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GEARING FOR WASHING MACHINES.

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1,161,480.

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Fig. 1

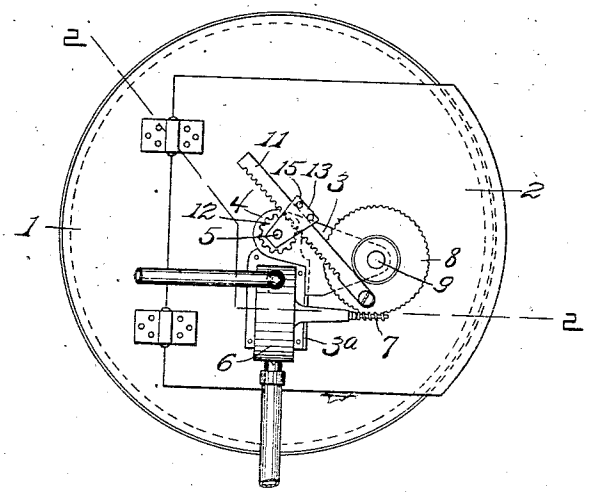


Fig. 2

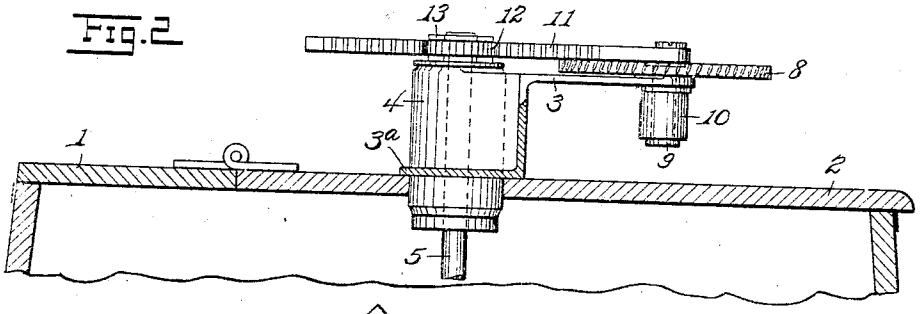
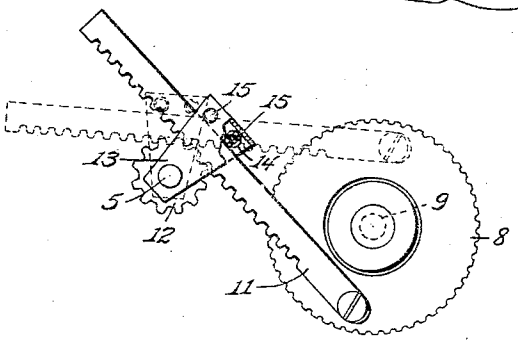


Fig. 3



WITNESSES

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GEARING FOR WASHING-MACHINES.

1,161,480. Specification of Letters Patent. Patented Nov. 23, 1915.

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To all whom it may concern:

Be it known that I, LOUIS P. KEYSER, a citizen of the United States of America, and resident of Wheeling, county of Ohio, and State of West Virginia, have invented certain new and useful Improvements in Gearing for Washing-Machines, of which the following is a specification.

This invention relates broadly to washing-machines, and specifically to a gearing for motor driven washing machines.

The primary object of the invention is to provide a simple gearing whereby the power of a rotary motor is applied to the dasher shaft of a washing machine for oscillating the latter.

A further object of the invention is to provide, in association with a rotary motor having a drive-shaft whose direction of rotation is constant, a gearing whereby said shaft communicates oscillatory motion to the dasher shaft, or dolly shaft, of a washing machine.

With these and other objects in view, the invention resides in the features of construction, arrangement of parts and combinations of elements which will hereinafter be fully described, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a top plan view of the invention applied to a tub; Fig. 2 is an enlarged section on the line 2—2, Fig. 1; and Fig. 3 is an enlarged detail view, in top plan, of the worm gear, rack-bar and pinion.

Referring to said drawings, in which like designating characters distinguish like parts throughout the several views, 1 indicates the top of a tub of a common type and 2 a lid hinged thereon. Rigidly mounted upon said lid is the base 3^a of a cast iron bracket 3 which has a vertically disposed sleeve-bearing 4 formed integral therewith, the lower end of said bearing extending below the base 3^a and being adapted for seating in the lid 2 at a point central with respect to the top of the tub. Rotatably mounted in said bearing 4 is a spindle 5 designed to have connected thereto or mounted thereon the lower end of the usual dolly-shaft (not shown) which carries the dolly or stirrer-head. Also mounted upon the base 3^a of the casting is a rotary motor 6 which, as herein shown, is of a fluid actuated type, but may be an electric motor if desired. The shaft of the motor carries thereon a worm 7 which operatively engages a horizontally disposed worm-gear 8 fixed on a spindle 9 which is journaled in a sleeve-bearing 10 carried by the bracket 3. Eccentrically connected to said worm gear 8 is one end of a rack-bar 11 the teeth of which operatively engage a pinion 12 fixed upon the spindle 5 at a point above the bearing 4.

A yoke 13 of substantially U-shape has the ends of its parallel members pivoted on the spindle 5 above and below the pinion 12 and is disposed in embracing relation to the rack-bar, being designed to swing with said rack-bar for maintaining the latter in operative relation to said pinion, as is clearly indicated in Fig. 3. Antifriction rollers 14 are mounted upon vertically disposed pins 15 which have their ends mounted in the opposite yoke members, said rollers being designed to bear against the back of the rack-bar, as shown in Fig. 3.

It will be noted that all the parts constituting the invention are compactly organized, the bracket 3 having all the operating parts mounted thereon and being itself mounted upon the hinged lid 2 of the tub; consequently, when said lid is raised to permit access to the tub, all said parts are moved to an out-of-the-way position.

What is claimed is—

In a gearing for washing machines, a cast iron bracket having a base portion adapted for mounting in a stationary position on the top of a supporting member and having a portion which overhangs said supporting member, a motor superposed on said base portion in overlying relation to said supporting member, a sleeve bearing formed in said bracket and extending centrally through said supporting member, a vertical spindle rotatable in said bearing, a pinion fixed on said spindle above the bearing in the bracket, a worm carried by the motor shaft, a worm gear rotatably mounted in overlying relation to the overhanging portion of said bracket and operatively associ-

ated with said worm, a rack bar having its toothed face in engagement with said pinion and having one end eccentrically connected to said worm gear, and means maintaining the engagement between said rack bar and said pinion throughout the range of movement of the former.

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

LOUIS P. KEYSER.

Witnesses:
H. E. DUNLOP,
L. W. WORALS.