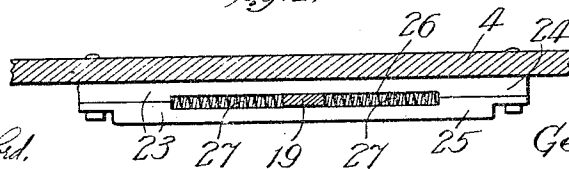
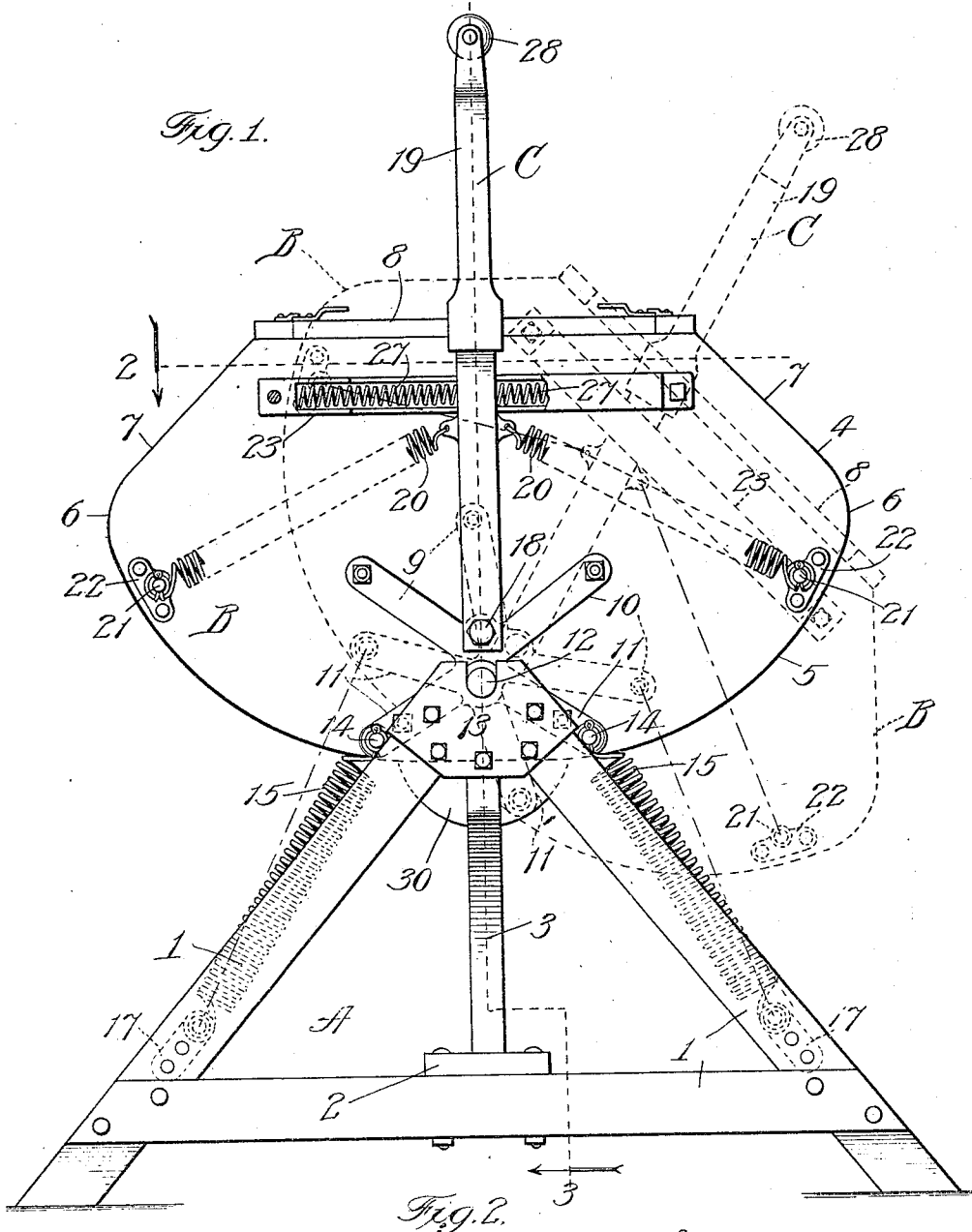


G. SIM.
 ACTUATING MECHANISM.
 APPLICATION FILED FEB. 2, 1911.

1,018,014.

Patented Feb. 20, 1912

2 SHEETS—SHEET 1.



Witnesses:
 E. C. Daybird,
 Chas. H. Buell.

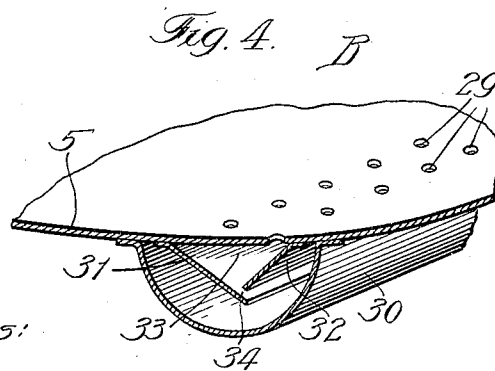
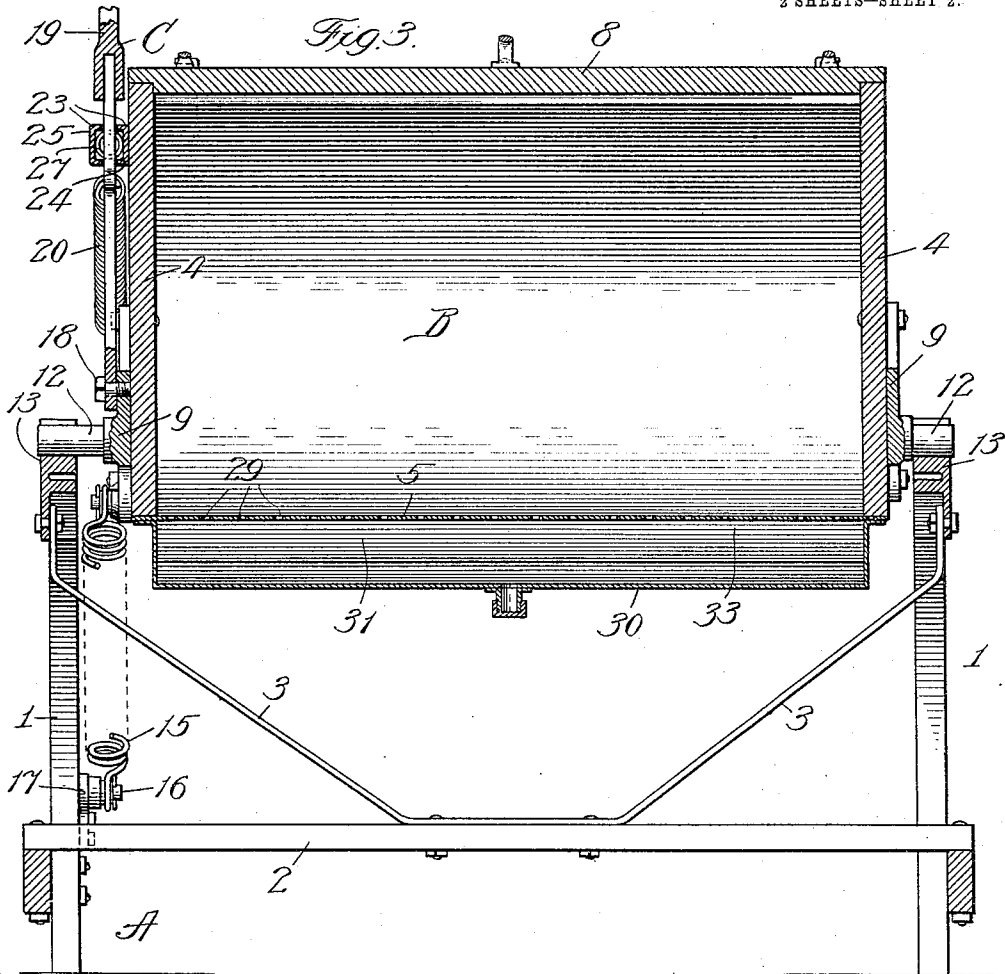
Inventor:
 George Sim,
 By Dyrenforth, Lee, Chittton & Wike
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G. SIM.
ACTUATING MECHANISM.
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1,018,014.

Patented Feb. 20, 1912.

2 SHEETS—SHEET 2.



Witnesses:
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Inventor:
George Sim.
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UNITED STATES PATENT OFFICE.

GEORGE SIM, OF CHICAGO, ILLINOIS, ASSIGNOR TO DONALD CAMERON, OF CHICAGO, ILLINOIS.

ACTUATING MECHANISM.

1,018,014.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed February 2, 1911. Serial No. 606,126.

To all whom it may concern:

Be it known that I, GEORGE SIM, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Actuating Mechanism, of which the following is a specification.

My invention relates particularly to actuating mechanism for oscillatory washing machines.

My primary object is to improve and simplify such mechanism.

My invention is illustrated in its preferred embodiment in the accompanying drawings, in which—

Figure 1 represents an end elevational view of a washing machine equipped with my improvements; Fig. 2, a broken section, taken as indicated at line 2 of Fig. 1; Fig. 3, a vertical section taken as indicated at line 3 of Fig. 1; and Fig. 4, a broken sectional perspective view, showing a detail of a sediment-chamber employed.

In the construction illustrated, A represents a frame; B, an oscillatory tub or body, having horizontal trunnions pivoted on the frame; and C, actuating mechanism for the member B.

The frame A may be of any suitable construction. As shown, it comprises end standards 1; a connecting member 2; and braces 3. The body B is of somewhat oval form, viewed at the end. It has flat ends 4, a curved bottom 5 terminating at enlargements 6, inclined side members 7, and a removable top 8. The body B is equipped at the lower portions of the outer surfaces of its end members 4 with castings or metal members 9 having upper arms 10 and lower arms 11. The members 9 have outwardly turned horizontal trunnions 12 supported in journals or bearings 13 with which the upper ends of the standards 1 are equipped. One of the castings or members 9 serves as a combination spring-attaching and trunnion-carrying member, having connected with studs 14 projecting outwardly from the lower ends of the arms 11, recoil springs 15, whose lower ends are connected with studs 16 carried by metal members or castings 17 applied to the end standards 1 of the frame on opposite sides of the axis of the tub or body B. The member 9 referred to is equipped above its trunnion 12 with a stud 18 upon which is pivoted the lower end of

the lever 19 of the actuating mechanism C. Attached to opposite edges of the lever 19 are power transmission springs 20, whose remote ends are connected with studs 21 carried by plates or castings 22 connected with the end member 4 of the tub. Above the springs 20 the lever 19 works in a horizontally disposed guide 23 carried by the upper portion of the end member 4 of the tub. The guide 23 comprises an inner plate or bar 24 and an outer plate or bar 25 separated by a space 26 adapted to accommodate the lever 19, and springs 27 confined between the lever 19 and the end portions of the guides. The lever 19 may be actuated in any suitable manner. It is shown equipped at its upper portion with a handle 28 for manual operation.

The tub B has its bottom 5 made with a foraminous central portion provided with small perforations, as indicated at 29, and beneath the foraminous portion of the tub-bottom is a sediment-chamber 30, into which depend baffle plates 31 and 32; which are carried by the bottom 5. The upper edge portions of the baffle plates are separated, by a space 33, which communicates with the perforations 29, and the baffle plates are set at an angle to each other, the plate 32 being made somewhat narrower than the plate 31, so that the plate 31 will overlap the free edge of the plate 32 but will be separated therefrom by a space 34. Sediment may thus pass through the perforations 29 and between the baffle plates, dropping into the lower portion of the sediment-chamber; and the baffle plates will serve to prevent the sediment from being stirred up and thrown back into the tub during oscillations of the tub.

The operation of the mechanism may be stated briefly. Motion is communicated to the lever 19, as by means of the handle 28, and power is transmitted through the coil springs 20, as the lever 19 is reciprocated, thereby oscillating the body B. As the body oscillates, the recoil springs 15 are alternately placed under tension, thus serving as counterbalancing springs tending to return the tub to its upright position, and so aiding in the actuation of the tub. The coil springs 27, when employed, serve the same function as the coil springs 20, or rather supplement the springs 20. In practice, one set of power transmission springs

may be omitted, if desired. Preferably, however, the springs 20 will be retained. As the lever 19 is oscillated, its reciprocating movements are transmitted to the tub, but amplified at the tub, owing to the momentum of the tub and its contents.

The construction described is exceedingly simple, may be cheaply manufactured, and is thoroughly effective for its purpose. It may be supplied to householders at comparatively small expense, and requires but little power to operate it.

What I regard as new, and desire to secure by Letters Patent, is:

1. The combination of a frame, an oscillatory body, a combination spring-attaching and trunnion-carrying member secured to one end of said body and having a horizontally disposed trunnion journaled in said frame, recoil-springs having their upper ends attached to said member on opposite sides of the trunnion and having their lower ends connected to said frame, a lever pivoted on said member and rising therefrom, and power-transmission springs on opposite sides of said lever and connected with said body.

2. The combination of a frame, an oscillatory body, a combination spring-attaching and trunnion-carrying member secured to one end of said body and having a horizontally disposed trunnion journaled in said frame, recoil-springs having their upper ends attached to said member on opposite sides of the trunnion and having their lower ends connected to said frame, a lever pivoted on said member and rising therefrom, and power-transmission springs on opposite sides of said lever having their adjacent ends attached to said lever and their remote ends attached to said body.

3. The combination of a frame, an oscillatory body having horizontal pivots journaled on said frame, a lever pivoted to swing in a vertical plane parallel with an end of said body, a guide for said lever carried by said body above the pivot of said lever, and power-transmission springs having their adjacent ends co-acting with said lever and having their remote ends connected with said body.

4. The combination of a frame, an oscillatory body having horizontal pivots journaled on said frame, a lever pivoted to swing in a vertical plane parallel with an end of said body, a guide for said lever carried by said body above the pivot of said lever, power-transmission springs having their adjacent ends co-acting with said lever and having their remote ends connected with said body, and recoil-springs having their upper ends attached to one end of said body on opposite sides of a pivot and having their lower ends attached to said frame beneath the body-pivot.

5. The combination of a frame, an oscillatory body having horizontal pivots journaled on said frame, a lever pivoted to swing in a vertical plane parallel with an end of said body, a guide for said lever carried by said body above the pivot of said lever, coil springs confined in said guide at opposite sides of said lever, power transmission springs having their adjacent ends connected with said lever beneath said guide and having their remote ends connected to said body, and recoil-springs connected with said body and with said frame.

GEORGE SIM.

In presence of—

R. A. RAYMOND,
R. A. SCHAEFER.