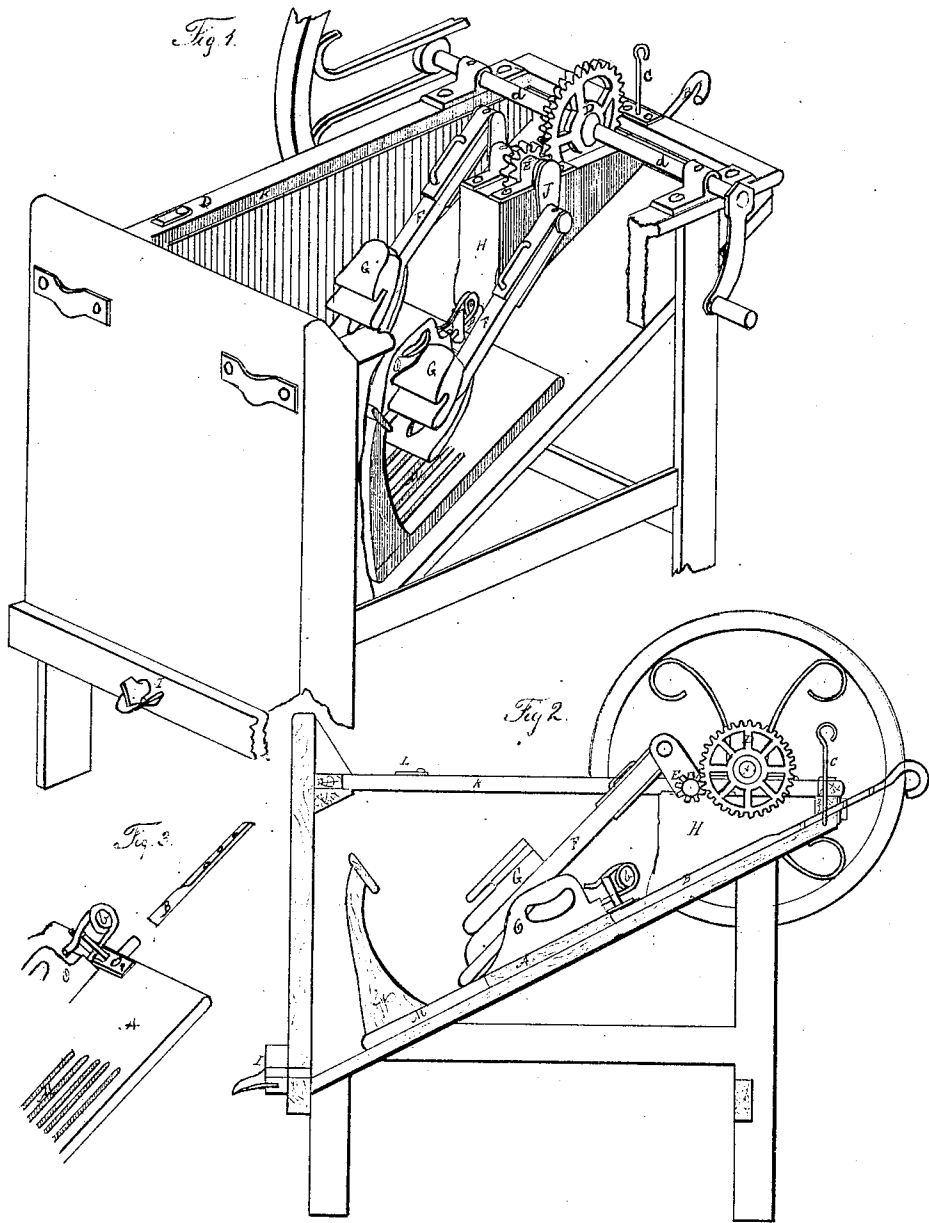


W. H. Cox,
Washing Machine.
No. 101,714. Patented Apr. 12. 1870.



Witnesses
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Atty.

United States Patent Office.

WILLIAM H. COX, OF KNOX COUNTY, ILLINOIS.

Letters Patent No. 101,714, dated April 12, 1870.

IMPROVED WASHING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM H. COX, of Knox county, in the State of Illinois, have invented a new and useful Improvement in Washing-Machines, of which the following is a specification.

The nature of my improvement consists in the construction and operation of an adjustable molded end-board and strainer combined, and also in the increased speed and efficiency in the action of the plungers.

In the accompanying drawing—

Figure 1 is an isometrical view of my machine.

Figure 2 a sectional view on the line *x-x*.

Figure 3, the method for connecting the molded end-board with adjustable rod B.

A represents the adjustable board.

B, the connecting adjustable rod secured to the board by wire spring pin *b*.

C is a pin for adjusting the rod B.

D a spur-wheel with crank and shaft *d d*.

E is a smaller spur-wheel with crank J J.

F the connecting-rods for plungers, pivoted to cranks J J by sleeves *f f*.

H is a central support for the gear-wheels. It also acts as a guide for rod B.

I is a scupper and plug for emptying the machine.

K, supporting-ledge for the cover.

L, buttons to secure cover.

M, slots cut in the wash-board for straining.

N, molded end or guard to board A.

O, handle for raising the wash-board so as to strain the clothes more effectually and rapidly.

P is a slotted plate for attaching rod B to board A.

The construction and operation of the parts of the machine which I claim as my improvement are as follows:

I construct of suitable size the wash-board A, having slots M cut in its lower end for the purpose of allowing the water or suds to strain through.

The guard or molded end board N is securely attached to the lower end of the wash-board, and, being semicircular in shape, it acts, in combination with the strokes of the plunger, to gradually turn the clothes under process of cleansing, so that every part is exposed to the action of the plungers.

The board A is attached to rod B by a slotted plate of metal or other suitable material. The upturned end of the rod passing through the slot is secured to the handle O by a wire spring pin, *b*.

This rod B passes upward along the diagonal bottom of the machine, in a groove cut in the bottom of support H, and projects beyond the upper end of the machine, its extremity being shaped in form of a handle, convenient to the hand of the operator. At this end the rod is flattened, and pierced with a series of holes to receive the adjusting-pin C. The object of this arrangement is to accommodate the space between

the end board and the plungers to the bulk of clothes to be cleansed.

The board A is provided with a handle, O, which serves the purpose of a divining-guide for the plungers, and, at the same time, affords a convenient and speedy means of straining the clothes.

After the cleansing operation is complete, the slotted plate P permits the board to be raised by the hand while the dirty water or suds is being drained off through scupper I, when, being again lowered, and the properly-adjusted pressure of the plungers brought to bear on the clothes, all superabundant moisture is pressed out, thereby obviating the necessity for wringing.

Rapidity of motion is communicated to the plungers, constructed as shown, rigidly attached to connecting-rods F, and pivoted by sleeves *f* to cranks J, by means of gear-wheel D running on the smaller gear-wheel E, whereby the power and time expended in the cleansing process by the use of other machines of a similar kind is greatly lessened, and this without subjecting the clothes to any greater amount of friction.

The plungers are provided with a series of grooves and channels on their beating-surface, one of the boards being shaped to a point. This arrangement aids materially in turning the clothes, and creates alternate suction and squirting forces, and completes agitation in the cleansing fluid, thereby causing thorough permeation of the fabric. Suitable covers are provided to prevent the contents of the machine splashing over.

The various parts of the machine may be constructed of any suitable material.

What I claim as my invention is—

1. The adjustable rod B, in combination with adjusting-pin C, slotted plate P, pin *b*, and wash-board A, substantially as and for the purpose specified.

2. The wash-board A, constructed as shown and described, with handle O, slots M, and guard or end-board N, in combination with plug and scupper I, rod B, adjusting-pin C, plunger G, connecting-rods F, and gear-wheels E and D, substantially as and for the purpose specified.

3. The combination and arrangement of shaft *d d*, gear-wheels D E, crank J, sleeves *f*, connecting-rods F, plungers G with board A as shown and described, rod B, pin C, and scupper I, the whole constructed and operated substantially as and for the purpose set forth.

Signed at Galesburg, Illinois, this 15th day of July, 1869.

W. H. COX.

Witnesses:

A. MUNDORFF,
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