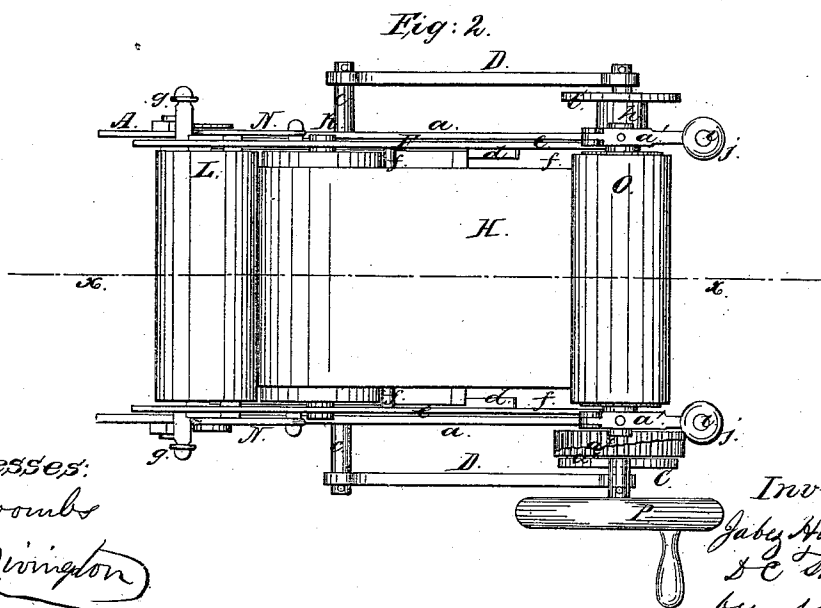
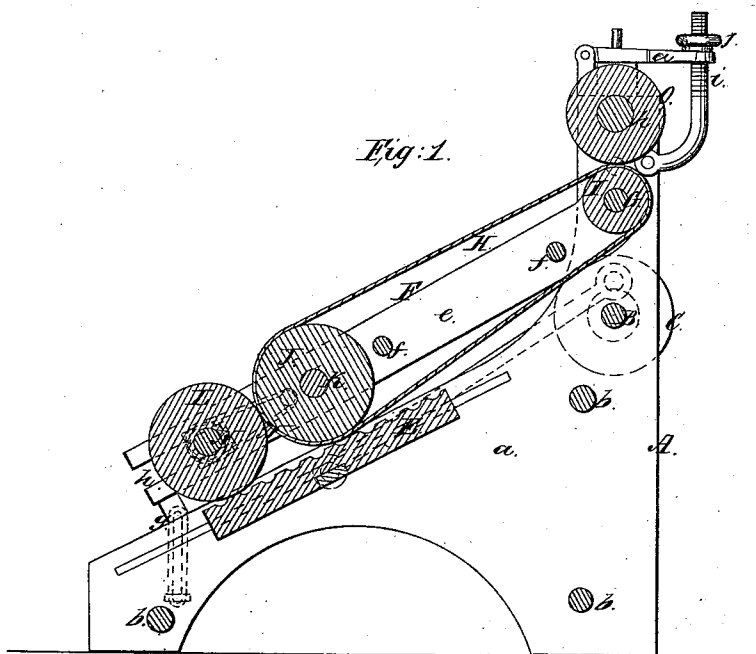


Hodskinson & Smith,

Washing Machine.

N^o 36,615.

Patented Oct. 7, 1862.



Witnesses:
J. W. Coombs
M. W. Livingston

Inventor:
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by M. W. Coombs
attys

UNITED STATES PATENT OFFICE.

JABEZ HODSKINSON AND O. C. SMITH, OF SALEM, MASSACHUSETTS.

IMPROVED WASHING AND WRINGING MACHINE.

Specification forming part of Letters Patent No. 36,615, dated October 7, 1862.

To all whom it may concern:

Be it known that we, JABEZ HODSKINSON and O. C. SMITH, of Salem, in the county of Essex and State of Massachusetts, have invented a new and Improved Clothes Washing and Wringing Machine; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of our invention, taken in the line *xx*, Fig. 2. Fig. 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in the employment or use of an endless apron, pressure-rollers, and a reciprocating rubber arranged in such a manner that the clothes may be subjected to a requisite degree of rubbing, in order to cleanse them thoroughly from dirt, and then be subjected to a sufficient pressure between rollers so as to have the moisture expelled from them, the washing and wringing operations being performed consecutively and by a continuous operation of the machine.

To enable those skilled in the art to fully understand and construct our invention, we will proceed to describe it.

A represents the frame of the machine, which is composed of two parallel side pieces, *a a*, connected by transverse rods *b*.

B is a shaft, which is fitted in the upper part of the frame A transversely, and has a crank-pulley, C, at each end of it, to which pitmen or connecting-rods D D are attached, said rods being fitted at their opposite ends on arms *c c*, which project from the sides of a rubber, E, which is placed in the frame A between inclined guides *d d*, the arms *c c* passing through slots in the side pieces *a a* of the frame.

The rubber E is a board having a corrugated upper surface, like an ordinary wash-board, and extending entirely across the frame or the space between the side pieces *a a* and it will be seen that as the shaft B rotates a reciprocating motion is given the rubber E.

F is a frame composed of two parallel side pieces, *e e*, connected by transverse rods *f*. This frame is fitted loosely at one end on a shaft, G, which is placed in the frame A directly above the shaft B and parallel with it. The frame F has an inclined position parallel

with the rubber E, as shown in Fig. 1, and its lower end is connected at each side by springs *g g* to the frame A. Rubber or other springs may be made for the purpose.

H is an endless apron, which may be of india-rubber or other material. This apron passes around a roller, I, on the shaft G, and around a roller, J, in the lower part of the frame F, the roller J being on a fixed axis or on a shaft, K, working in fixed bearings. In the lower part of said frame F there is also placed another roller, L, the axis or shaft M of which is fitted in longitudinal slots *h* in the lower end of frame F, and the roller L is made to bear against the roller J, or rather against the apron H, which passes around it, by springs N N, which may be of india-rubber or other suitable elastic material connected at one end to the shaft M and at the opposite end to the side pieces *e e* of frame F.

O is a roller, which is placed in the frame A directly above the roller I and parallel with it. This roller O may be of india-rubber, and its shaft *h* is fitted in bearings which are allowed a vertical play in the frame A, and which have levers or bars *a'* pressing down upon them or on springs interposed between the bearings and the bars, the latter having screw-rods *i i* passing through them, on which nuts *j* are fitted, and by turning which the pressure of the roller O on I, or the apron H, which passes around it, may be graduated as desired. The roller L may also have a covering of india-rubber.

The operation is as follows: The clothes to be operated upon are placed on the rubber E, the lower end of frame F being raised and the clothes passed under it, and the machine placed over a tub containing a requisite quantity of suds. Power is then applied to the machine by turning a crank-wheel, P, attached to the shaft G of roller I, from which motion is communicated to the shaft B of the roller C by gearing *a''*. The clothes by this means are subjected to a requisite rubbing on the rubber E underneath roller J, and the rubbing process may be continued as long as is necessary by turning the crank P, first in one direction and then in the other. When the rubbing operation is finished, the crank P is turned with a continuous motion in one direction, and the clothes pass up between the rollers J L, and are conveyed by the apron H to the rollers O I, in passing between which the moisture is

expressed from them. The clothes are subjected to a pressure on the rubber E by the action of the springs *g g*, and the clothes, as they are discharged from between the rollers O I, may drop into a rinsing-tub, over which the machine may be placed after the washing operation has been performed, and the clothes then rinsed and wrung, the operation being precisely the same as that of the washing just described.

The device as a whole is extremely simple and efficient, may be manufactured at a reasonable cost, and will greatly expedite the operation of washing and wringing clothes, as well as reduce the labor attending the same.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The reciprocating rubber E, in combination with the endless apron H and rollers I, J, L, and O, arranged in connection with the frames A and F, to operate as and for the purpose herein set forth.

JABEZ HODSKINSON.
O. C. SMITH.

Witnesses:

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