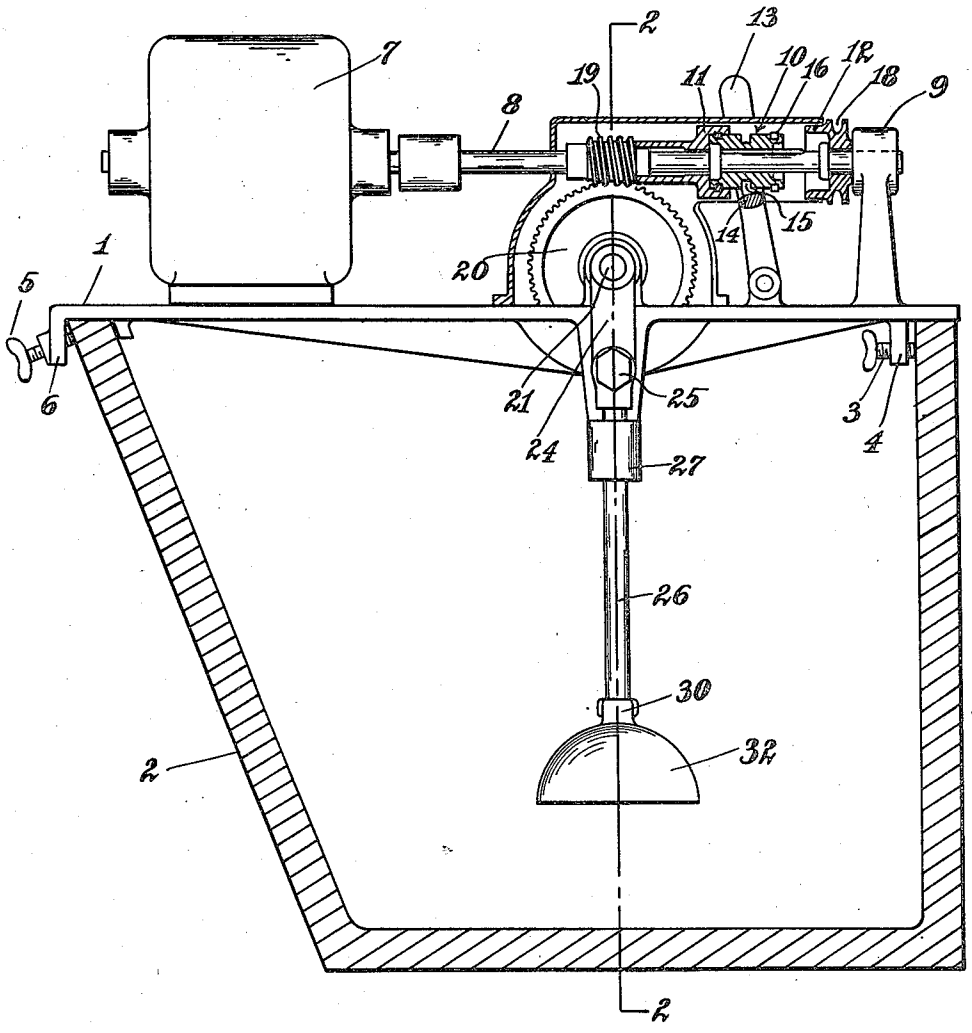
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E. LINDBERG

WASHING MACHINE

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FIG. 1



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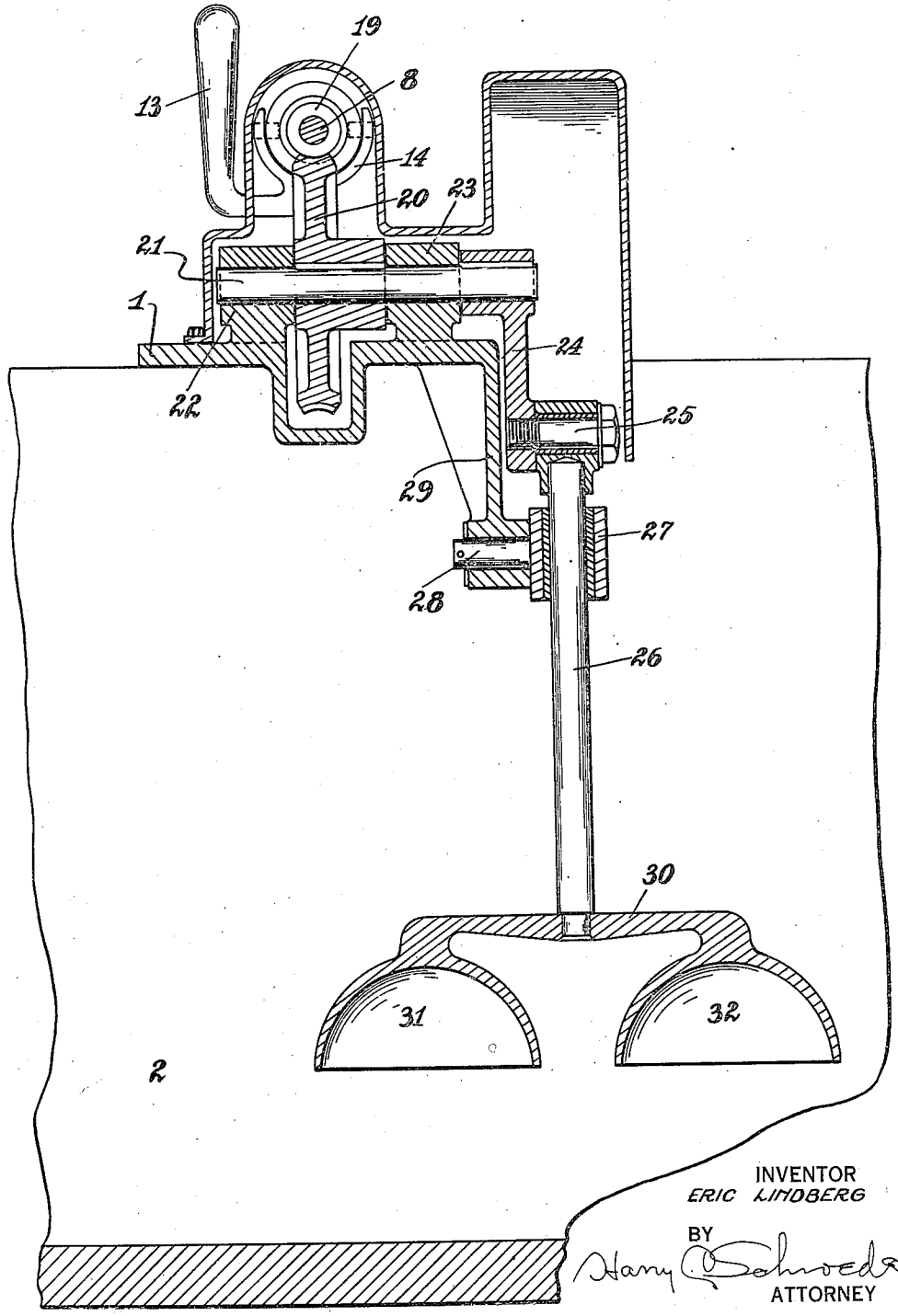
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FIG. 2



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FIG. 3

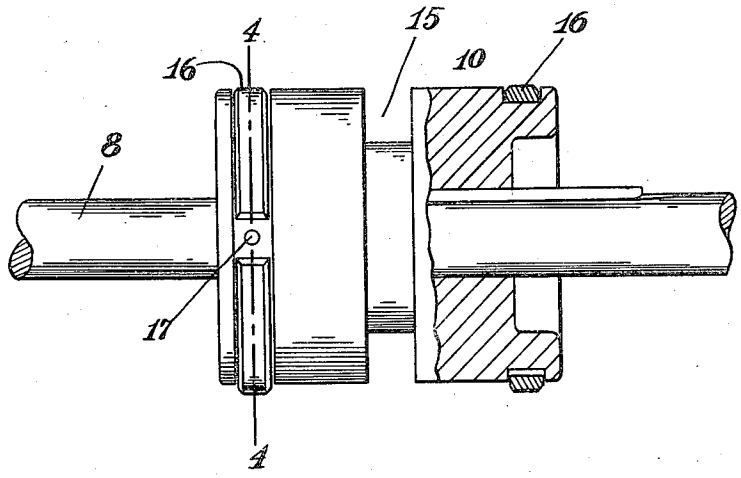
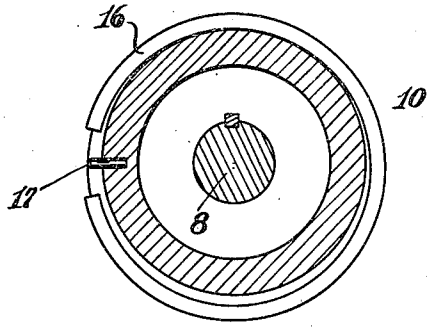


FIG. 4



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Patented Jan. 13, 1925. 1,523,027

UNITED STATES PATENT OFFICE.

ERIC LINDBERG, OF BERKELEY, CALIFORNIA, ASSIGNOR OF ONE-FIFTH TO LYDIA FRANCES LARSON AND TWO-FIFTHS TO ALBERT G. LARSON, BOTH OF OAKLAND, CALIFORNIA.

WASHING MACHINE.

Application filed May 23, 1923. Serial No. 640,875.

To all whom it may concern:

Be it known that I, ERIC LINDBERG, a citizen of the United States, residing at Berkeley, in the county of Alameda and State of California, have invented certain new and useful Improvements in Washing Machines, of which the following is a specification.

My invention is an improved washing machine.

The object of my invention is to provide a washing machine which may be readily attached to the standard type of sanitary tub.

Another object is to provide a machine which is simple in construction and inexpensive to manufacture.

In the annexed drawing in which my invention is illustrated:

Figure 1 is a side view partly in section to show the construction of my machine.

Figure 2 is a sectional view taken on the line 2—2 of Figure 1.

Figure 3 is an enlarged side view partly in section of the slidable clutch member.

Figure 4 is a sectional view taken on the line 4—4 of Figure 3.

Referring more particularly to the drawing, my washing machine comprises a base plate 1 which is mounted on the tub 2 as follows: A set screw 3 extends through a boss 4 which depends from the plate 1 and bears against the tub 2, and a set screw 5 extends through a depending lip 6 and bears against the outside of the tub.

A motor 7 is mounted on the plate 1 and drives a shaft 8 which is journaled in a bearing 9 which rises from the plate.

A slidable clutch member 10 is keyed to the shaft 8 and is adapted to engage with either of the cups 11 or 12, which are journaled on the shaft. The member 10 is moved transversely by means of a handle 13 which is pivoted to the plate 1, and which is formed with a yoke 14 to engage a groove 15 in the slidable member. Expandible rings 16—16 are formed at either end of the member 10, and a pin 17 projects into the path of the ring to prevent its rotation. Thus, when the member 10 is moved into the cups 11 or 12 the ring 16 will expand against said cup and cause it to rotate. A pulley 18 is formed on the cup 12 in which a belt is adapted to travel to operate a wringer.

A worm 19 is secured to the cup 11 and engages a worm wheel 20. The worm wheel 20 is keyed to a shaft 21, which shaft is journaled in bearings 22 and 23 mounted on the plate 1.

A crank arm 24 is keyed to the end of the shaft 21 and a pin 25 is secured in the end thereof. A connecting rod 26 is journaled on the pin 25 and reciprocates in a bearing 27. To allow for the rocking of the bearing 27 a pin 28 is provided which projects from the side of the bearing and is journaled in an arm 29 which depends from the plate 1. A transverse arm 30 is secured to the bottom of the rod 26 and cups 31 and 32 are secured to the end of said rod.

The worm wheel 20, shaft 21 and crank arms 24 are rotated through the worm 19 and motor 7. Thus the rod 26 and cups 31 and 32 are both reciprocated and oscillated through the rocking bearing 27.

Having described my invention, I claim:

1. A self-contained portable washing machine comprising a base plate adapted to be secured to a tub, a wheel journaled on said plate, a rocking bearing connected with said plate, means to rotate said wheel, a rod depending below said plate, and having sliding connection with said rocking bearing, cups on said rod, a crank arm connecting said wheel and said rod whereby said rod is reciprocated.

2. A self-contained portable washing machine comprising a base plate adapted to be secured to a tub, a wheel journaled on said plate, means to rotate said wheel, a rod depending below said plate, cups on said rod, a crank on said wheel to which the rod is journaled, a rocking bearing through which said rod reciprocates, a pin formed on said bearing, and a second bearing in which said pin is journaled.

3. A self-contained portable washing machine comprising a base plate adapted to be secured to a tub, a motor secured to said plate, an arm depending from said plate, a bearing mounted for pivotal movement on said arms, a worm adapted to be driven by said motor, a worm wheel journaled on said plate and meshing with said worm, a crank on said wheel, a rod journaled on said crank, said rod depending below said plates and having sliding connection with said bearing, and cups secured to said rod.

In testimony whereof I affix my signature.

ERIC LINDBERG.