W. COMBS.

Washing-Machine.

No. 164,364. Patented June 15, 1875.

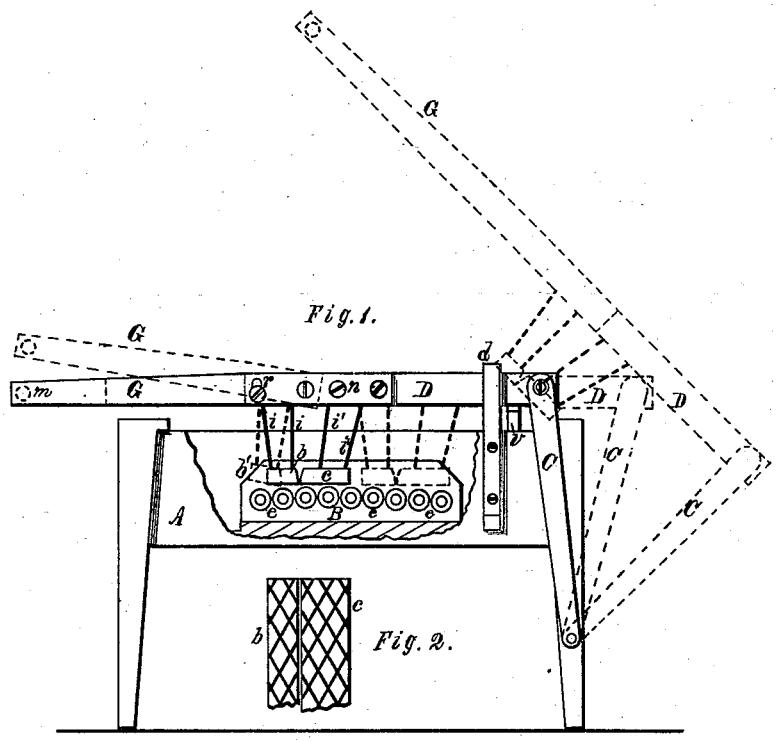

Fig. 2.

Witnesses:
E. B. Whitmore
F. H. Clement

Inventor:
Wm Combs
By Wm. J. Loughborough
Atty

THE GRAPHIC CO. PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

WILLIAM COMBS, OF GENEVA, NEW YORK.

IMPROVEMENT IN WASHING-MACHINES.

Specification forming part of Letters Patent No. **164,364**, dated June 15, 1875; application filed April 17, 1875.

To all whom it may concern:

Be it known that I, WILLIAM COMBS, of Geneva, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a side elevation of a rectangular washing case or box having my invention attached, a portion of the front side of the case being broken away. Fig. 2 is an inverted view of one end of the double rubbing-board, showing the diagonal serrations or grooves.

This invention consists, essentially, in providing, in this class of washing-machines, a diagonally serrated-faced divided rubbing-board, *b c*, and roller wash-board.

I use an ordinary rectangular wash or suds-box, A, mounted upon suitable legs. Within this box I place the wash-board B, composed of a series of small rollers, *e*, they being preferably arranged so as to form or describe the segment of a circle, its convexity being upward. This board is fixed to the box in the usual manner. The rubbing-board may be flat, or nearly so; but I prefer to corrugate or groove its lower face diagonally, so as to cause it to hold or secure that portion of the clothes upon which it is pressed, and cause the same to be reciprocated over the wash-board, which, under ordinary circumstances, would be effected thereby. To render this entirely sure in all conditions, I divide the board into two unequal sections, *b* and *c*, the former being hung to the arms G on each side of the machine by hanger-rods *i*, and the latter *c* to the arms D by the hangers *i'*. The arms G are connected by a cross-rod at *m*, and they are connected to the arms D by the plates *n*, as shown, or by any other suitable hinge-joint. The arms D are connected together by one or more cross-ties, and they are connected to the machine by the pivoted links C, which permit the rubbing-board to be reciprocated.

It will be seen that by means of the slot *r* in the plates *n*, and the screw or pin which passes through said slot and into the arms G, the latter may be lifted to the position shown in dotted lines G' without raising the arms D. This movement throws section *b* of the rubber-board to the position of the dotted lines *b'* away from section *c;* then, by pressing down upon the cross-rod *m*, section *b* will press upon the clothes and cause a fold, which it will grasp between it and the other section, *c;* then, by reciprocating the rubbing-board, they are forced over the wash-board back and forth.

It will be seen that the operator may change his grasp upon the clothes at any time, and to any particular portion of the garment or fabric. The studs *d* are fixed to the sides of the box, and act as guides for the arms D to work between. The cross-bar *r* is intended to attach a wringer to.

What I claim as my invention is—

In combination with the wash-board B, composed of rollers *e*, the diagonally serrated-faced divided rubbing-board *b c*, rods *i* and *i'*, and hinged arms G, pivoted swinging arms D, and connecting-links C, in the manner and for the purposes set forth.

W. COMBS.

Witnesses:

WM. S. LOUGHBOROUGH,

E. B. WHITMORE.