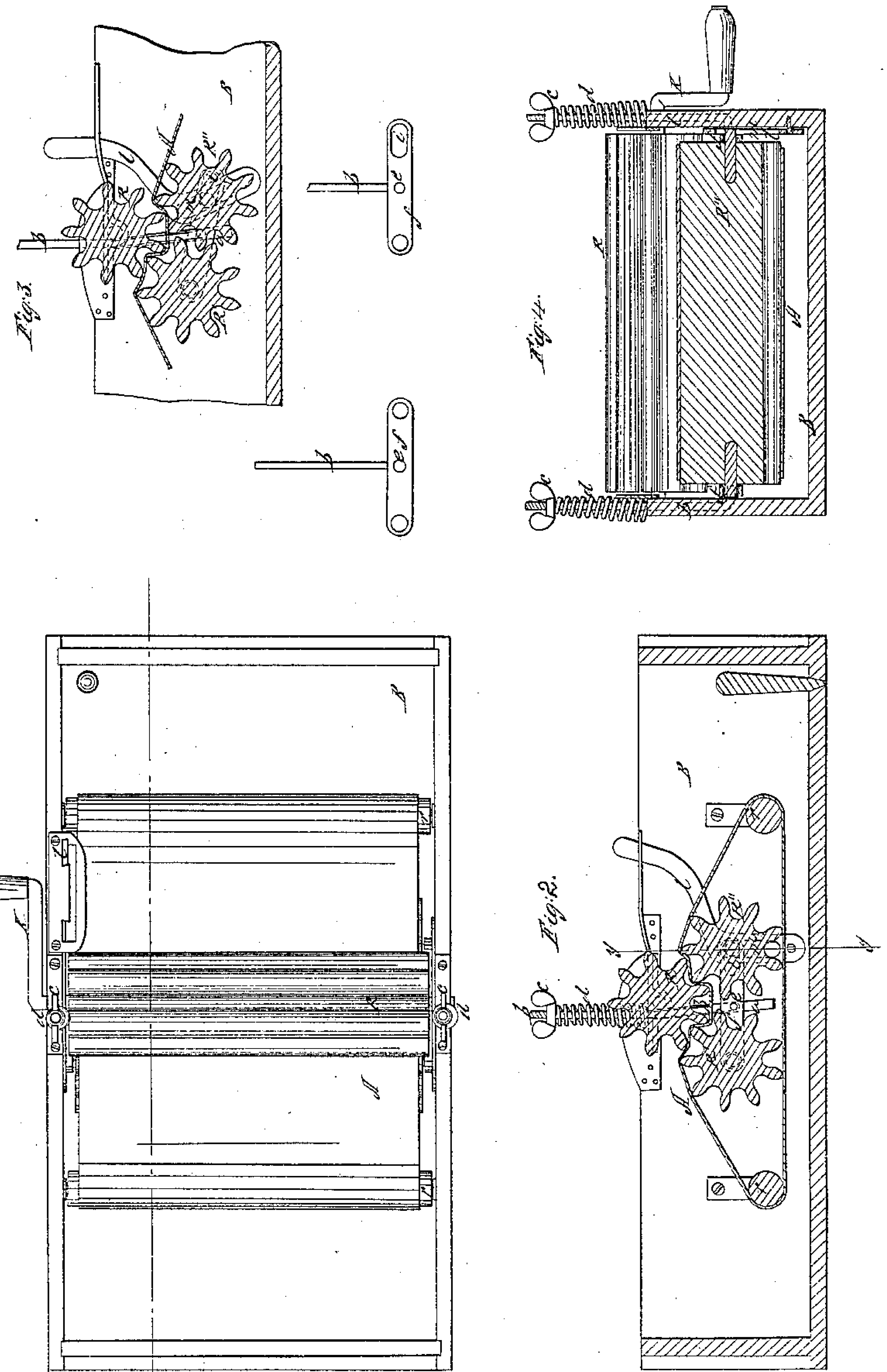
J. F. Pond,

Washing Machine,

No. 21,903. Patented Oct. 26, 1858.



Witnesses:

Inventor.
Joseph P. Pond

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UNITED STATES PATENT OFFICE.

JOSEPH F. POND, OF CLEVELAND, OHIO.

WASHING-MACHINE.

Specification of Letters Patent No. 21,903, dated October 26, 1858.

To all whom it may concern:

Be it known that I, JOSEPH F. POND, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1 is a top view of the machine. Fig. 2 is a vertical section on line *x x*. Fig. 3 is a similar section; showing the brake applied by which the rotation of the lower rollers is stopped. Fig. 4 is a vertical section on line *y y*.

The character of washing machine to which my invention applies, is that in which the cleaning operation takes place between an endless apron and a corrugated roller.

The nature of the invention consists in hanging the lower rollers over which the apron passes at opposite extremities of vibrating bars for rendering the said rollers self adjustable as will be described.

In the drawing B is the box containing the cleansing mechanism, to be made water tight.

R R′ R″ are the corrugated rollers; the first journaled upon the sides of the box, and rotated by crank K.

Passing downward, through the grooves *a* in the sides of the box, are rods *b b*, having on their upper extremities nuts *c c* for confining springs *d d*.

The lower ends of the rods *b* turn inward and carry each a bar *f*, capable of vibrating about its point of suspension *e*. These bars receive the journals of the rollers R′ R″, so that the said rollers have a tendency to be drawn toward roller R, by the force of springs *d d*.

One of the journals of roller R″ rests in a slot *i* bar *f*, and is also embraced by a slot *m* of lever *l*, so as to cause the corrugations of the rollers R′ R″ to lock when the level *l* is carried into the position shown in Fig. 3.

The endless apron A passes around rollers *r r* and rollers R′ R″ as shown in Fig. 2.

The operation of the machine is as follows: The springs *d* draw the rollers R′ R″ into contact with roller R, as shown in Fig. 2, so that the rotation of roller R produces the rotation of the other rollers in one direction, and thus causes the movement of the apron A. The vibration of the bars *f f* enables each roller R′ or R″ to adjust itself to the thickness of the garment passing under the roller R, without increase of distance between the axes of rollers R′ R″. When the lever *l* is moved to the position shown in Fig. 3, the corrugations of rollers R′ R″ mesh and prevent the rotation of these rollers, so that the clothing will be rubbed by the movement of roller R. In using this machine, the articles to be washed are spread upon the apron A, and by its movement carried under roller R; the pressing received between the rollers serving to remove the dirt.

If any particular portion requires special rubbing, then lever *l* is thrown into position shown in Fig. 3, and roller R moved alternately back and forth over the part requiring the rubbing.

One advantage of this construction lies in the fact that when one roller is forced down to accommodate an inequality, or undue thickness of clothing, the other roller will pack close to the roller R, and tend more strongly to draw forward the apron A and the clothing thereon.

Having described my invention and the operation thereof I claim—

The suspension of the rollers R′ R″ upon the vibrating bars *f f* at the extremities of slide rods *b b*, in combination with the springs *d* and upper roller R; the whole constructed, arranged, and operating substantially as, and for the purposes set forth.

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

JOSEPH F. POND.

Witnesses:
GEO. PATTEN,
W. W. BURSON.