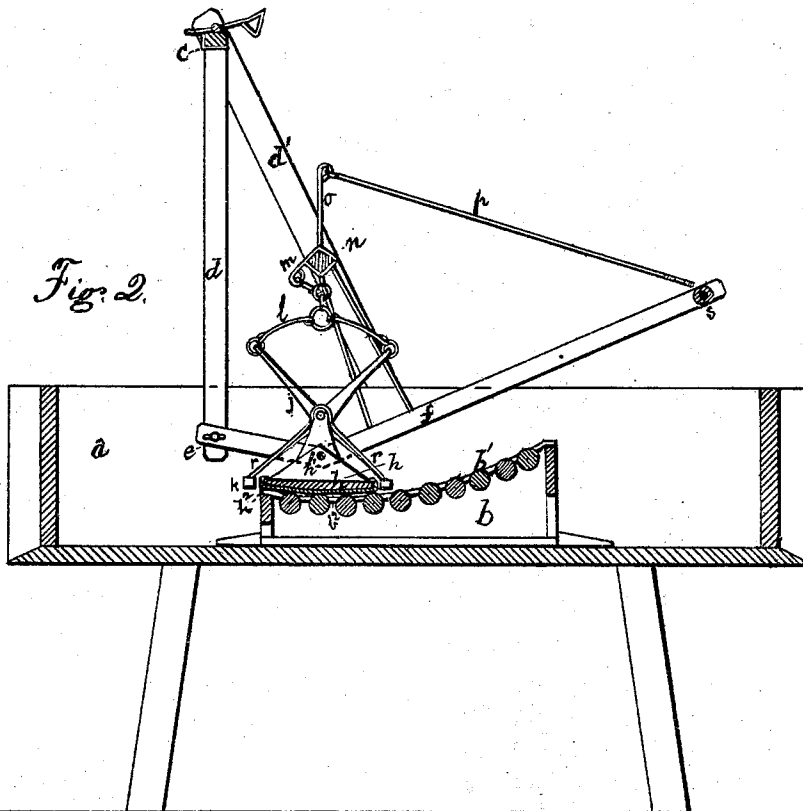
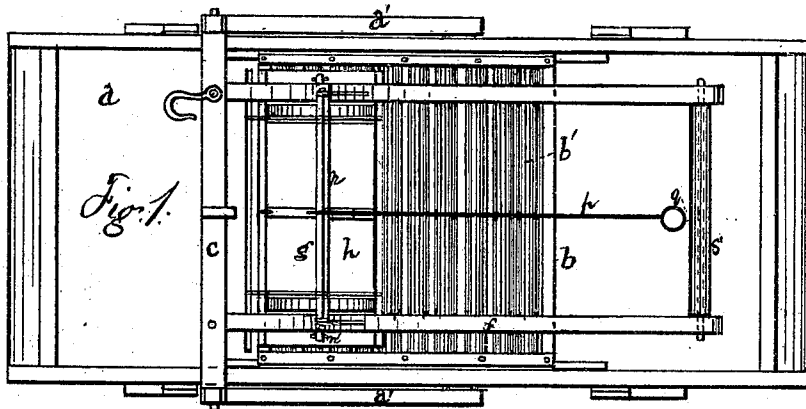


D. B. MYERS.
Washing-Machines.

No. 143,177.

Patented September 23, 1873.



Witnesses
Collins & Brooks
Henry Smith

Inventor:
D. B. Myers
per R. S. & A. Lacey
his attys

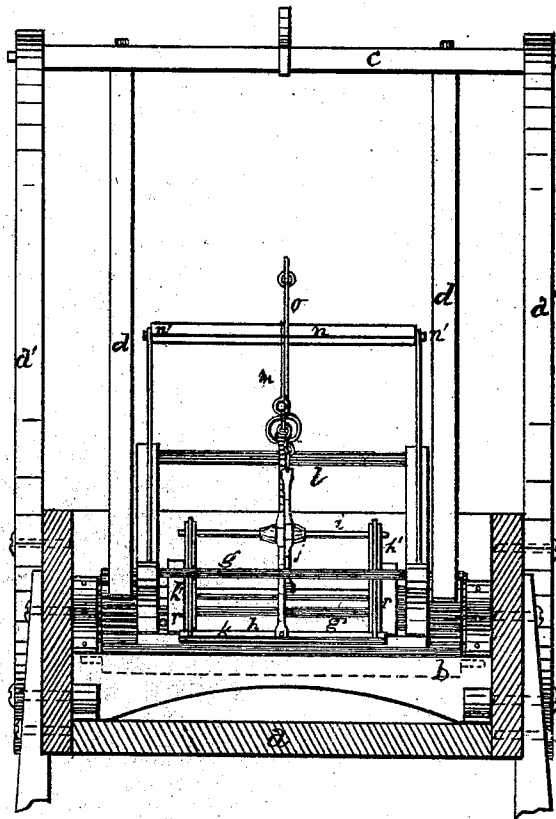
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Fig 3



Witnesses
Henry Orth
Colborne Brooks

Inventor.
D. B. Myers
for *R. S. & A. H. Lacey*
his attys.

UNITED STATES PATENT OFFICE.

DAVID B. MYERS, OF UHRICKSVILLE, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO CHRISTIAN D. HELWIG, OF SAME PLACE.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **143,177**, dated September 23, 1873; application filed
August 18, 1873.

To all whom it may concern:

Be it known that I, DAVID B. MYERS, of Uhricksville, in the county of Tuscarawas and State of Ohio, have invented certain new and useful Improvements in Washing-Machine; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention has for its object to provide a washing-machine that, in addition to being well suited for general purposes, will possess a special adaptability for cleansing small articles of clothing, articles or portions of light fabric, and the smaller parts of garments. My improvement consists in arranging, in connection with the brackets of the rubber, a series of levers, which attach to and operate a pair of cross-bars, which form, with the edge of the rubber, catches or clasps for taking up and holding articles of clothing during the process of washing; also in placing said catches under the control of the operator by means of of a rocking shaft carried in bearings supported by the operating arms or levers, a rod and links attached thereto and connecting with the upper ends of the levers, which operate the catches, and in a series of springs attached to the brackets of the rubber for holding said catches open when not closed by the operator, all of which will be more fully understood by reference to the accompanying drawings, and the following detailed description.

Figure 1 represents a plan, Fig. 2 a section, and Fig. 3 an end view on a slightly larger scale, of a washing-machine arranged according to my invention.

a represents a rectangular box or trough, in which is placed a curved wash-board, *b*, the surface of which is formed of a series of revolving rollers, *b'*. At each side of the trough *a* supporting-arms *a'* are arranged, the upper ends of which are provided with bearings for a rocking shaft, *c*, to which are connected a pair of pendent arms, *d*, the extremities of which are provided with bearings for a cross-shaft, *e*, upon which are mounted a pair of

bent levers or arms, *f*, to which is attached a cross-shaft, *g*, supporting by means of brackets *h*¹ the rubber *h*. The brackets *h*¹ are provided with bearings for a shaft, *i*, upon which are mounted a pair of lever-arms, *j*, one end of each of which is attached to a cross-bar or rod, *k*, arranged flush with the under side of the rubbing-surface *h*², and in position to form in connection with the edge of rubber *h* a clasp for holding articles of fabric or clothing to be washed. The opposite ends of the levers *j* are, by links *l*, connected to a short arm, *m*, projecting from the rocking shaft *n*, supported in bearings *n'*. To the rocking shaft *n* a lever, *o*, is attached, to which a rod, *p*, is attached, and held in position by means of a ring, *q*, so that the operator may, when desired, pull upon the same, and by that means actuate the clasps in order to take up or release any clothes or fabrics from time to time, as may be desired. *r r* are springs, attached to the brackets *h*¹, and operate to keep the clasps open when not closed or pulled together by means of the rod *p*. The rubber *h* is pushed to and fro by means of the cross-bar or hand-rail *s*. On the under side the rubber *h* is curved to correspond with the curve of the wash-board *b*, and covered with a pad or thickness of flexible gum or india rubber, *b*², presenting a smooth rubbing-surface, so that no portion of the fabric under operation can pass under it without receiving equal pressure over the whole surface. This pad offers sufficient friction ordinarily to hold and move the fabric to and fro over the rollers *b'* of the wash-board *b*, and by its elasticity it adjusts itself to garments and articles presenting different thicknesses of fabric, and also to allow of buttons or other fastenings passing between the same and the wash-board without injury.

Light fabrics and small articles are liable to become rolled up or knotted under the rubber if not held; this, however, is prevented by the operator closing the clasp *k*, and grasping such articles by means of the rod *p*, without stopping the rubbing process, and holding them till the portion under the rubber is cleansed, the rod *p* is then released, and the springs *r r* will then throw open the clasps *k* and free the articles held; the rubber can then be moved

to another portion of the board, and the operation of rubbing there repeated.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a rubber of a washing-machine, such as herein described, a pair or series of levers, *j*, and cross-bar *k*, operating to form catches for retaining articles of clothing or fabrics in position while being washed, substantially as described.

2. The shaft *n*, lever *o*, rod *p*, arm *m*, links *l*,

supported and carried by the bent arms or levers *f*, in combination with the levers *j*, cross-bars *k*, springs *r*, and rubber *h*, constructed as described, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of June, 1873.

DAVID B. MYERS.

Witnesses:

W. B. THOMPSON,
A. S. McCULLOUGH.