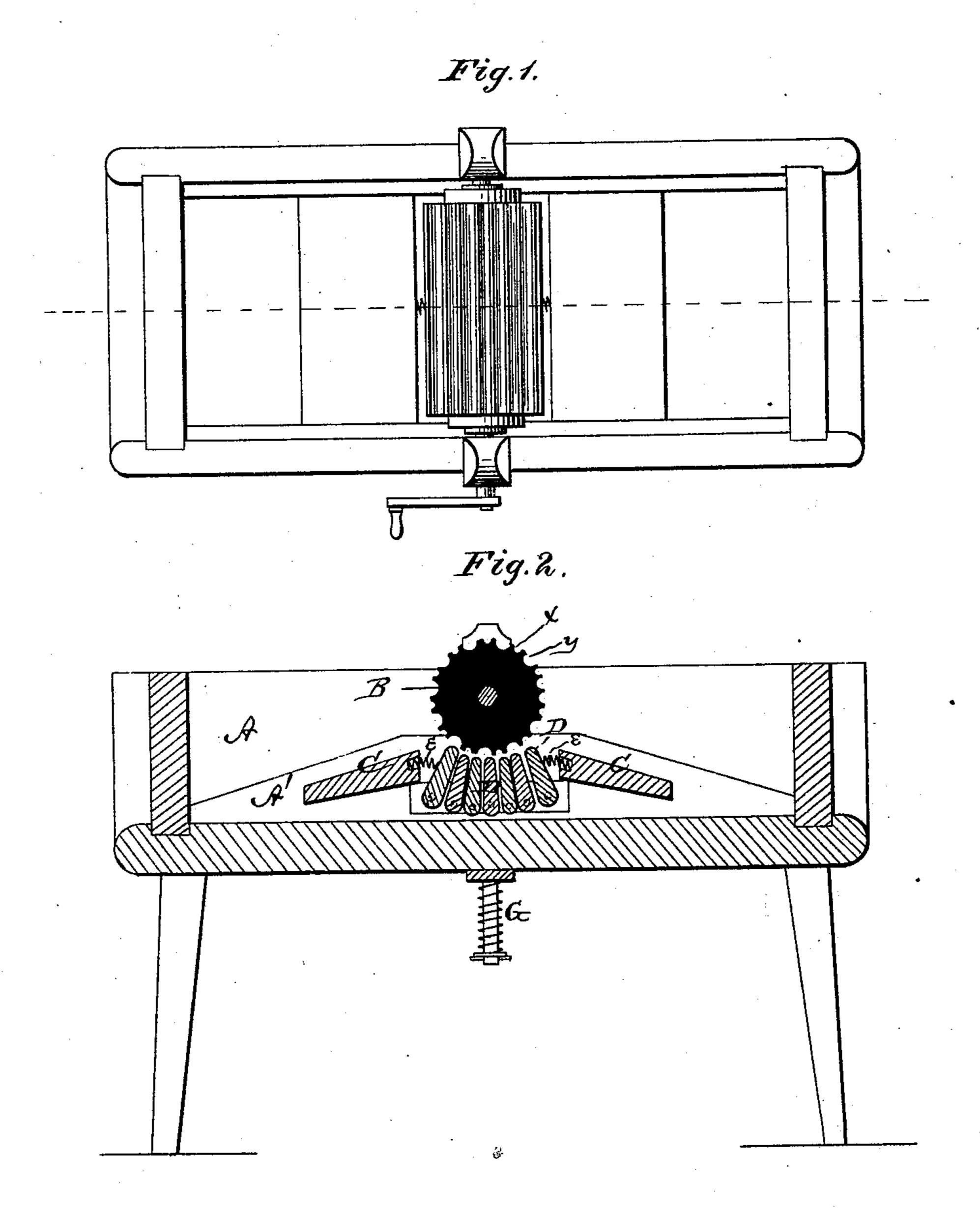
G. W. HOLMES. Washing-Machine

No. 166,871.

Patented Aug. 17, 1875.



WITNESSES

Henry N. Miller By

G. Co. Stolewes,

Attorney

UNITED STATES PATENT OFFICE

GEORGE W. HOLMES, OF COUNCIL BLUFFS, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 166.871, dated August 17, 1875; application filed July 22, 1875.

To all whom it may concern:

Be it known that I, GEORGE W. HOLMES, of Council Bluffs, in the county of Pottawattamie and in the State of Iowa, have invented certain new and useful Improvements in Washing-Machines; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

On the 21st day of April, 1874, a patent, No. 156,157, was granted to me for an improvement in washing-machines, in which was combined a fluted roller supported on a flexible frame, a series of vertical plates placed in the bottom of a washing-box, and two aprons resting on springs which bear against the plates, so that the clothes passed over the apron and plates and under the rollers.

My present invention is intended as an improvement upon the above-patented invention; and it consists in the construction of the roller, and the combination therewith of the aprons and plates, all as more fully hereinafter set forth.

Figure 1 represents a plan view, and Fig. 2 a longitudinal section of my invention.

A respresents the rectangular box. A' represents the frame in the bottom of the same, and to which are connected the series of vertical plates D D, pivoted at their lower ends. C C represent the two inclined aprons, one at each side of the plates. B represents the corrugated roller. G represents the flexible frame which supports the roller, and E E are the springs between the aprons and the vertical plates.

The main device which I desire to cover as an improvement in connection with the devices hereinbefore referred to is the roller, which in this present case is made of india-

rubber, and secured around a central shaft. The circumference of this rubber roller is formed of a series of longitudinal grooves, xy, every alternate groove x being of about onehalf the size of those adjacent thereto. This construction will cause the feed or catch of the clothes readily and perfectly, and the elasticity of the roller avoids the breakage of buttons from the garments. The large and small alternating grooves form more spaces, through which the dirt in the clothes may be more readily pressed through the fibers when washing, and the roller being thus grooved and hung in a flexible frame, and placed over the plates or slats D in the box, the machine acts both as a rubber and a pounder. The spiral springs E E connect the aprons C and outside plates D direct, so that the movement of the latter is direct instead of indirect, as in my former patents.

The operation of this machine is simple. The suds are placed in the tub, and the clothing to be washed placed so that they will come in contact with the roller and the plates. The roller is turned by a crank, and the clothes thereby drawn back and forth under the roller and over the plates until they are thoroughly cleansed.

What I claim is—

In combination with the aprons C C, vertically-pivoted plates D D, and springs between the two, the india-rubber roller B secured around a shaft, and provided with longitudinal corrugations x and y, of unequal sizes, as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of June, 1875.

G. W. HOLMES.

Witnesses:

H. M. PARRISH, W. S. WILLIAMS.