

(No Model.)

2 Sheets—Sheet 1.

G. K. HELLDORFER.  
WASHING MACHINE.

No. 489,806.

Patented Jan. 10, 1893.

FIG 1

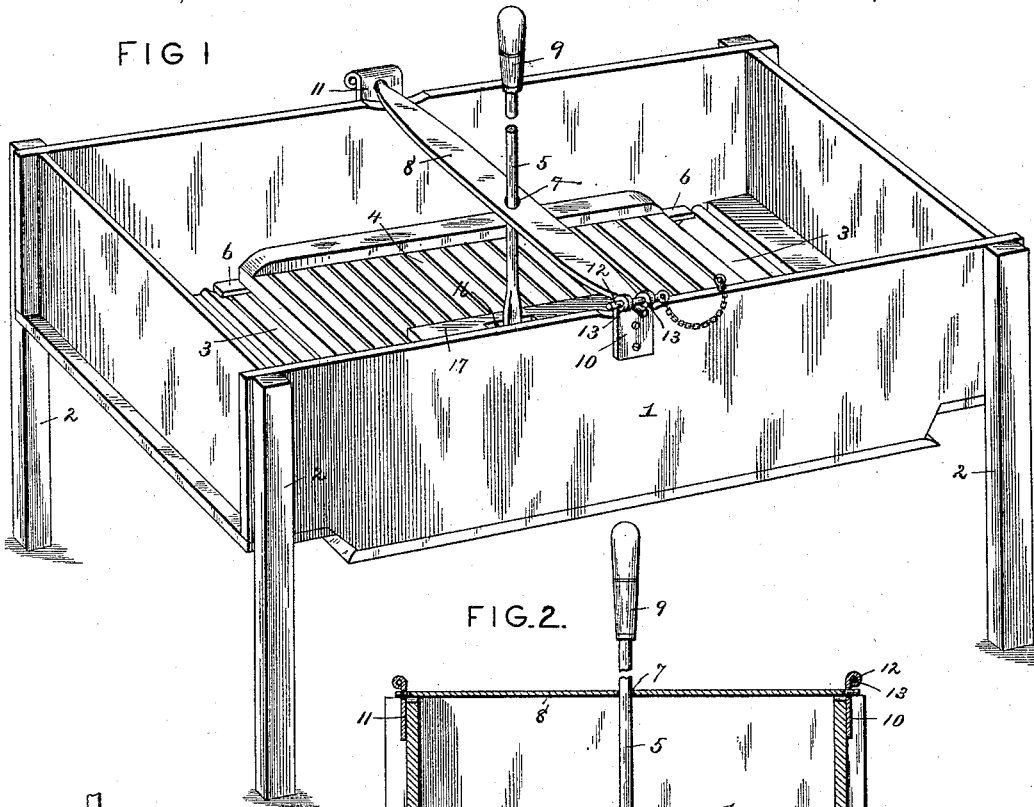


FIG. 2.

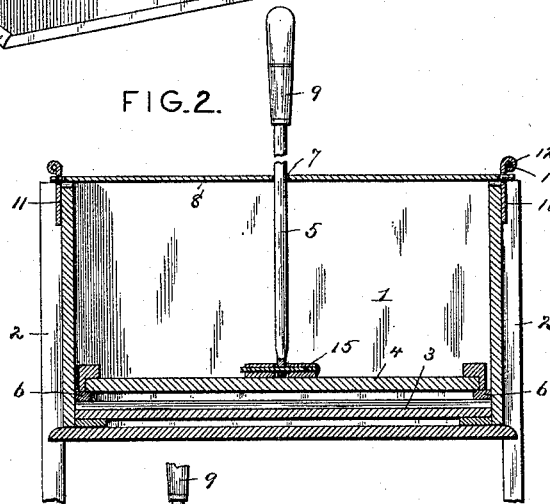


FIG. 4.

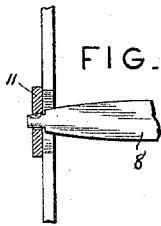
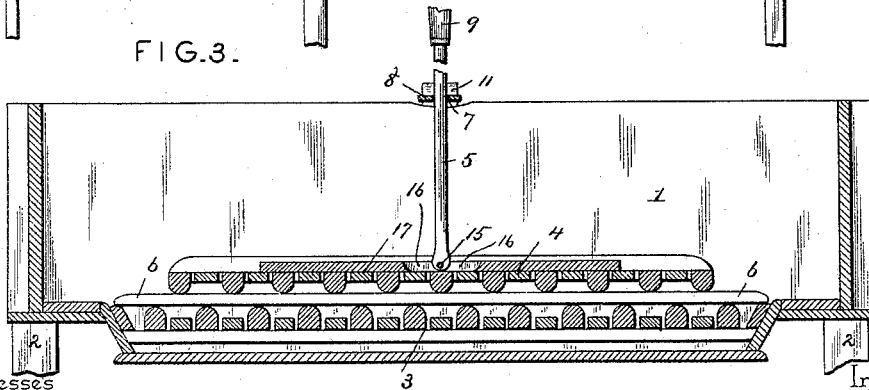


FIG. 3.



Witnesses

Inventor

Harry L. Ames  
A. P. Riley

By his Attorneys,

G. K. Helldorfer.  
C. A. Snow & Co.

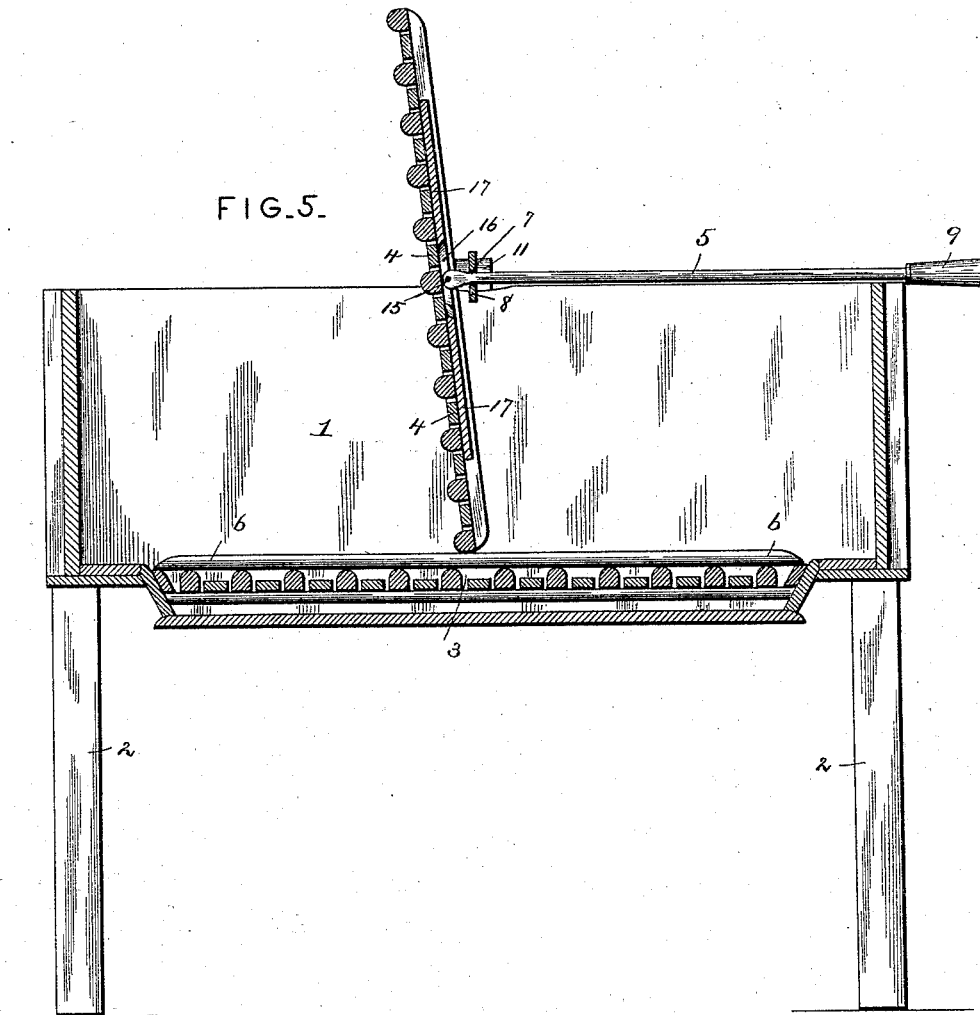
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2 Sheets—Sheet 2.

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N. J. Riley

Inventor

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# UNITED STATES PATENT OFFICE.

GEORG K. HELLDORFER, OF BALTIMORE, MARYLAND.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 489,806, dated January 10, 1893.

Application filed April 5, 1892. Serial No. 427,877. (No model.)

*To all whom it may concern:*

Be it known that I, GEORG K. HELLDORFER, a citizen of the United States, residing at Baltimore, in the State of Maryland, have  
5 invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing machines.

The object of the present invention is to  
10 simplify and improve the construction of washing machines, and to provide one in which the pressure exerted by the rubber upon the clothes being washed, may be readily regulated to suit the character of the fab-  
15 rics to avoid tearing or otherwise injuring the same.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated  
20 in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a washing machine constructed in accordance with this invention. Fig. 2 is a  
25 transverse sectional view. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail view of an end of the oscillating bar. Fig. 5 is a longitudinal sectional view the rubber being arranged in a vertical position.

30 Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a washing machine body rectangular in cross-section, and supported by  
35 legs 2, and provided at its bottom with a rubbing surface 3, adapted to co-operate with a combined presser and rubber 4 which is rectangular and moves horizontally over the rubbing surface 3, and is pivotally connected to  
40 the lower end of an oscillating lever 5. The rubbing surface 3 is horizontally disposed and is composed of transverse bars; and the rubber 4 is mounted on track bars 6 and is provided on its lower face with a rubbing  
45 surface consisting of a series of transverse bars similar to the rubbing surface 3. The lever has its lower end pivoted by a pin 15 in a recess 16 of a cleat 17, which is secured to the upper face of the rubber 4, and the said  
50 lever is fulcrumed in a central opening 7 of a rocking bar 8, and it consists of a rod loosely arranged in the opening 7 and provided at its upper end with a handle 9. The lever

moves freely in the central opening of the rocking bar, and the operator exerts a direct  
55 pressure upon the clothes and may vary the pressure to suit the character of the garments or fabrics to be washed. The rubber slides freely on the track bars 6, and the arrangement of the rubbing surface 3, and the  
60 combined presser and rubber 4 is such that the clothes being washed are prevented from accumulating at the ends of the body. The rocking bar 8 has its ends reduced and formed into journals, which are arranged in bear-  
65 ings of plates 10 and 11 secured to and projecting upward from opposite points of the body. The plate 10 has its bearing formed by a recess and it is provided with eyes 13 arranged at the mouth of the recess and  
70 receiving a pin 12, which may be readily removed to enable the rocking bar to be taken out of its bearings to permit the presser and rubber to be removed from the washing machine body.

From the foregoing description and the accompanying drawings, the construction, operation and advantages of the invention will  
75 be readily understood.

What I claim is—

80 The combination of a washing machine body provided on its bottom with a horizontal rubbing surface, a rectangular rubber arranged on said surface, the bearing plates 10 and 11 secured to opposite sides of the body  
85 and extending upward therefrom, the bearing plate 11 being provided with a bearing opening and the bearing plate 10 having a bearing recess and eyes arranged on opposite  
90 sides of the recess, a flat rocking bar provided at its ends with journal portions arranged in the bearings of the plates and having a central opening, a removable pin arranged in  
95 said eyes and detachably securing the rocking bar in the bearing recess of the plate 10, and a lever loosely arranged in the central opening and having its lower end pivoted to the rubber, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in  
100 the presence of two witnesses.

GEORG K. HELLDORFER.

Witnesses:

THS. KELL BRADFORD,  
A. W. BRADFORD.