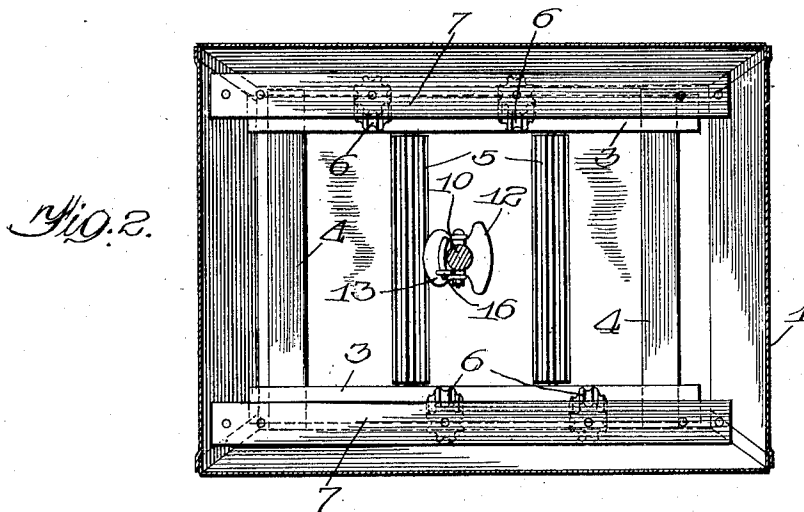
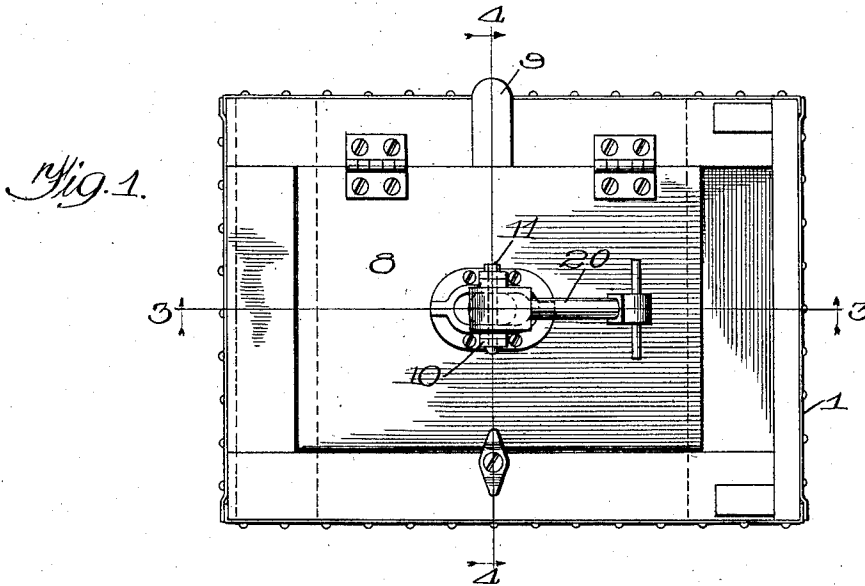


J. F. HOGLUND.
WASHING MACHINE.
APPLICATION FILED JUNE 25, 1908.

964,778.

Patented July 19, 1910.

2 SHEETS—SHEET 1.



Witnesses:
W. D. Perry
G. J. Donarum Jr.

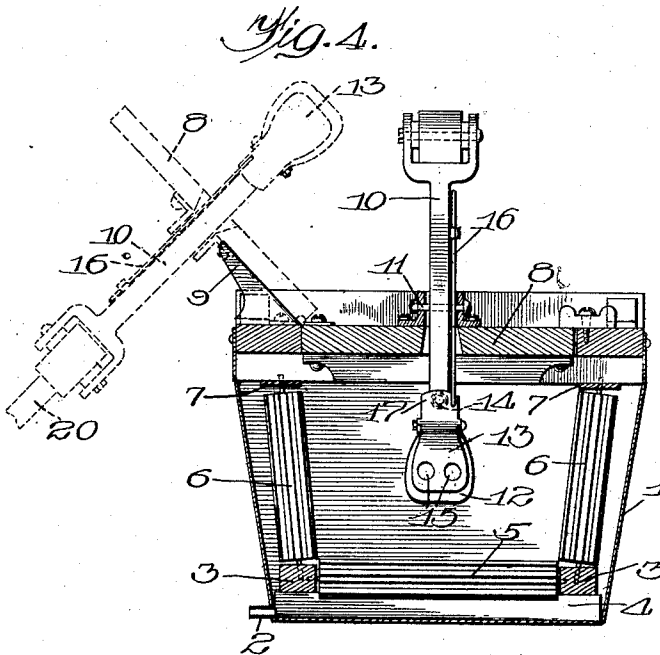
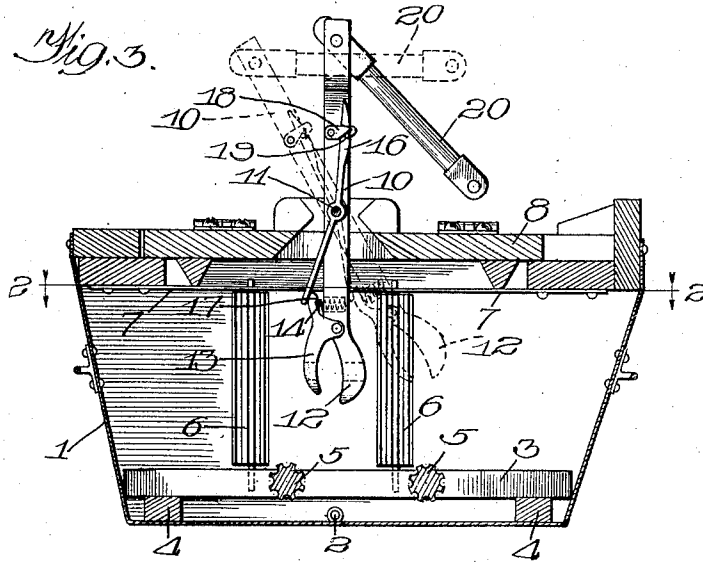
Inventor:
John F. Hoglund
By *Luther L. Miller*
Atty.

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UNITED STATES PATENT OFFICE.

JOHN F. HOGLUND, OF ROCKFORD, ILLINOIS, ASSIGNOR TO CHARLES E. JACKSON, OF
ROCKFORD, ILLINOIS.

WASHING-MACHINE.

964,778.

Specification of Letters Patent.

Patented July 19, 1910.

Application filed June 25, 1908. Serial No. 440,218.

To all whom it may concern:

Be it known that I, JOHN F. HOGLUND, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

The object of this invention is to produce an improved washing machine which is simple in construction, efficient in operation, and which may be cheaply manufactured.

Other objects and advantages will appear in the detailed description hereinafter contained.

In the accompanying drawings, Figure 1 is a plan view of a washing machine embodying the features of my invention. Fig. 2 is a section taken substantially on line 2 2 of Fig. 3. Fig. 3 is a section on line 3 3 of Fig. 1. Fig. 4 is a section on line 4 4 of Fig. 1.

The embodiment herein shown of my invention comprises a tub 1 which may be substantially rectangular in plan view, as shown. Preferably the sides and bottom of said tub are formed of sheet metal, in order that heat may be applied to the outer side of said tub in any suitable way for the purpose of heating the water in said tub. A valved pipe 2 provides means for draining the tub when desired. Upon the bottom of the tub is a frame 3 which preferably is removable through the open upper end of the tub. The frame 3 comprises transverse cross-bars 4 which rest upon the bottom of the tub and space the remainder of the frame from said bottom. In the frame 3 is a suitable number of rubbing rollers 5 which preferably are provided with grooved or corrugated peripheries, as shown. At each side of the roller frame 3 and extending in a vertical or nearly vertical position is a plurality of rubbing rollers 6. The lower ends of the rollers 6 are journaled in the frame 3 and may be lifted out of their bearings in said frame, while the upper ends of said rollers are supported in such a way as to permit of readily withdrawing said rollers from the tub. In the embodiment herein shown said means consists of two bars 7 of spring material, said bars being secured at their ends to the tub and being provided with bearing openings for the journals of the rollers 6. The bars 7 may be flexed

upwardly out of engagement with the roller journals in order that the rollers 6 may be removed from the tub.

The tub is provided with a pivoted cover 8 that may be raised and thrown back to rest upon a bracket 9 upon the tub. Said cover carries a means for moving the articles to be washed through the water in said tub and in contact with the rubbing rollers 5 and 6. As herein shown, said means consists of a lever 10 which is pivotally supported intermediate its ends upon a pivot 11, the lower end of said lever having means for engaging the clothing or other articles to be cleansed. As herein shown, said holding means comprises a jaw 12 fixed to the lever 10 and a jaw 13 pivoted upon said lever, a spring 14 tending to move said movable jaw into gripping position. If desired, openings 15 may be provided in the sides of the jaws 12 and 13 to permit the cleansing water to reach the portion of the clothes between said jaws. In order that the jaw 13 may be opened to receive or release an article I provide a lever 16 which also is pivoted upon the pivot 11, the lower end of said lever engaging an arm 17 upon the jaw 13. 18 is a hook latch pivoted upon the lever 10 in position to engage a stud 19 upon the operating lever 16 for holding the jaw 13 in open position. The lever 10 is swung by any suitable means, such as a rod 20 pivoted to the upper end of said lever.

In operation, the jaw 13 is locked open by means of the lever 16 and hook latch 18, the clothes or other articles to be washed are placed between the jaws 12 and 13, and the lever 16 released, by raising the hook latch 18, to allow the jaw 13 to grip said articles. The cover having been closed down, the lever 10 is moved back and forth, by means of the rod 20, to force the clothes through the water and along the rubbing rollers 5 and 6, until the clothes are fully cleansed. Water may enter through the openings 15 in the jaws 12 and 13 to wash the portion of the clothes which lies between said jaws.

It should be understood that while I have herein described my invention in considerable detail, I do not limit myself to the exact construction shown and described.

I claim as my invention:

1. In a washing machine, in combination, a tub; a lever pivotally mounted on and extending into said tub; two jaws secured to

the lower end of said lever, said jaws having a relative pivotal movement; and means for holding said jaws closed.

2. In a washing machine, in combination,
5 a tub; a cover for said tub; means mounted
on said cover for moving the clothes through
the water; a jaw fixed on said moving
means; a jaw pivotally mounted on said
means; and means tending to hold said jaws
10 together.

3. In a washing machine, in combination,
a tub; a frame in said tub; rubbing rollers
journaled in said frame; a cover hinged on
said tub; a lever pivotally mounted on said
15 cover and extending into said tub; a jaw
fixed to said lever; a jaw pivotally mounted

on said lever; and means tending to hold
said jaws together.

4. In a washing machine, in combination,
a tub; a lever pivotally mounted on and ex- 20
tending into said tub; a jaw fixed to said
lever; a jaw pivoted on said lever; a spring
tending to hold said jaws closed; a hand
lever arranged to swing said pivoted jaw
to open it; and means arranged to engage 25
said hand lever to secure it in position to
hold said pivoted jaw open.

JOHN F. HOGLUND.

Witnesses:

ERNEST U. SCHROETER,
LUTHER L. MILLER.