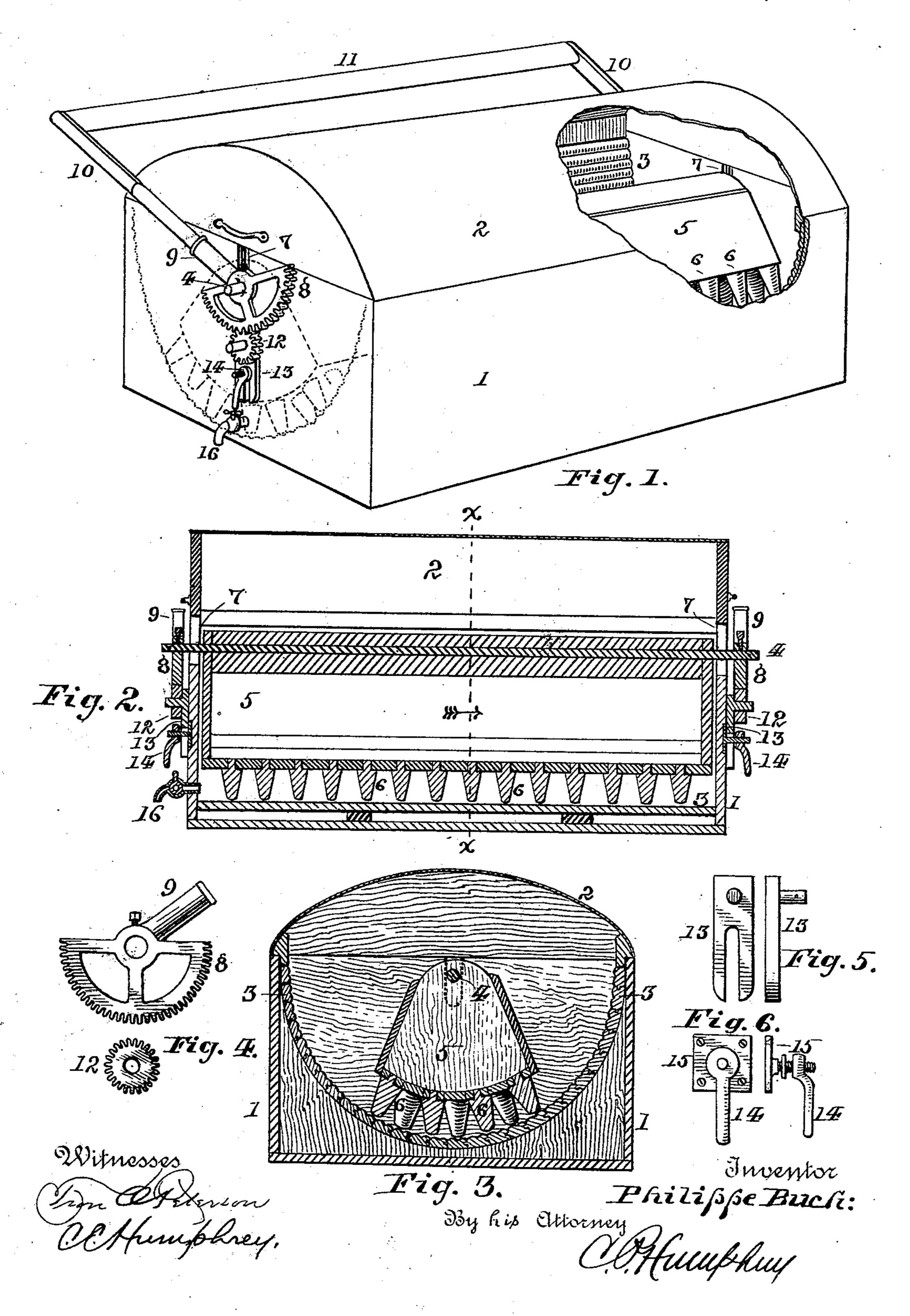
## P. BUCH. WASHING MACHINE.

No. 512,359.

Patented Jan. 9, 1894.



## United States Patent Office.

## PHILIPPE BUCH, OF AKRON, OHIO.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 512,359, dated January 9, 1894.

Application filed August 10, 1893. Serial No. 482,790. (No model.)

To all whom it may concern:

Be it known that I, PHILIPPE BUCH, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented a certain new and useful Improvement in Washing-Machines, of which

the following is a specification.

My invention has relation to improvements in that class of washing machines in which a semi-cylindrical rubber having projections on its curved face is arranged to rock concentrically in a semi-cylindrical hollow body having corrugations on its inner face; and it has for its objects, to render the rocking rubber readily and permanently adjustable above the curved face of the body; to provide improved devices for supporting the shaft of the rubber; to provide for applying a lubricant to the supporting parts of the rubber without coming in contact with the clothes; and generally to simplify its construction and increase its efficiency.

To the aforesaid objects my invention consists in the peculiar and novel construction, arrangement and combination of parts hereinafter described and then specifically pointed out in the claims, reference being had to the accompanying drawings forming a part of this

specification.

In the accompanying drawings, in which similar reference-numerals indicate like parts in the several views: Figure 1 is a perspective view, in outline, of my improved washing machine, a portion being broken away to show 35 the construction and relative arrangement of the internal parts; Fig. 2, a central, vertical section of the same, longitudinally through the axis of the shaft of the rocking rubber; Fig. 3, a section of the same at the line x, x, of 40 Fig. 2; Fig. 4, elevations of the segmental rack and pinion to support the rocking-rubber; Fig. 5, front and side elevations of the adjustable wrist plate that supports the pinion; and Fig. 6, similar views of the retaining bolt, nut and 45 plate for holding the wrist plate.

Referring to the drawings, 1, is the case or body, consisting of a box, open at the top, and provided with a removable cover, 2. Inside the case 1, is a semi-cylindrical lining 3, united at each end and at its upper edges with the case 1, by water-tight joints, its inner face being corrugated with parallel rounded beading.

Suspended inside of the case 1, and centrally to the lining 3, on the shaft 4, is, what, for the purposes of this application I denominate the 55 rocking rubber, which is a box 5, being in cross-section practically the segment of a cylinder. The curved face of this rubber is provided with fingers 6; each in form of a truncated cone, the smaller end being rounded; 60 and each course alternating with the next in position. The shaft 4, extends through each end of the case 1, in vertical notches 7, properly guarded by metal faces, which permit the entrance and removal of the shaft, and its 65 vertical adjustment. On the ends of the shaft 4, are fastened segmental racks 8, each having integral therewith projecting sockets 9, for the reception of arms 10, united by a bar 11, by which the shaft and connected rubber 70 5, are rocked. Each rack 8, rests on and meshes in a pinion 12, mounted on a wrist in the forked-plate 13, which is fastened by a nut 14, on a stud projecting from a plate 15 screwed to the case 1. By this arrangement the rock- 75 ing rubber is made vertically adjustable to adapt it to different classes, thicknesses and numbers of articles to be washed, the location of the wrist being below the notch 7, thereby permitting the use of a lubricant without per- 80 mitting its entrance into the machine. A cock 16, permits the removal of the water from the lining 3.

In operation the cover 2, and rubber 5, are removed, the space inside the lining 3, filled 85 with suitably tempered water, and the height of the shaft 4, adjusted, and the rubber replaced. The articles to be washed are then placed in the machine, the cover returned, and the rubber rocked; the peculiarly-shaped 90 fingers, 6, engaging them and rubbing them along the corrugated surface of the lining, 3, and by its reciprocal motion turning them over and subjecting new parts to the rubbing surface, until they are thoroughly washed.

I claim as my invention—

The combination of the body having end notches and a corrugated lining; the rocking rubber having fingers, with its supporting shaft; the segmental racks mounted on the rocking ends of said shaft and sockets integral therewith to receive the rocking arms; the rocking arms; the pinions to mesh with and support said segmental racks; the forked plates hav-

ing wrists to receive said pinions; the plates adapted to be fastened to said body below said end notches, having study to receive said forked plates; and the nuts to lock said forked plates at different heights, all constructed and arranged to simultaneously co-act substantially as shown and for the purpose specified.

In testimony that I claim the above I hereunto set my hand.

PHILIPPE BUCH.

In presence of—

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C. P. HUMPHREY,

C. E. HUMPHREY.