Hutchings & Leach,

Washing Machine,

No. 31,889, Patented Apr. 2, 1861.

Fig: 1

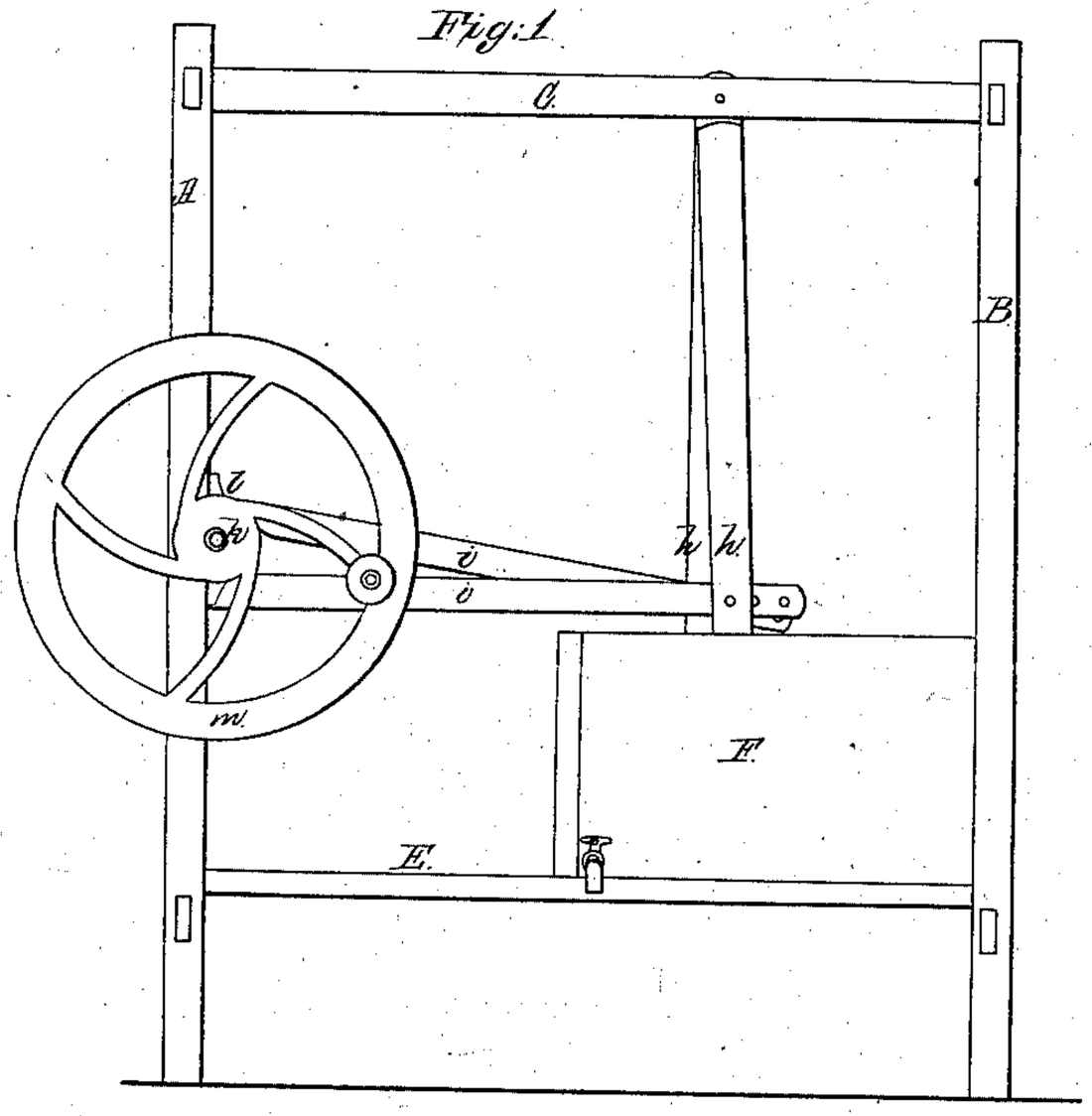


Fig: 2.

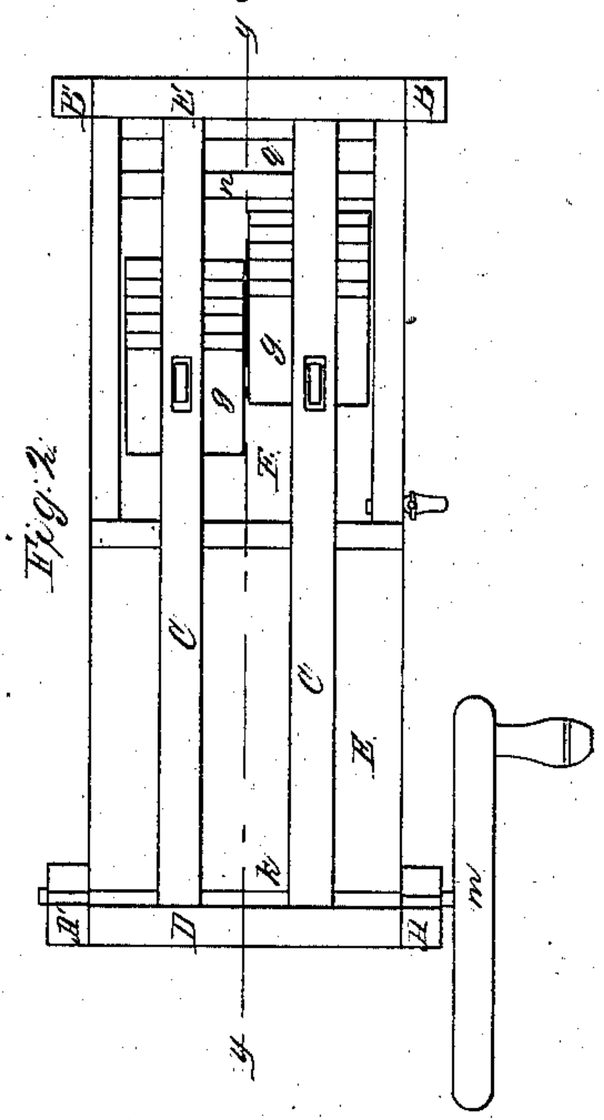


Fig: 4.

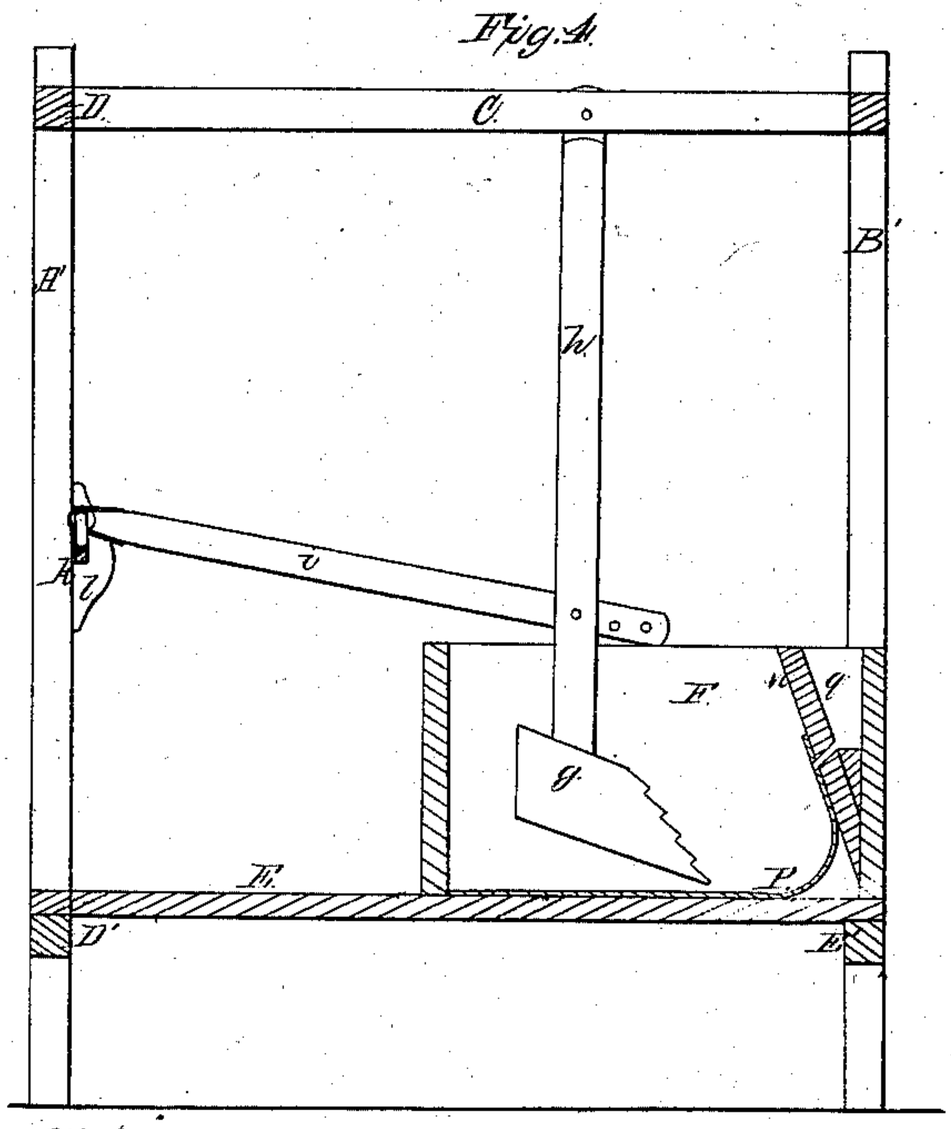
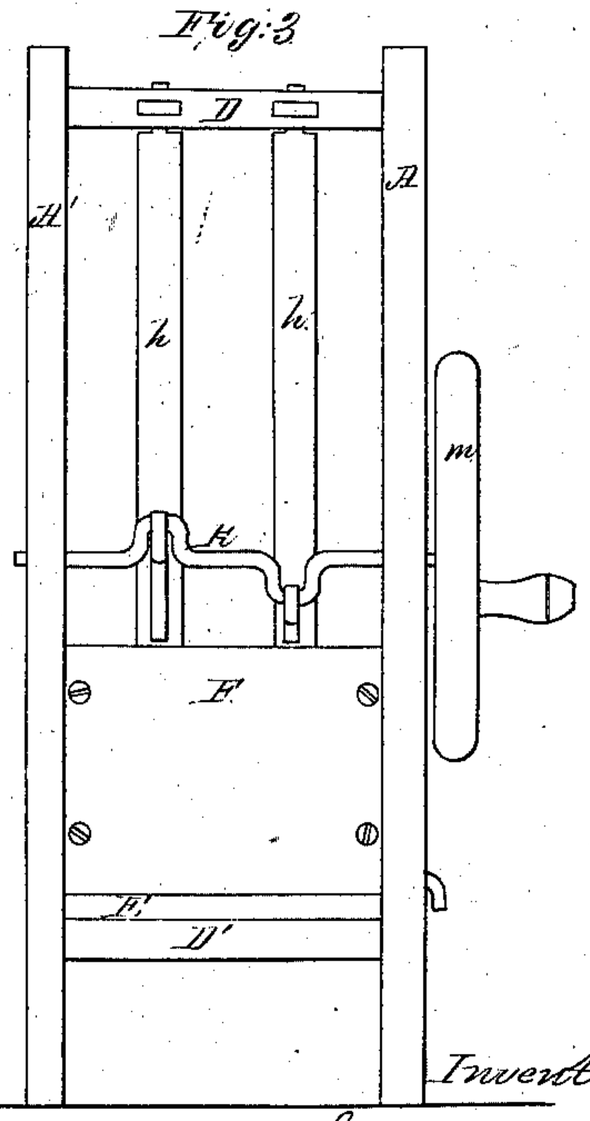


Fig: 3



Witnesses:

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Inventors:

John Hutchings
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By their attorney
J. C. Robbins

UNITED STATES PATENT OFFICE.

S. HUTCHINGS AND J. D. LEACH, OF PENOBSCOT, MAINE.

WASHING-MACHINE.

Specification of Letters Patent No. 31,889, dated April 2, 1861.

To all whom it may concern:

Be it known that we, SABIN HUTCHINGS and JOSEPH D. LEACH, of Penobscot, in the county of Hancock and State of Maine, have invented a new and Improved Washing-Machine; and we do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1, of said drawings is a side view of our improved washing machine; Fig. 2, a top view of the same; Fig. 3, an end view, and Fig. 4, a section in the line *x*, *x*, of Fig. 2.

The same letters refer to corresponding parts in each of the drawings.

The supporting frame of our improved washing machine may be constructed in the manner represented in the accompanying drawings, or in any other that may be deemed expedient. One end of said frame is composed of the uprights A, A′, and the connecting cross-pieces D, D′; the opposite end of said frame, is composed of the uprights B, B′, and the connecting cross-pieces E, E′; and the union between the said frame-ends is effected by the parallel top beams C, C, and the base-plank E.

We generally give the washing box F, of our improved washing machine, the shape represented in the drawings; and this box we place in such a position upon the base-plank E, that one end of said box will pass between the uprights B, B′; and in this position we rigidly confine the said box in any suitable manner. An inwardly inclining transverse board *n*, is framed into the front portion of the wash-box; and the central portion of the inner surface of said board, must in some way be connected to the bottom of the wash-box by means of a curved surface. This curved surface we generally form of a sheet of zinc *p*, and this sheet of zinc may also be of such a size as to form a lining for the entire bottom of the wash-box, as represented in the drawings. The space *q*, between the outer end of the wash-box and the inclined transverse board *n*, may serve as a soap-box; or a stream of soap suds, or water, may be allowed to flow into said box and thence be allowed to flow into the wash-box through small perforations while the machine is in operation.

A rolling and a compressing action is exerted upon articles of clothing placed within the wash-box, by means of two reciprocating feet *g*, *g*, which are suspended from the frame beams C, C, by means of the jointed bars *h*, *h*. The requisite motion is imparted to the said feet *g*, *g*, by means of the crank-shaft *k*, the pitmen *i*, *i*, and the crank-fly-wheel *m*; the form, position and arrangement of the said parts being clearly represented in the drawings. The inclined front surfaces of the feet *g*, *g*, must be notched, or otherwise roughened, and their actuating inclined surfaces must bear such a relation to the inclination of the transverse board *n* that they will jointly act upon a mass of clothing placed within the wash-box, in the following manner, viz; first, lift the mass of clothing upward, and then press it against the surface of the inclined board *n*, by a movement that will impart an inwardly rolling motion to the said mass of clothing; a character of movement that will cause every article of clothing placed in the wash-box to be thoroughly and equally acted upon.

We are aware that reciprocating feet of a somewhat similar shape to those represented in the accompanying drawings, have been employed in a box whose angular shape is such that the only action that can be exerted by the said feet, is to drive the clothing placed in the said box, into an angle of the same, where they must remain stationary and where they will arrest the movement of the said feet in case the supply of clothing placed in the said box, be slightly in excess of the power exerted to keep the said feet in motion. We therefore wish it to be understood that our improvement in this class of washing machines, consists in the curved connection between the flat bottom of the wash-box and the inwardly inclining board *n*, at the front end of said box, when such a shape is given to the actuating faces of the swinging feet *g*, *g*, as will cause them to raise the clothing placed in said box, and press the same against the face of the inclined board *n*, by a continuation of the said upward movement; a movement that will produce a compressing and at the same time a rubbing action upon the said clothing, that will speedily remove all the dirt therefrom, when a proper supply of soap suds is used in the said wash-box.

Having thus fully described our improved washing machine what we claim therein as

our invention and desire to secure by Letters Patent, is—

The curved connection between the flat bottom of the wash box and the inner surface of the inclined board *n*, at the forward end of said box, when such a shape is given to the actuating faces of the swinging feet *g*, *g*, as will enable them to produce the within described compressing and rubbing effect upon the clothing which may be operated upon within our said machine and when the several parts of said machine are arranged in the manner herein set forth.

The above specification of our improved washing machine signed and witnessed this fourteenth day of November 1860.

SABIN HUTCHINGS.
JOSEPH D. LEACH.

Witnesses:
N. WALKER,
D. H. COFFIN.