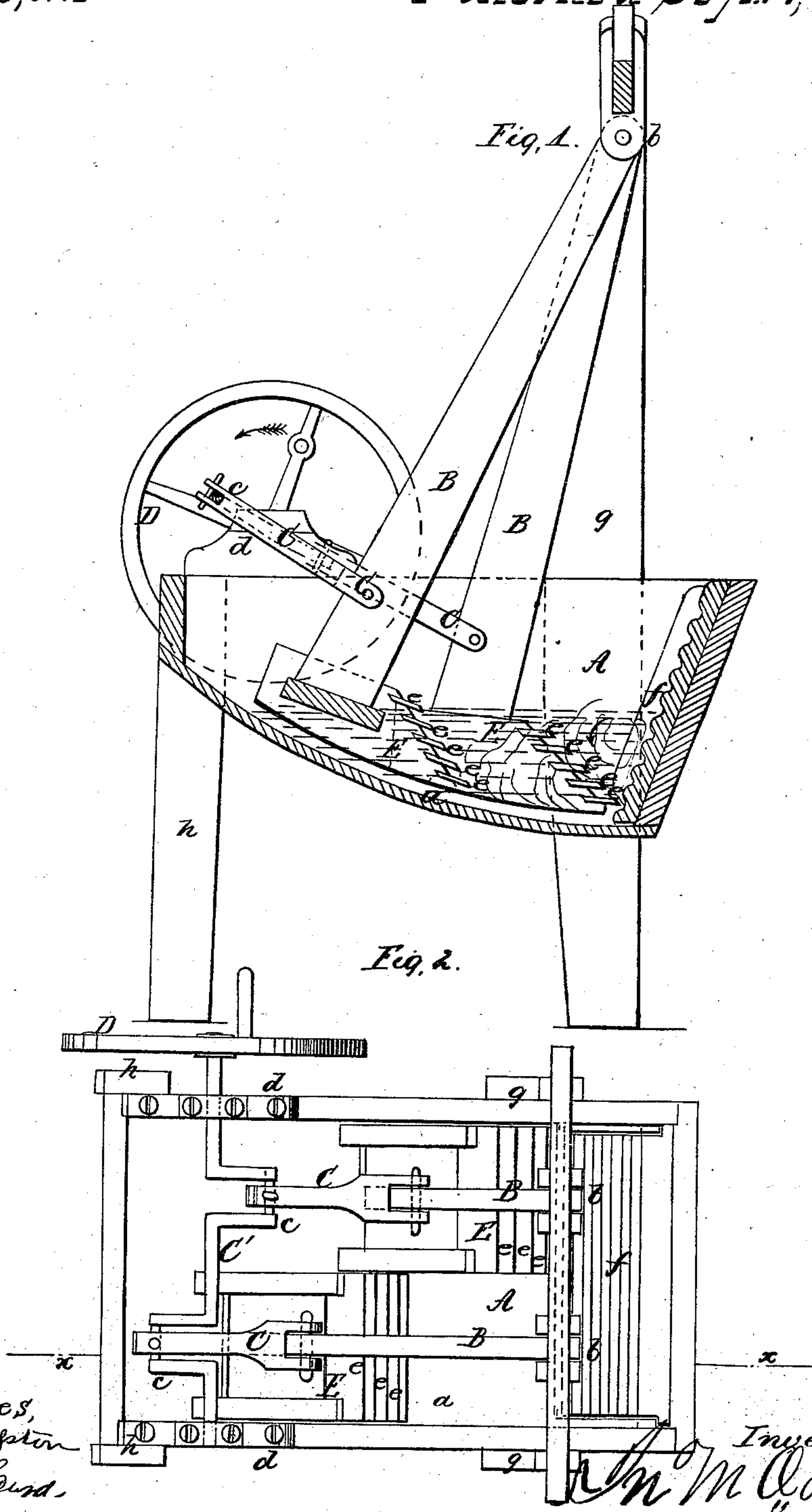


J. M. Oakley,

Washing Machine.

N^o 33,311.

Patented Sep. 17, 1861.



*Witnesses,
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UNITED STATES PATENT OFFICE.

JOHN M. OAKLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. 33,311, dated September 17, 1861.

To all whom it may concern:

Be it known that I, JOHN M. OAKLEY, of the city, county, and State of New York, have invented a new and Improved Clothes-Washing Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

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

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

This invention relates to an improvement in that class of clothes-washing machines in which pressure rather than friction or rubbing is employed to cleanse the clothes.

The object of the invention is to render this class of machines more efficient than those hitherto constructed by subjecting the clothes to a continuous and quicker pressing action and by a means better calculated to shift or rotate the clothes while acting upon them, so as to enable the latter to be uniformly and quickly cleansed throughout.

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

A represents a box of quadrilateral form and having a curved or segment bottom *a*, said bottom being a portion of a cylinder of which the points of suspension *b* of two swinging arms B B are in the axis thereof. The swinging arms B B are connected by rods C C to cranks *c c* on a shaft C', which is placed in suitable bearings *d d* on the front part of the box A. The cranks *c c* have reverse positions, as shown clearly in Fig. 2, and at one end of the shaft C' there is placed a crank-wheel D. To the lower end of each arm B there is placed a plunger E. These plungers may be described as being of box form, their front surfaces being inclined and formed of a series of slats *e*, placed obliquely one above the other to form the inclined surface, as shown clearly in Fig. 1. The face or slatted sides of the plungers E E incline toward the front end of the box A—that is to say, the plungers gradually increase in length from their upper to their lower ends, as shown in Fig. 1. The slats *e* are placed at such a distance apart as to allow the water to pass freely between them as the plungers are operated, and the lower surfaces of the plungers just clear the bottom *a* of the box A. The back

f of the box A is inclined outward, and its inner surface is corrugated or fluted horizontally, similar to an ordinary wash-board.

The arms B B are suspended from the cross-bar of the uprights *g g*, which are placed one at each side of the box A and form the back legs of said box, *h h* being the front legs.

The operation is as follows: The box A is supplied with a requisite quantity of suds, and the clothes to be washed (shown in red outline in Fig. 1) are placed in the box A between the plungers E E and the back *f*. The crank-shaft C' is then rotated and the plungers E E are operated simultaneously in opposite directions and the clothes alternately pressed by them against the back *f*. At the forward movement of each plunger E the clothes are compressed at their lower part in consequence of the inclined surfaces of the plungers and the back *f*, and at each outward movement of the plungers the clothes slightly turn, the upper part of the clothes turning down, as indicated by the arrow in Fig. 1. The plungers E by their alternate pressing action operate quickly and keep the clothes in constant movement, causing them to turn gradually, so as to constantly present a fresh surface to the action of the plungers and back *f*. The slats *a* allow the water to readily pass between them, and the clothes, it will be seen, are not rubbed, but compressed by the plungers, and the dirt washed from the clothes by pressing the latter in the suds, thereby avoiding all injury to the clothes by friction or rubbing.

In describing the machine and its operation and in the drawings I have used two plungers; but I do not intend to confine myself to that number, as the operation may be performed with one or more.

I do not claim, broadly, the cleansing of clothes by squeezing or compressing the same while saturated; but

I do claim as new and desire to secure by Letters Patent—

The arrangement of the pendulous arms B B and attached slatted plungers E E with the inclined corrugated back *f*, curved bottom *a*, rods C C, and double crank C', all as herein shown and described, for the purpose set forth.

JNO. M. OAKLEY.

Witnesses:

M. M. LIVINGSTON,
JAMES LAIRD.