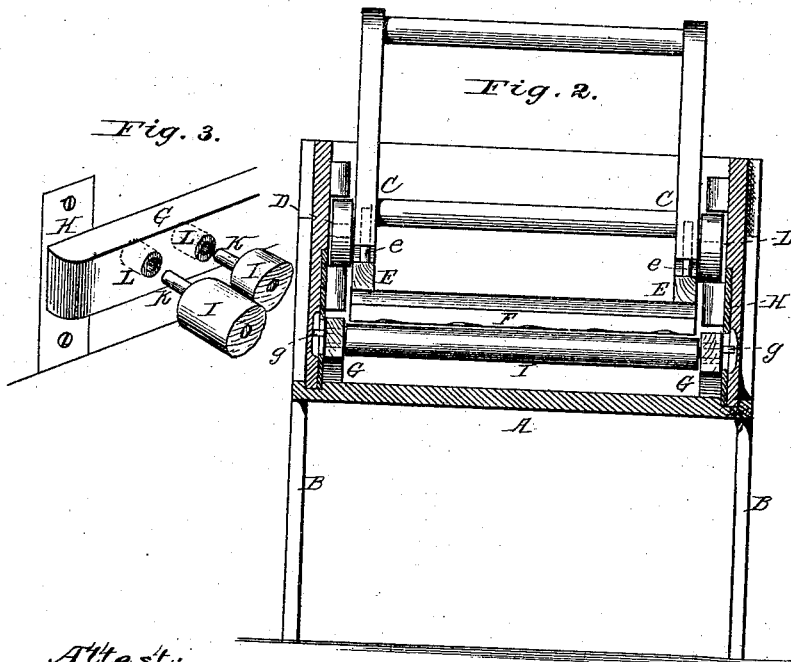
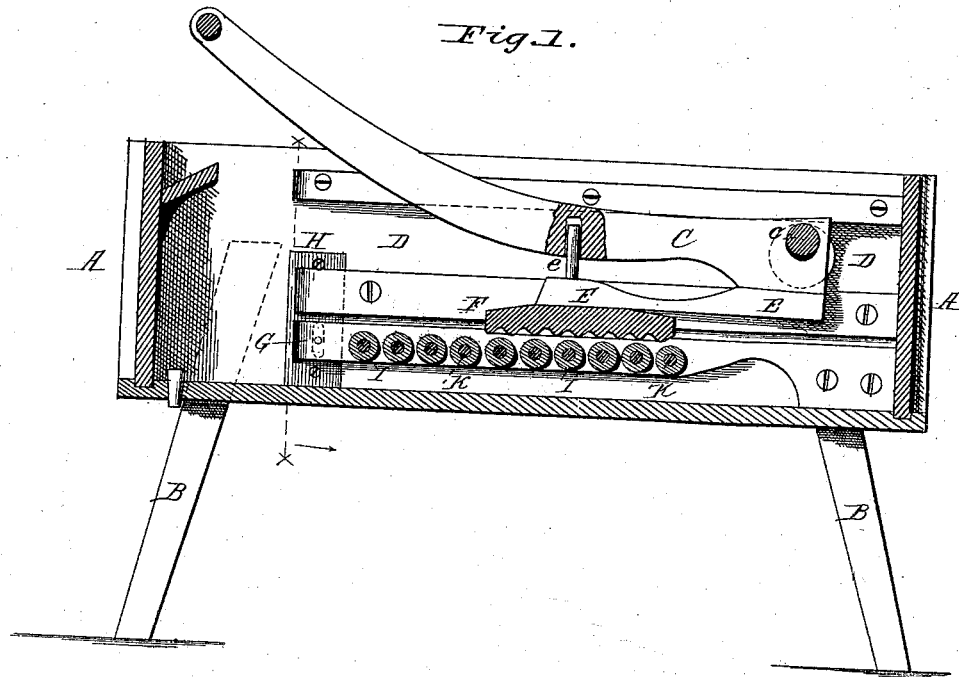


G. W. GILBERT.
Washing-Machine.

No. 168,735.

Patented Oct. 11, 1875.



Attest:
G. L. Quinn
J. S. Coombs

Inventor:
George W. Gilbert
By James L. Norris
att.

UNITED STATES PATENT OFFICE

GEORGE W. GILBERT, OF EAST PROSPECT, PENNSYLVANIA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 168,735, dated October 11, 1875; application filed October 4, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. GILBERT, of East Prospect, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Washing-Machine, of which the following is a specification:

This invention relates to certain improvements in washing-machines, its object being to impart a certain degree of elasticity to the rubbing-surfaces between which the clothes are worked, to prevent tearing or otherwise injuring the same, and also to render the rollers forming the lower rubbing-surface more durable than in machines of this class as heretofore constructed.

My invention consists in a novel construction and arrangement of parts, which will be fully hereinafter described, and specifically pointed out in the claims.

In the drawings, Figure 1 is a horizontal section of my improved washing-machine; Fig. 2, a cross-section of the same; and Fig. 3, a detached view, showing the metallic sleeves and the rods which work therein.

The letter A represents a rectangular tub or vessel mounted upon legs B; and C, a frame adapted to be moved back and forth in said tub. The said frame is provided with friction-rollers, journaled to the shaft or bar *c* at each end of the same, and adapted to travel in ways D D, secured to the inside of the tub on opposite sides of the same. E E represent springs, constructed, preferably, of elastic wood, attached at one end to the lower end of the frame C. To the other ends of said spring is attached the corrugated rubber F, and near the said ends of said springs are secured the guide-pins *e e*, which project into and work in recesses in the under sides of the arms of the frame C, and serve to guide said springs as they work, and prevent them from breaking. G G represent two spring-bars, preferably of elastic wood, attached each at one end to the opposite sides of the tub, at or near the bottom of the same. Near the other

ends of said springs, on their outer sides, are secured the pins *g g*, which project into the slots in the metallic plates H H, secured to the insides of the tub, serving to guide said springs and limit the motion of the same. From spring to spring, transversely across the tub, extends a series of hollow rollers, I, mounted upon the metallic rods K, said rods working in short metallic sleeves or bearings L at each end of the springs G.

The operation of my apparatus is as follows: The tub being properly filled with water, the clothes are placed between the reciprocating rubber and the rollers, and a reciprocating motion is given to the frame C, the same being pressed down, so as to press the clothes between the rubbing-surfaces during the operation. The springs E E and G G yield to any inequalities in the clothing and prevent injury to the same, the guide-pins preventing the springs from being thrown out of line and broken.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The frame C, provided with the friction-rollers, and having the spring-bars E horizontally attached to the end of said frame, and carrying the corrugated rubber F and vertical guide-pins *e*, in combination with the vessel A, and rollers journaled in the spring-bars G, substantially as shown and described.

2. The combination of the hollow rollers I, mounted upon the metallic rods working in metallic bearings L, secured to each end of the supporting spring-bars G, and capable of rotating therewith, the whole forming the lower rubbing-surface of the apparatus, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

GEO. W. GILBERT.

Witnesses:

JAMES L. NORRIS,
JOS. L. COOMBS.