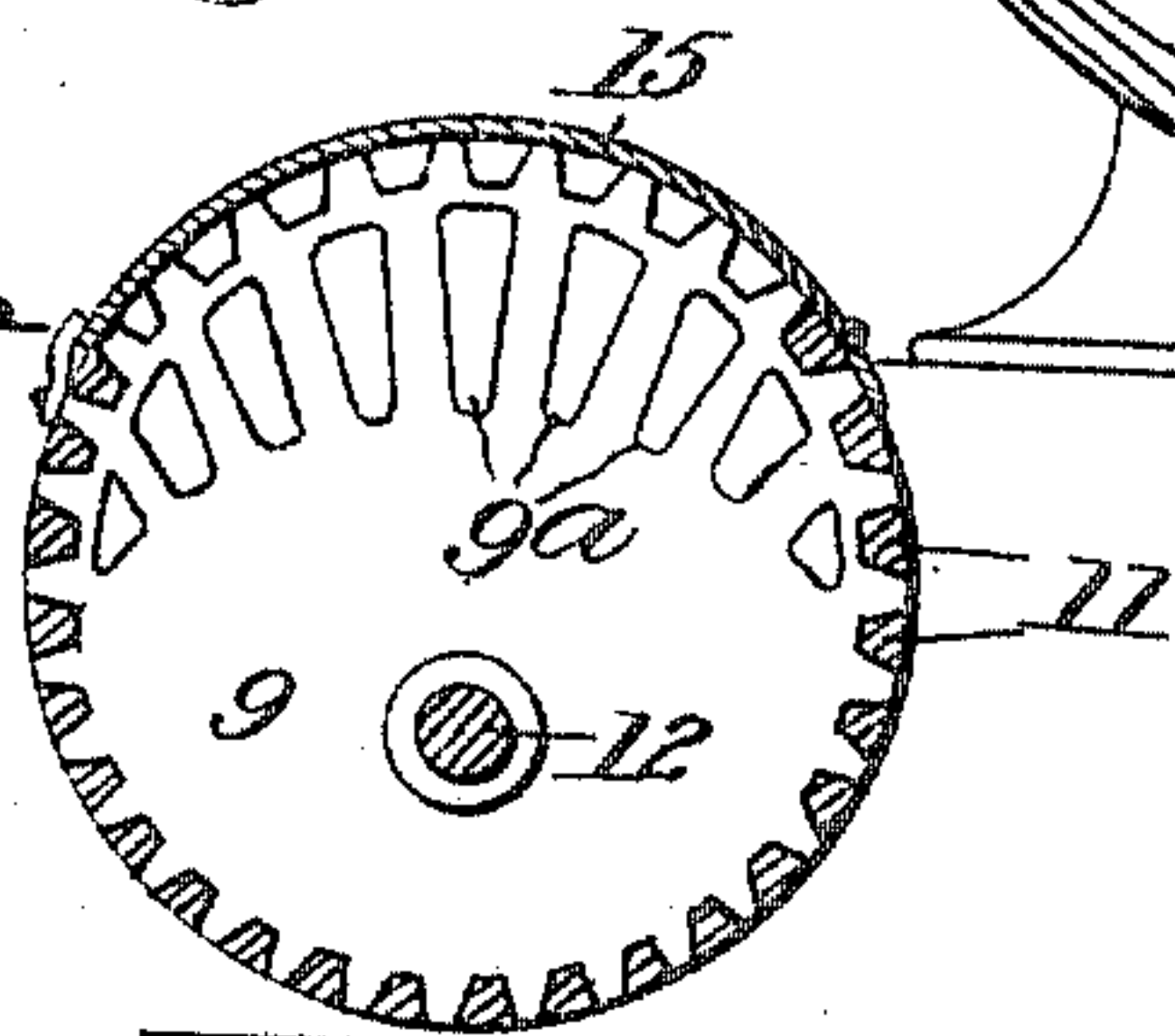


Fig. 5.

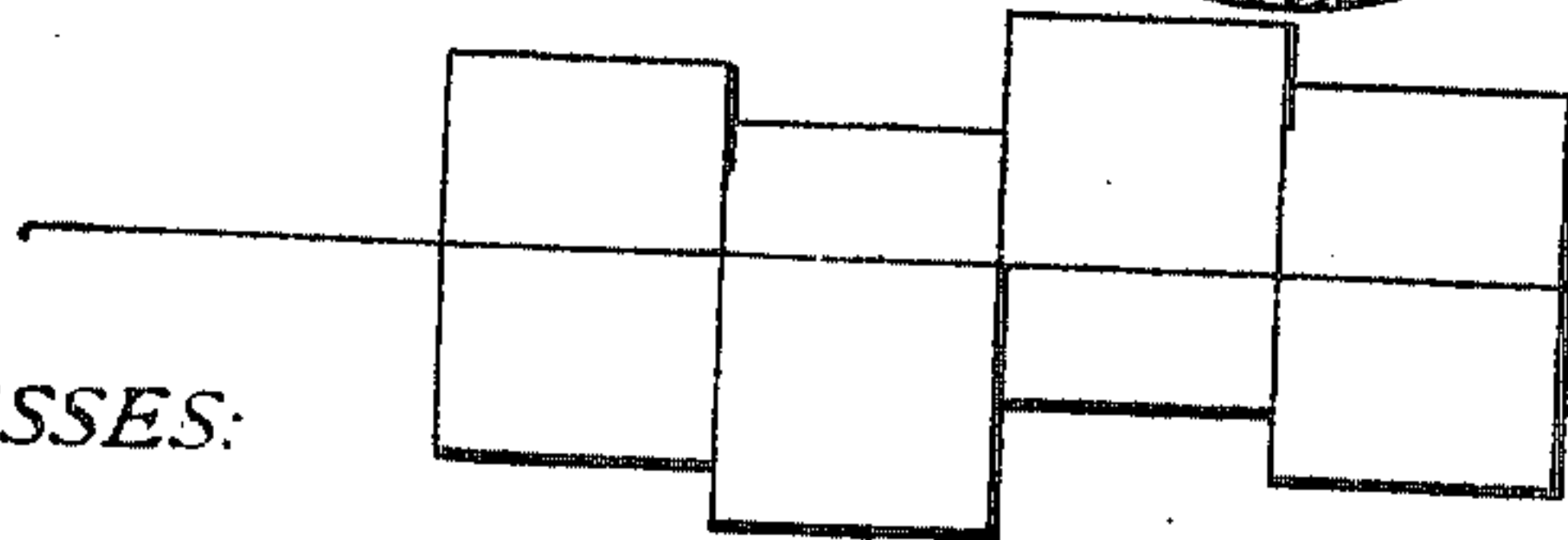
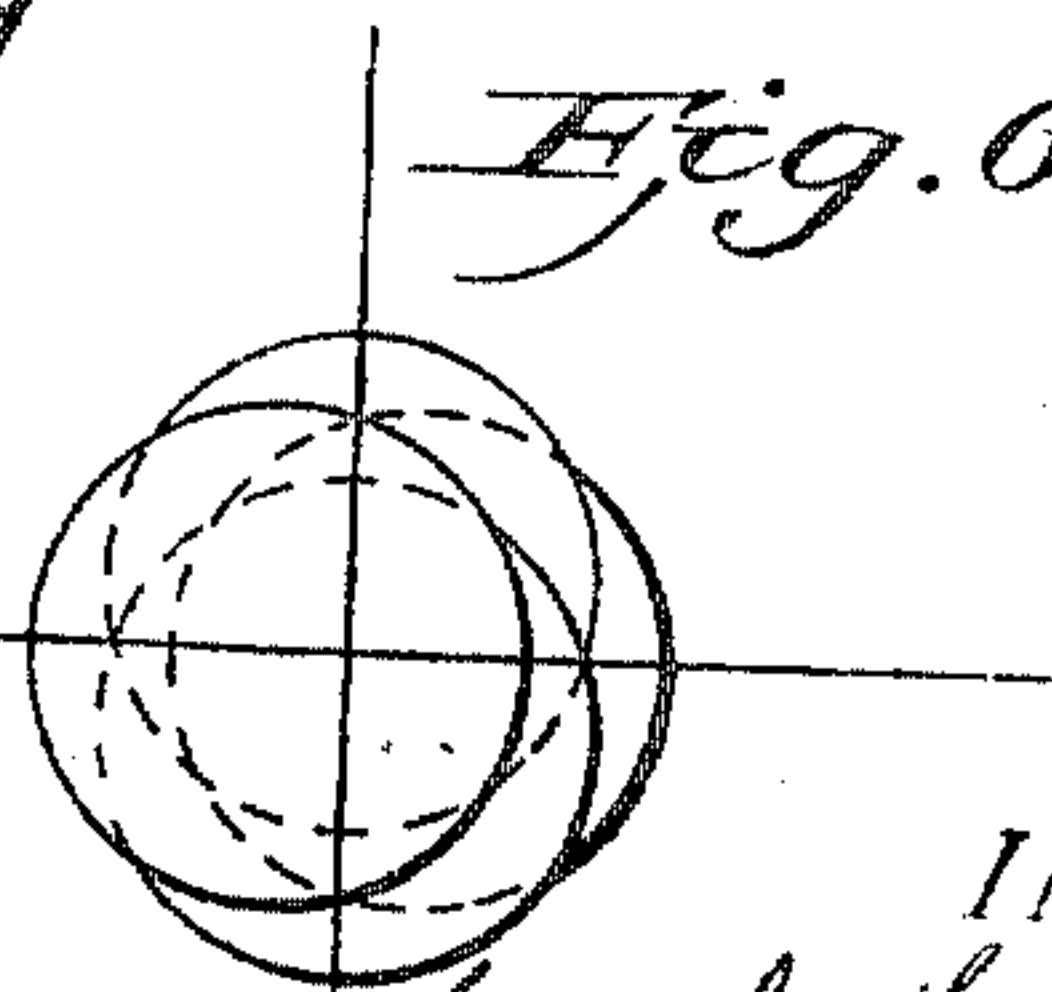


Fig. 6.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

FRANK H. HALSTEIN, OF WHEATON, ILLINOIS.

## WASHING-MACHINE.

No. 811,291.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed September 27, 1904. Serial No. 226,170.

*To all whom it may concern:*

Be it known that I, FRANK H. HALSTEIN, a citizen of the United States, residing at Wheaton, in the county of Dupage and State of Illinois, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention is an improved washing-machine of that kind in which the clothes are contained in a rotating receptacle which is contained in an outer tub or cylinder. The receptacle is formed of slats and perforated plates with openings therein, and the clothes are washed by the action of the water flowing through the slots or openings.

The invention is characterized particularly by the use of receptacles disposed eccentrically within the outer cylinder or tub, which produces constant agitation and circulation of the water and prevents the clothes from rolling, as in concentric machines.

An embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a central longitudinal section. Figs. 2, 3, and 4 are respectively cross-sections on the lines 2 2, 3 3, and 4 4 of Fig. 1. Figs. 5 and 6 are diagrams in side and end elevation, illustrating a modification in which the inner receptacle or washer contains four sections instead of two, as in the other views.

Referring specifically to the drawings, the outer cylinder or tub is indicated at 6, preferably formed of semicylindrical halves hinged together and arranged to be opened or closed. It is supplied with steam and water through a pipe. (Indicated at 7.) A drain is indicated at 8. Rotatable within this casing is the clothes receptacle or washer, which, in the forms shown in Figs. 1 to 4, inclusive, comprises end heads 9 and a center head 10, connected by slats 11, producing a double or two cylindrical receptacles, each of which is located eccentrically upon the shaft 12, with which they rotate. They are disposed oppositely to balance each other. The heads 9 have slots 9<sup>a</sup> extending therethrough, and the middle head 10 has slots 10<sup>a</sup> in the spaces beyond the overlapping portions of the cylinders, as indicated in Fig. 2. Slots also exist between the slats 11. The heads are prefer-

ably made of metal and the slats of wood, and the cylinders are strengthened and tied together by brace-rods, as indicated at 13. The shaft passes through stuffing-boxes in the ends of the outer tub or casing and may be driven by any suitable means. Each compartment or inner cylinder has a door 15, through which the clothes may be put in or taken out. The diagrams Figs. 5 and 6 illustrate a method of setting additional sections on the shaft. Obviously three, four, or more sections may be added, according to the size of the machine desired, the preferable way being, of course, so that the machine is balanced.

When the shaft and the sections carried thereby are rotated in the tub, the water is beaten or driven, by reason of the eccentricity of the sections, through the openings between the slats and in the head-plates, and the water is continuously circulated and forced through the clothes within the sections. The eccentric disposition prevents the clothes from rolling or balling, and the desired purpose is effected in a thorough and expeditious manner.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an outer tub, of a clothes-receptacle rotatable within the same, comprising a plurality of cylinders having openings, and arranged end to end and eccentrically with respect to the axis of rotation.

2. The combination with an outer tub, and a shaft extending across the same, of a rotatable clothes-receptacle within the tub, comprising a plurality of eccentric cylinders arranged end to end along the shaft, with one head forming an end for two cylinders.

3. The combination with an outer tub, and a shaft extending across within the same, of a series of eccentric cylinders arranged end to end along the shaft, and disposed oppositely with respect to their eccentricity, to balance each other.

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

FRANK H. HALSTEIN.

Witnesses:

WM. J. ROBINSON,  
SIGNA FELTSKOG.