

E. Gordon,

Washing Machine Rubber,

N^o 48,550.

Patented July 4, 1863

Fig: 1.

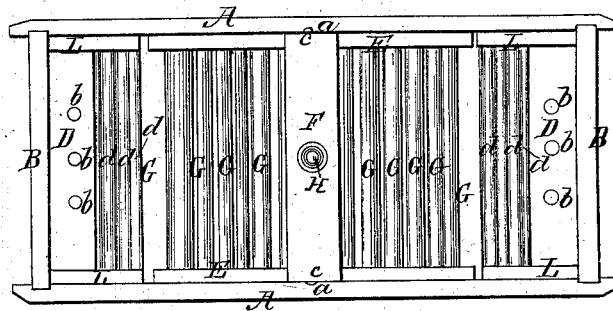
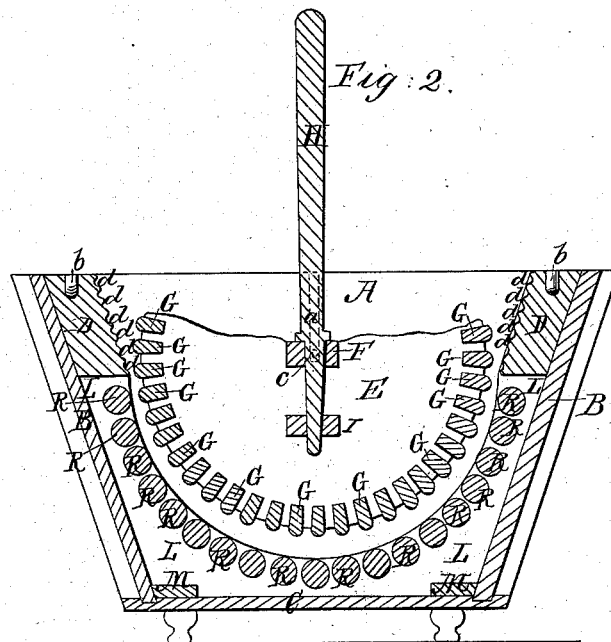


Fig: 2.



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UNITED STATES PATENT OFFICE.

EBENEZER GORDON, OF CEDAR RAPIDS, IOWA.

IMPROVED WASHING-MACHINE.

Specification forming part of Letters Patent No. 48,550, dated July 4, 1865.

To all whom it may concern:

Be it known that I, EBENEZER GORDON, of Cedar Rapids, in the county of Linn and State of Iowa, have invented and discovered a new and useful Improvement in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and the letters and figures marked thereon, which form part of this specification.

In said drawings, Figure 1 represents a plan or top view of my invention, and Fig. 2 is a vertical central section thereof at the line *x* in Fig. 1.

Similar letters of reference in the different figures denote corresponding parts of my invention.

The nature of my invention consists in a novel construction and arrangement in a washing-machine, whereby the clothes may be thoroughly cleansed, while at the same time all danger of clogging up the machine and preventing its free operation and of tearing off buttons is effectually obviated, the machine being also much cheaper and more convenient than other machines now in use.

To enable those skilled in the art to understand the construction and operation of my invention, I will describe the same with particularity, making reference to the aforesaid drawings.

A B C represent the box or tub in which the mechanism for washing the clothes is arranged, consisting of the upright sides A A, the sloping or inclined ends B B, and the bottom C, which is of the same width as the top of the box, but is less in length on account of the sloping of the ends B.

L L represent two similar frames or supports, one being arranged at each side of the machine, as shown, extending from the bottom to the top, the outer configuration of said frames L exactly conforming to the form of the box and fitting closely to the same, thus rendering them firm and immovable therein, while the interior surface is concave, representing two semicircular arcs, or thereabout, as shown. These frames L support each end of the series of rollers marked R in the drawings, which are arranged so as to present a concave interior surface, corresponding to the conformation of the said supporting-frames L L.

M M represent two cross-braces, fastened to the bottom of each of said frames to strengthen and sustain the same in the proper position. At the upper ends of said frame, above the uppermost of the said rollers, and at each end of the machine, there are arranged the blocks or planks marked D D, having inclined interior surfaces, as shown, which are provided with transverse corrugations similar to those upon an ordinary wash-board, (marked *d*.)

E E are two boards or planks of suitable thickness, cut in a semicircular form, whose convex surface corresponds with the concave formed by the rollers R, which are joined together by the cross-pieces F I, as shown. These semicircular boards E are arranged at such a distance apart as will allow them to oscillate freely between the sides of the machine, and the cross-bars G are mortised or fixed upon the convex surface of said pieces E E, as shown.

It will be observed that the exterior surfaces of said cross-bars G are rounded off, so as to present substantially a semicircular form.

Through appropriate holes in the cross-pieces F I is fixed the handle H, as shown. From each end of the cross-bar F there project the pins or journals marked *c*. At the middle point in each of the sides A A, directly opposite each other, there are cut the vertical slots *a a*, open at the top and extending downward far enough to serve the purpose for which they are designed. These slots may be lined with iron or steel, and the lower end of the slot, being designed to form a support for the rubber E G, should have an iron or steel plate arranged therein to form a suitable bearing for the journals *c c* aforesaid. The slots *a a* should extend down far enough so that the rubber E G may be suspended at the proper distance from the concave of rollers below to allow the clothes to be washed to intervene.

It may be remarked that the rubber E G is readily removed from the machine by simply raising the same from the slots *a a*, and the concave of rollers, including its supporting-frame and the corrugated blocks D, may also be removed from the box by simply raising it up.

Having described the construction and arrangement of my invention, I will now describe its operation.

A suitable quantity of clothes are placed

upon the concave of rollers, and the rubber is then adjusted as shown, and the journals *c c* are supported in the slots *a a*. The operator then grasps the handle *H* and oscillates the rubber backward and forward, the clothes being pressed and rubbed by the said rubber against the rollers *R* until the clothes are thoroughly cleansed. During the operation the rolling motion of the roller causes the clothes to move along freely, and thus prevents them from clogging or impeding the machine. The rounded exterior surfaces of the rubbing-bars *G* also prevent the buttons from being torn or worn off from the clothes, or hooks and eyes, or other similar devices.

By using or arranging the corrugated blocks *D* when the rubber is removed and the clothes examined, if by any possibility any spots or streaks be left in the clothes, they may be readily rubbed out upon the corrugated surface of said blocks, or either of them, thus avoiding the necessity or trouble of using the ordinary wash-board for that purpose, as is now the case.

It will readily be observed that the herein-described machine is very simple and cheap in its construction, readily operated and adjusted, and not liable to get out of repair.

Having now described the construction and operation of my improved washing-machine, I will specify what I claim as new therein and desire to secure by Letters Patent:

1. The combination of the supporting-frame *L*, the rollers *R*, the semicircles *E*, the rubbing-bars *G*, provided with rounded exterior surfaces, the cross-bar *F*, the journals *c c*, and slots *a a*, arranged as and for the purposes specified.

2. The combination and arrangement of the box *A B*, the removable supporting-frame *L*, the rollers *R*, corrugated blocks *D*, rubber *E* *G*, and handle *H*, operating as and for the purposes specified.

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Witnesses:

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