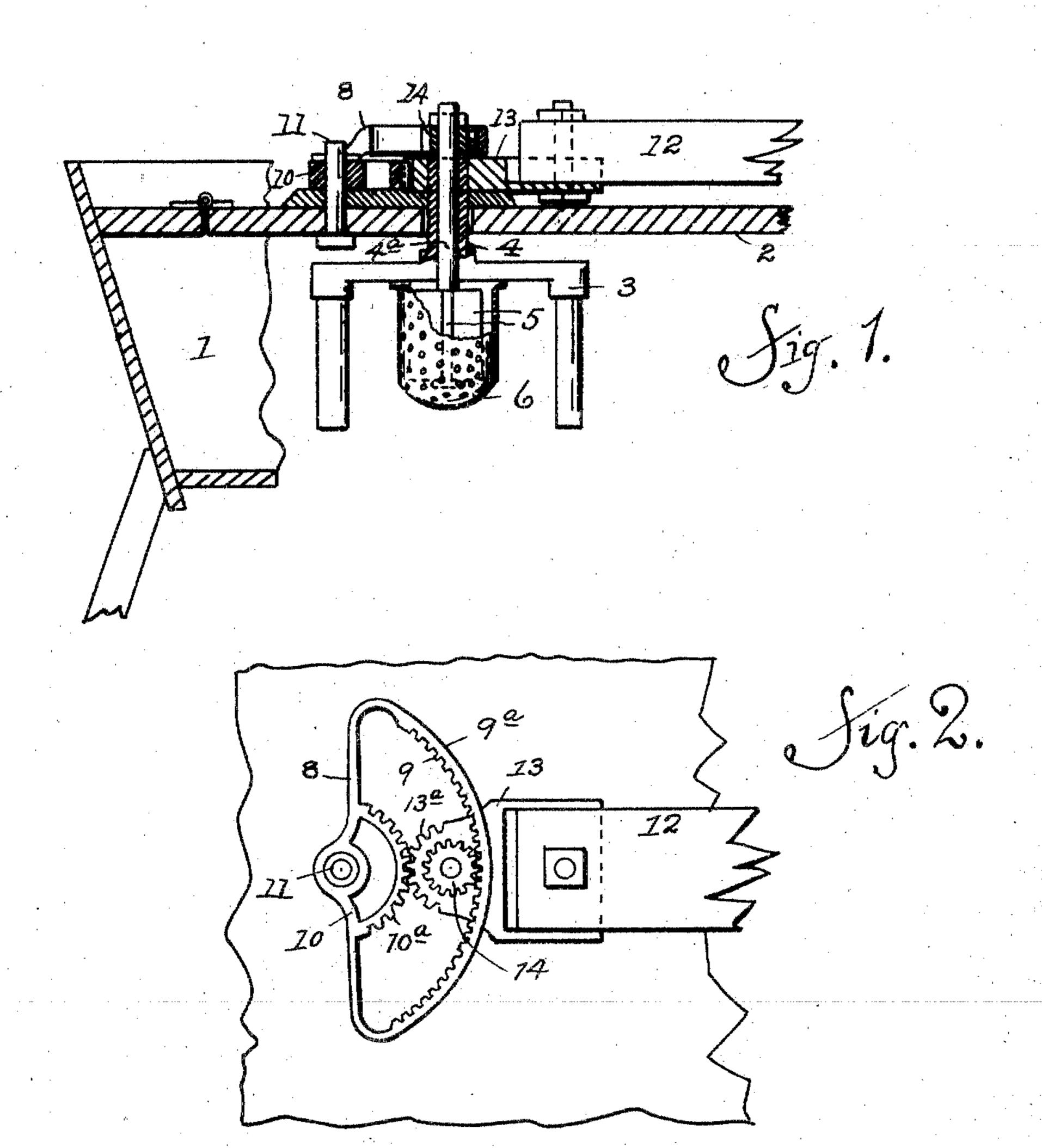
No. 767,116.

PATENTED AUG. 9, 1904.

## J. J. OAKS. WASHING MACHINE.

APPLICATION FILED NOV. 17, 1903.

NO MODEL



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## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 767,116, dated August 9, 1904.

Application filed November 17, 1903. Serial No. 181,496. (No model.)

To all whom it may concern:

Be it known that I, James J. Oaks, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented new and useful Improvements in Washing-Machines, of which the following is a specification.

This invention relates to improvements on washing-machines; and the object of the invention is to produce a machine that will be easy to operate and one that will insure a thorough action of the water through the mass of clothing being washed.

I attain these objects by means of a peculiar construction of gearing located on the top of the cover and to which the rotary spider and operating-handle are mounted and by the use of a perforated cylinder located in the tub and mounted on the same shaft with the spider.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawings, in which—

Figure 1 is a vertical sectional view of a portion of a machine with my improvements thereon. Fig. 2 is a plan view showing the gearing.

The numeral 1 indicates the tub, which is of ordinary construction and has the usual swinging lid or cover 2. A spider 3 of ordinary construction is mounted on a shaft 4 to the 30 under side of the cover, and a smaller shaft 4<sup>a</sup> passes through this shaft 4 and has the usual wings or paddles 5 mounted thereon. In my present construction I provide a perforated cylindrical casing 6, which is fastened to the 35 shaft 4 and incloses these paddles 5. When these parts are revolved by the operation of the handle, the spider and cylinder will revolve in the opposite direction from that of the wings on the shaft 4<sup>a</sup> and the current of water 40 in the tub will be forced in different directions by its course through the perforated cylinder, thus insuring a thorough cleansing action on the clothing contained in the tub, while at the same time it will prevent the clothing from

rolling into one body and keep it properly 45 separated

separated.

To the top of the cover is mounted a quadrant 8. This quadrant comprises a frame approximately semicircular and formed with gear-teeth 9 on the inside of the larger or outer 50 span 9<sup>a</sup>. The portion 10 of the quadrant which is closer to its pivotal point 11 is below the plane of the portion 9° and has gear-teeth 10° cut into its outer face. The shaft 4 protrudes through the cover and has mounted thereon 55 an operating-handle 12. This handle has a fitting 13 formed on its end, and this fitting is provided with gear-teeth 13°, which teeth mesh with the teeth 10<sup>a</sup> of the smaller portion of the quadrant 8. On the top of the shaft 4<sup>a</sup> is 60 mounted a gear-wheel 14, which meshes with the teeth 9 in the frame 9<sup>a</sup>. The movement of the handle 12 will of course, through this gearing, revolve the shaft 4, carrying the spider and perforated casing 6, in the direction 65 opposite to that given to the shaft 4a, so that the water will be forced through the perforations of said cylinder and thoroughly cleanse the wash.

Having thus fully described the invention, 70 what I claim is—

A washing-machine comprising a tub and cover, a rubber mounted in said cover, said rubber comprising a shaft 4, a shaft 4\* which passes through the shaft 4, revolving paddles 75 mounted on said shaft 4\* a perforated cylindrical casing inclosing said paddles secured to the shaft 4, and means for giving said casing and paddles rotary movement in opposite directions.

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

JAMES J. OAKS.

Witnesses:

Ed. A. Kelly, Geo. M. Miller.