

I. A. SHAW.
Washing-Machine.

No. 168,931.

Patented Oct. 19, 1875.

Fig: 1.

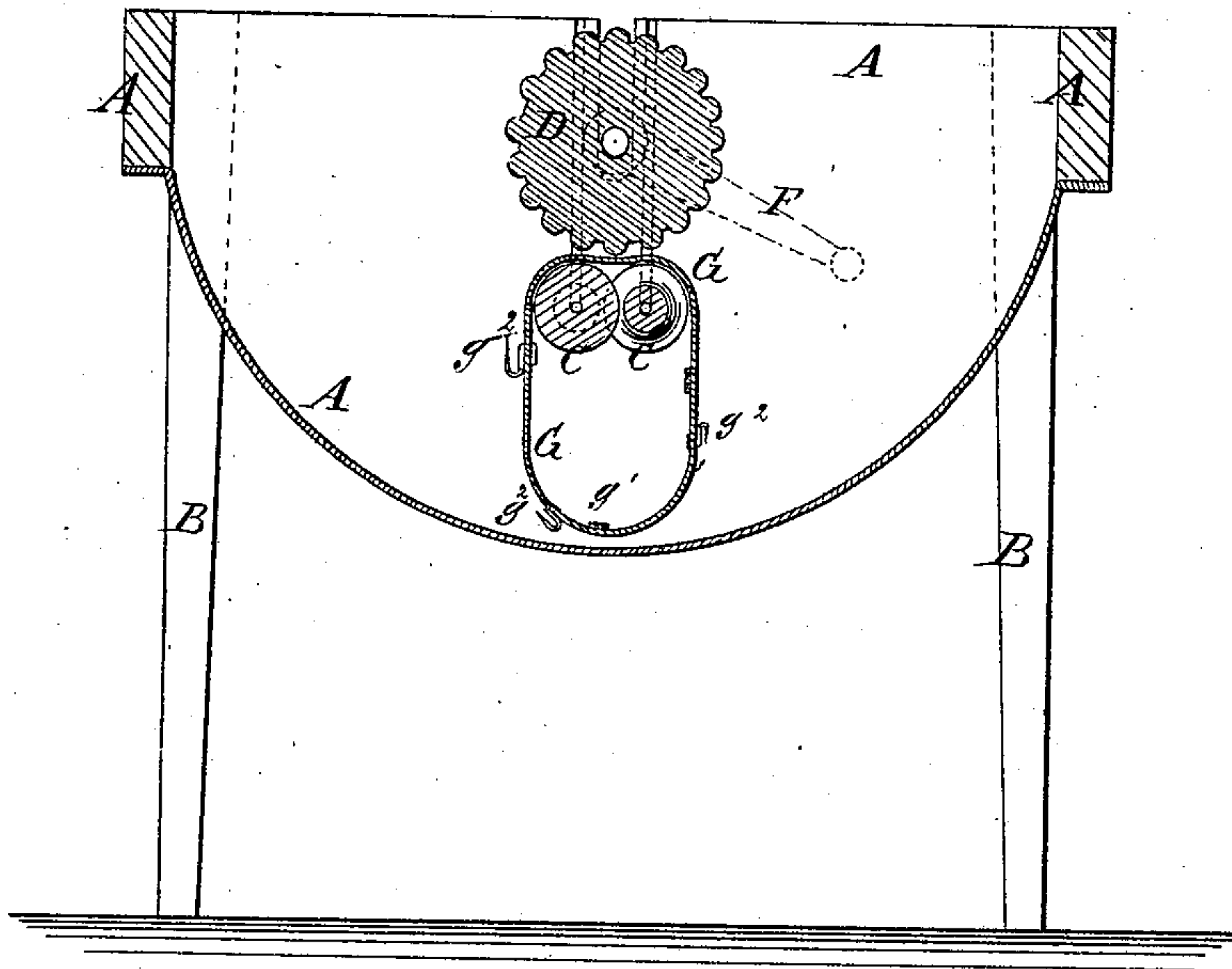


Fig: 2.

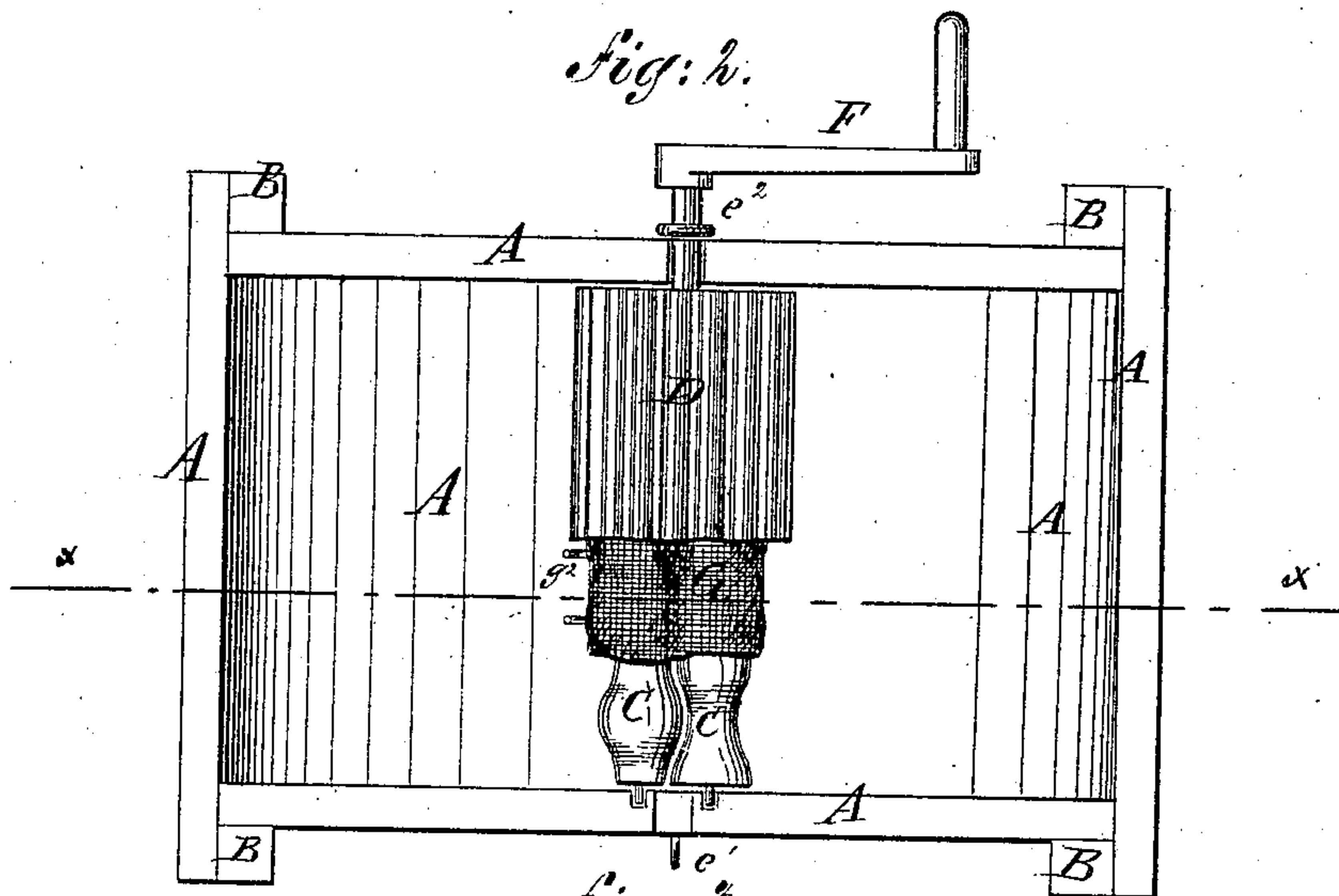
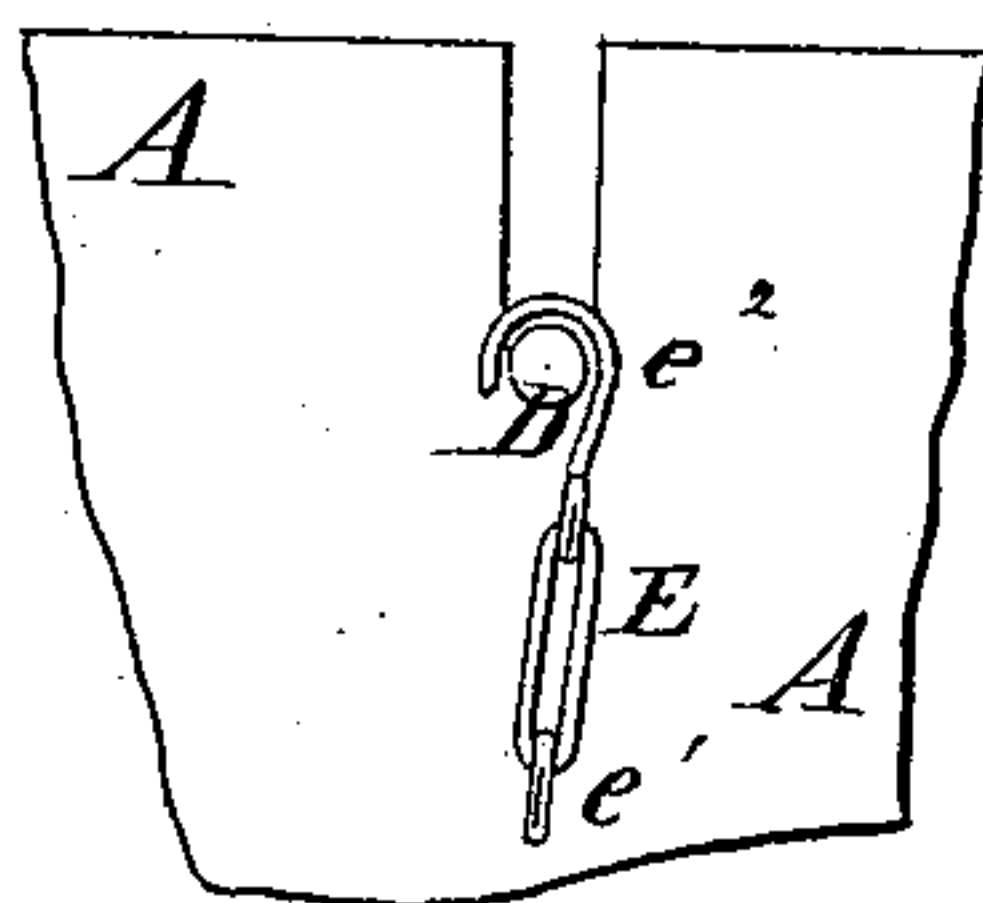


Fig: 3.



WITNESSES:

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INVENTOR:

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BY *Mumt Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

IRVIN A. SHAW, OF GRAND MEADOW, MINNESOTA, ASSIGNOR TO HIMSELF
AND JOHN E. JOSLYN, OF SAME PLACE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **168,931**, dated October 19, 1875; application filed
August 6, 1875.

To all whom it may concern:

Be it known that I, IRVIN A. SHAW, of Grand Meadow, in the county of Mower and State of Minnesota, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification:

Figure 1 is a vertical section of my improved machine, taken through the line *x x* of Fig. 2. Fig. 2 is a top view of the same, part of the upper roller and of the endless apron being broken away. Fig. 3 is a detail view of the device for holding the upper roller down to its work.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved washing-machine, simple in construction, convenient in use, easily operated, and effective in operation, washing the clothes quickly and thoroughly, and without injuring them.

The invention consists in the combination of the rollers, the springs, and the endless apron, provided with hooks, with each other, and with the semi-cylindrical suds-box, as hereinafter fully described.

A is the suds-box of the machine, which is made with vertical sides and ends, and a semi-cylindrical bottom. The suds-box A is supported by legs B, of such a length as to raise the machine to a convenient height. C are two small rollers, which are made with alternate swells and contractions, which are so arranged that the swells of the one roller may fit into the contractions of the other roller, as shown in Fig. 2. The rollers C have pivots at their ends, the pivots at one end working in sockets in the inner surface of one side of the suds-box A, and the pivots at the other end

working in the lower ends of vertical grooves in the inner surface of the other side of said suds-box A, so that the said rollers C can be readily detached when desired. D is a larger roller, which is corrugated longitudinally, placed above the rollers C, and the journals of which revolve in vertical slots in the sides of the suds-box A. The roller D is held down to its work by rubber or other springs E, the lower ends of which are connected with the sides of the suds-box A by staples or other fastenings *e*¹, and their upper ends are provided with hooks *e*², to hook upon the journals of the upper roller D. To one of the journals of the roller D is attached the crank F, by which the machine is operated. G is an endless apron or band, made of cloth, and passed around the lower rollers C. The apron G is kept spread by stretchers *g*¹, of whalebone or other material, attached to it transversely. To the endless apron G are attached hooks *g*², to receive the clothes.

By this construction the clothes are alternately drawn through the water, and then between the rollers C D, and are thus washed clean very quickly and without being injured.

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

The combination of the rollers C C D, the springs E, and the endless apron G, provided with stretchers *g*¹ and hooks *g*², with the semi-cylindrical suds-box A, substantially as herein shown and described.

IRVIN A. SHAW.

Witnesses:

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