G. M. HALL & L. WHITE.

Improvement in Washing Machines.

No. 125,192. Patented April 2, 1872.

Fig. 1.

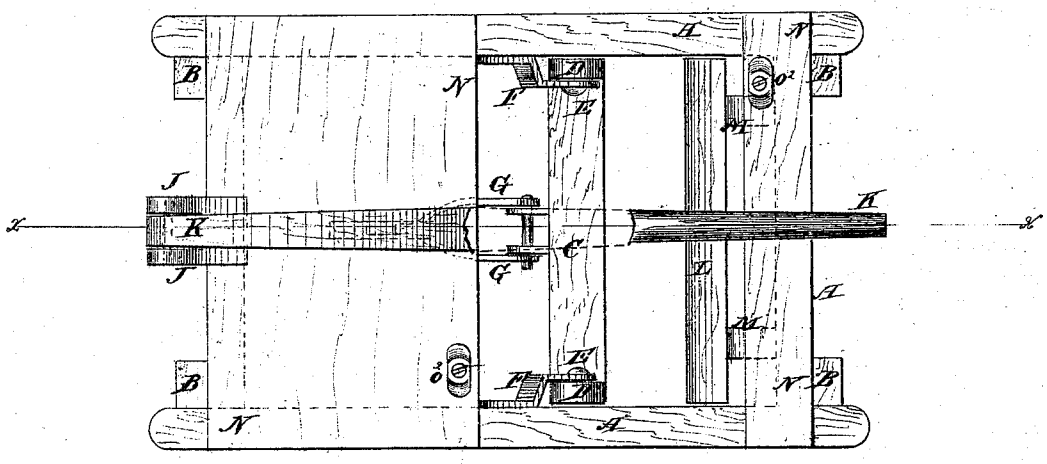
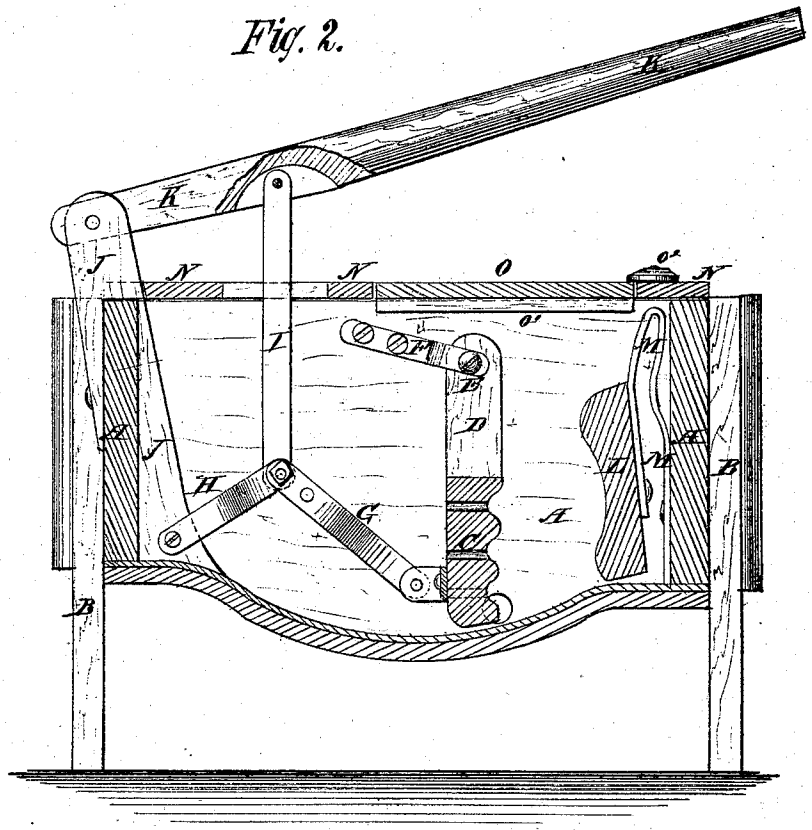


Fig. 2.



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UNITED STATES PATENT OFFICE.

GROVE M. HALL AND LAWRENCE WHITE, OF ORFORD, IOWA.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 125,192, dated April 2, 1872.

Specification describing a new and useful Improvement in Washing-Machine, invented by GROVE M. HALL and LAWRENCE WHITE, of Orford, in the county of Tama and State of Iowa.

Figure 1 is a top view of our improved machine, the detachable part of the cover being removed, and part of the lever being broken away to show the construction. Fig. 2 is a detail vertical longitudinal section of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

Our invention has for its object to improve the construction of the washing-machine for which Letters Patent No. 111,999 were granted to LAWRENCE WHITE February 21, 1871, so as to make it stronger, more convenient in use, and more effective in operation; and it consists in the construction and arrangement of various parts of the machine, as hereinafter more fully described.

A is the box of the machine, to which are attached, and which is supported by, legs B, which are made of such a length as to raise the machine to a convenient height. The box A is made with vertical sides and ends, and the middle part of its bottom is sunk or concaved, as shown in Fig. 2, to correspond with the curve of the sweep of the beater. C is the beater, which is made wide, and the face of which is corrugated or grooved longitudinally. In the bottom of each of the grooves or corrugations of the beater C are formed holes about five-eighths of an inch in diameter, to allow air, when the beater begins its rearward movement, to pass in between said beater and clothes to cause the face of the beater to loosen easily from the clothes. To the ends of the beater C are attached the lower ends of the bars D, the upper ends of which are pivoted to the upper part of the sides of the box A by the bolts E. The inner ends of the bolts E are supported by brace-bars or straps F, the ends of which are attached to the sides of the box A, as shown in Figs. 1 and 2. The braces F support the ends of the bolts E and prevent the beater from sagging or working loose. To the lower middle part of the rear side of the beater C is pivoted the forward end of the rod or rods G, the rear end or ends of which are pivoted to the forward end or ends of the rod or rods H and to the lower end of the rod I. The rear end of the rod or rods H is pivoted to the lower part of the post J, securely attached to the end of the box A. To the upper end of the post J is pivoted the end of the lever K, to which is pivoted the upper end of the rod I, as shown in Fig. 2. L is the wash-board, against which the clothes are pressed by the beater C. The wash-board L is made wide, and is concaved upon its forward side, as shown in Fig. 2. The wash-board L is attached to the forward arms of the peculiarly-shaped double springs M, the other arms of which are attached to the end of the box A, as shown in Fig. 2. N are the stationary parts of the cover, which parts are securely attached to the box A. O is the movable part of the cover, which fits into the space between the parts N, and is secured in place by cleats O^1 attached to its under side, and by buttons O^2 pivoted to the parts N.

By this arrangement of the parts of the machine the space for the clothes is brought forward into a much more convenient position, and, at the same time, the machine is adapted to receive a wringer, so that the clothes may be wrung directly from the box A. By this arrangement the power is applied to the beater more directly and more advantageously. As the clothes are forced forward by the beater C they first strike the lower part of the face of the wash-board L, and are forced backward and downward. As the beater C moves further forward, the clothes are forced upward along the concave face of the wash-board L, and are pressed and slightly rubbed. The clothes, as they are released by the rearward movement of the beater C, fall back into the water, turn partly over, and change their places, so as to always present different parts to the faces of the beater C and wash-board L.

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

The grooved beater C and pivoted bars D, operated by toggle mechanism G H I K, in combination with the concave L, backed and supported by spring M, as and for the purpose described.

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