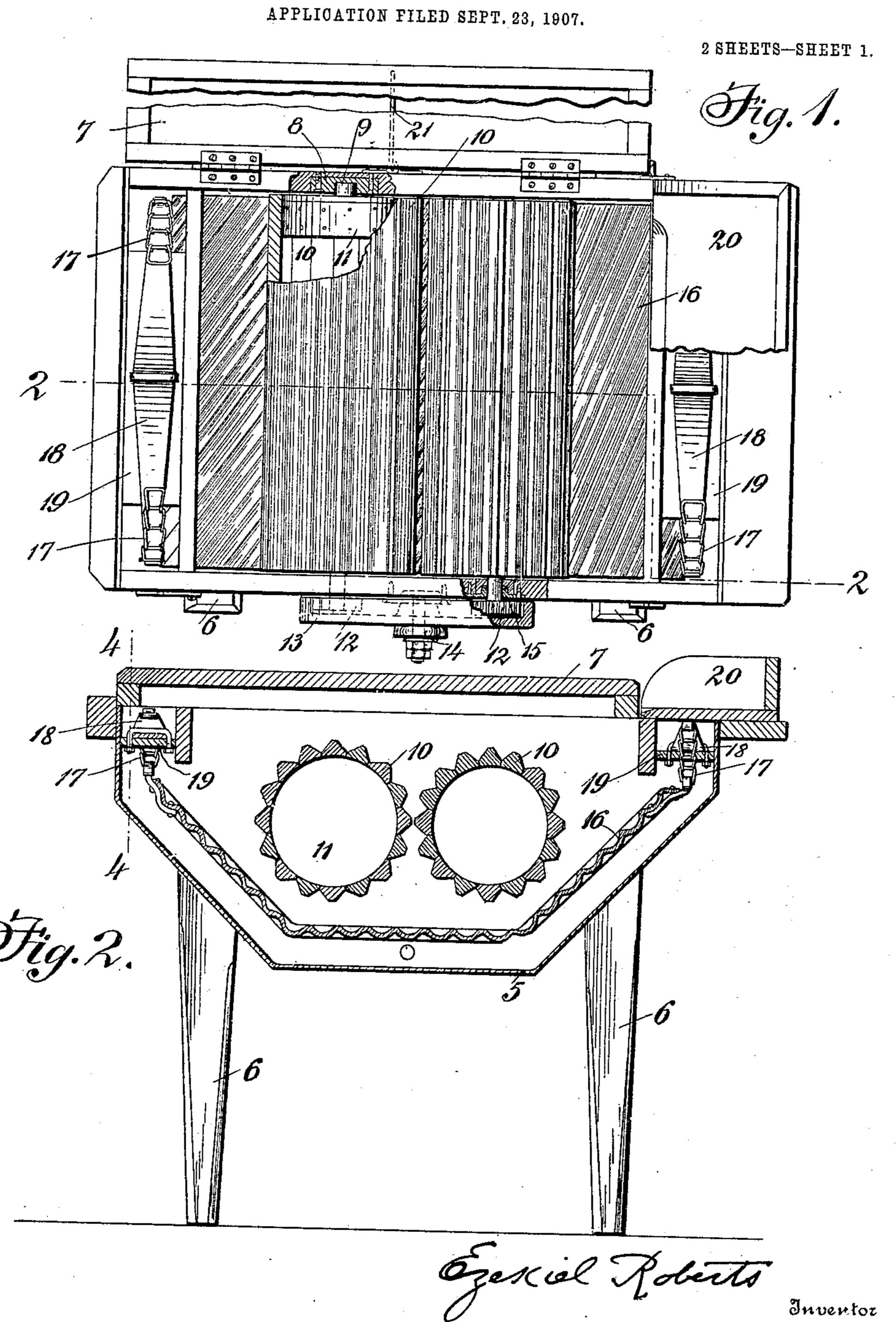
## E. ROBERTS. WASHING MACHINE.



Witnesses Allmastel.

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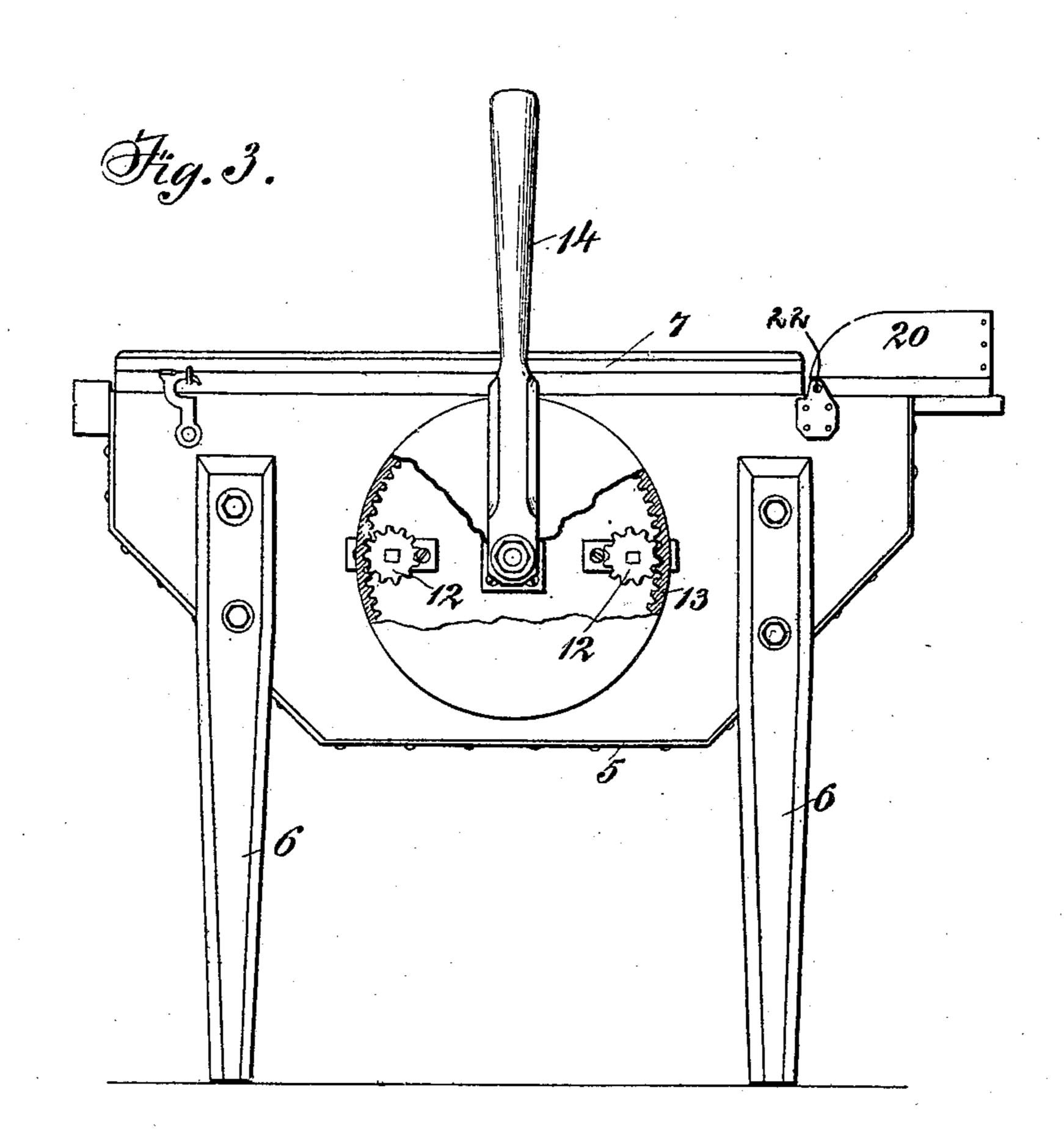


Fig. 4.

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## UNITED STATES PATENT OFFICE.

EZEKIEL ROBERTS, OF STILLWATER, OKLAHOMA.

## WASHING-MACHINE.

No. 885,956.

Specification of Letters Patent.

Patented April 28, 1908.

Application filed September 23, 1907. Serial No. 394,133.

To all whom it may concern:

Be it known that I, EZEKIEL ROBERTS, a citizen of the United States, residing at Stillwater, in the county of Payne, Oklaboma, have invented certain new and useful Improvements in Washing - Machines, of which the following is a specification.

This invention relates to washing-machines of that kind comprising a suds-box containing a rotary rubber and a yielding

wash-board.

The object of the present invention is to provide in such a machine improved means for supporting the wash-board so that it may be adjusted according to the quantity and nature of the clothes to be washed.

A further object is to provide a machine which is rapid and efficient in action, and

which can be easily operated.

In the accompanying drawings, Figure 1 is a plan view of the machine partly broken away. Fig. 2 is a section on the line 2—2 of Fig. 1 with the lid closed. Fig. 3 is a side elevation partly broken away. Fig. 4 is an enlarged sectional detail on the line 4—4 of Fig. 2.

Referring specifically to the drawings, 5 denotes a suds-box having suitable sup-

porting legs 6, and a lid 7.

In the side walls of the box are bearings 8 for the journals 9 of a pair of parallel extending rotary rubbers which are corrugated rollers made of slats 10 fastened at their ends to disks 11. The journals on one 35 end of the rollers pass to the outside of the suds-box and are provided with pinions 12 which mesh with an internal gear 13 fitted with an operating lever 14. The gear 13 is mounted in a suitable bearing bracket on 40 the side wall of the suds-box. Through this gearing, the rubbers are made to rotate in the same direction when the lever 14 is operated. The bearings on this side of the suds-box are also provided with a stuffing-45 box and a gland 15 therefor. The washboard 16 is a strip of sheet metal having corrugations which extend at an incline with respect to the axis of the rotary rubbers. The wash-board is arranged in a 50 bend below the rotary rubbers and is suspended at its ends by means of chains 17 from the free ends of flat springs 18 which are secured at or about midway between

their ends to shelves 19 inside the suds-box. The ends of the springs are hook shaped, 55 as is clearly shown in Fig. 4 to prevent the chains from slipping off accidentally when the machine is in use.

By means of the chains 17 the wash-board 16 can be placed closer to or farther away 60 from the rotary rubbers according to the quantity and nature of the clothes to be washed. The position of the springs is not changed by the adjustment of the wash-board so that the pressure on the clothes will 65 be uniform for all adjustments of the wash-board. By making the corrugations of the wash-board inclined a better rubbing effect on the clothes is had, they pass through the machine more easily, and are less liable to 70 get stuck or injured.

In use, the clothes are placed between the wash-board 16 and the rotary rubbers, so as to be engaged by both rubbers. The rotary rubbers have different diameters, and there- 75 fore travel with different peripheral speeds. The effect of this is a pulling and rubbing action on the clothes by the smaller rubber retarding the clothes while the larger rubber pulls or feeds them forward. This rubbing 80 and pulling action greatly facilitates and expedites the washing operation. The rubbers are operated through the gears 12 and 13 by swinging the operating lever 14 back and forth.

At one end of the machine as indicated at 22 is pivoted a wringer-board 20 which may be swung away from the attaching means of the wash-board at that end of the machine in order that access thereto may be had. To 90 the suds-box is hinged a bracket 21 for supporting the lid 17 when it is open. When in this position the lid can be used for a clothes support.

I claim
In a washing-machine, a suds-box, a pair
of rotary rubbers therein means for turning
the rubbers in the same direction and with
different peripheral speeds, and a wash-board
coöperating with the rubbers.

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

EZEKIEL ROBERTS.

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Witnesses:

F. J. WIKOFF, M. F. EDWARDS.