

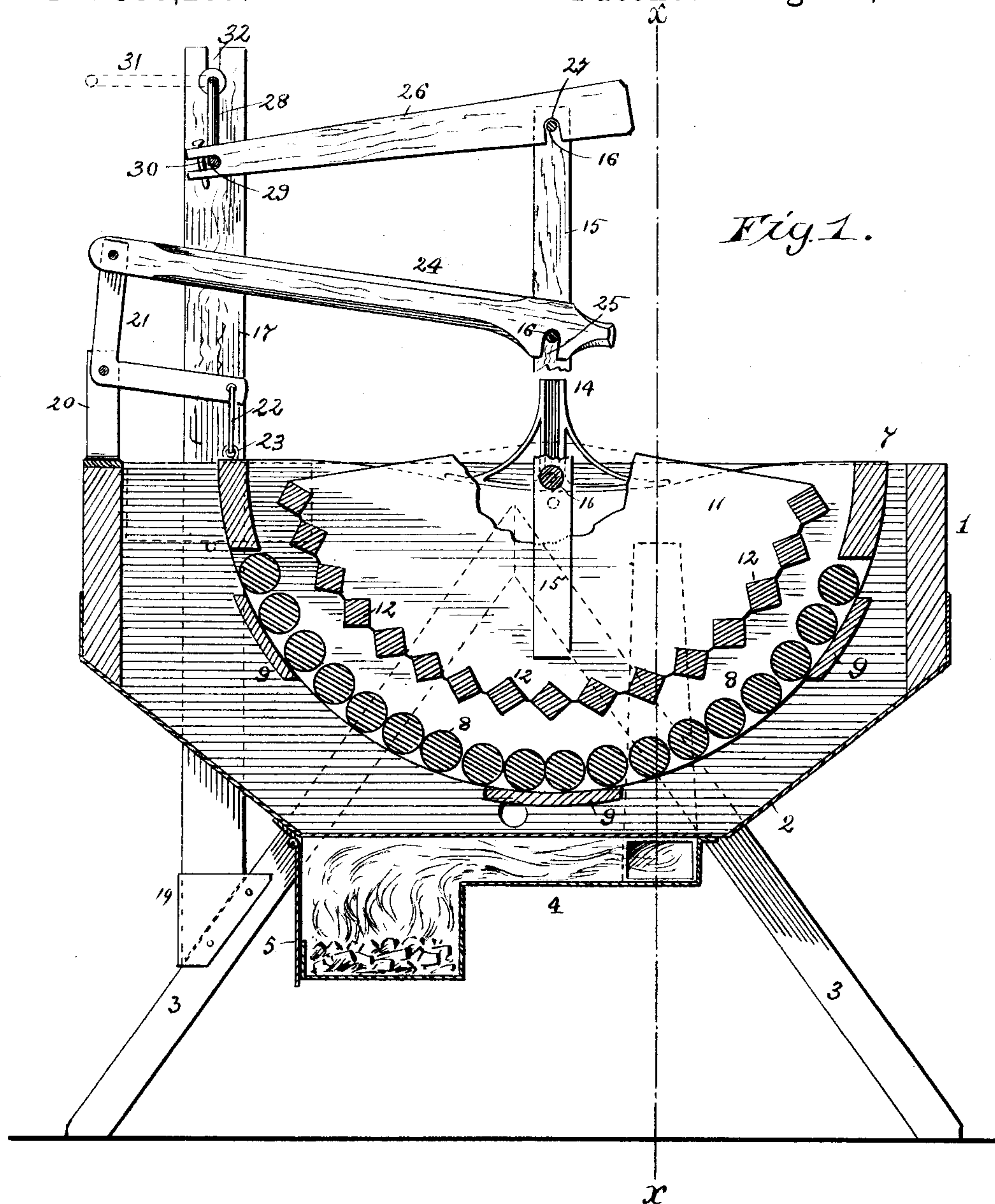
(No Model.)

2 Sheets—Sheet 1.

J. W. LASSWELL.
WASHING MACHINE.

No. 388,207.

Patented Aug. 21, 1888.



WITNESSES:

J. P. Garfield.
C. Sedgwick.

INVENTOR:

J. W. Lasswell.
BY *Munn & Co.*

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

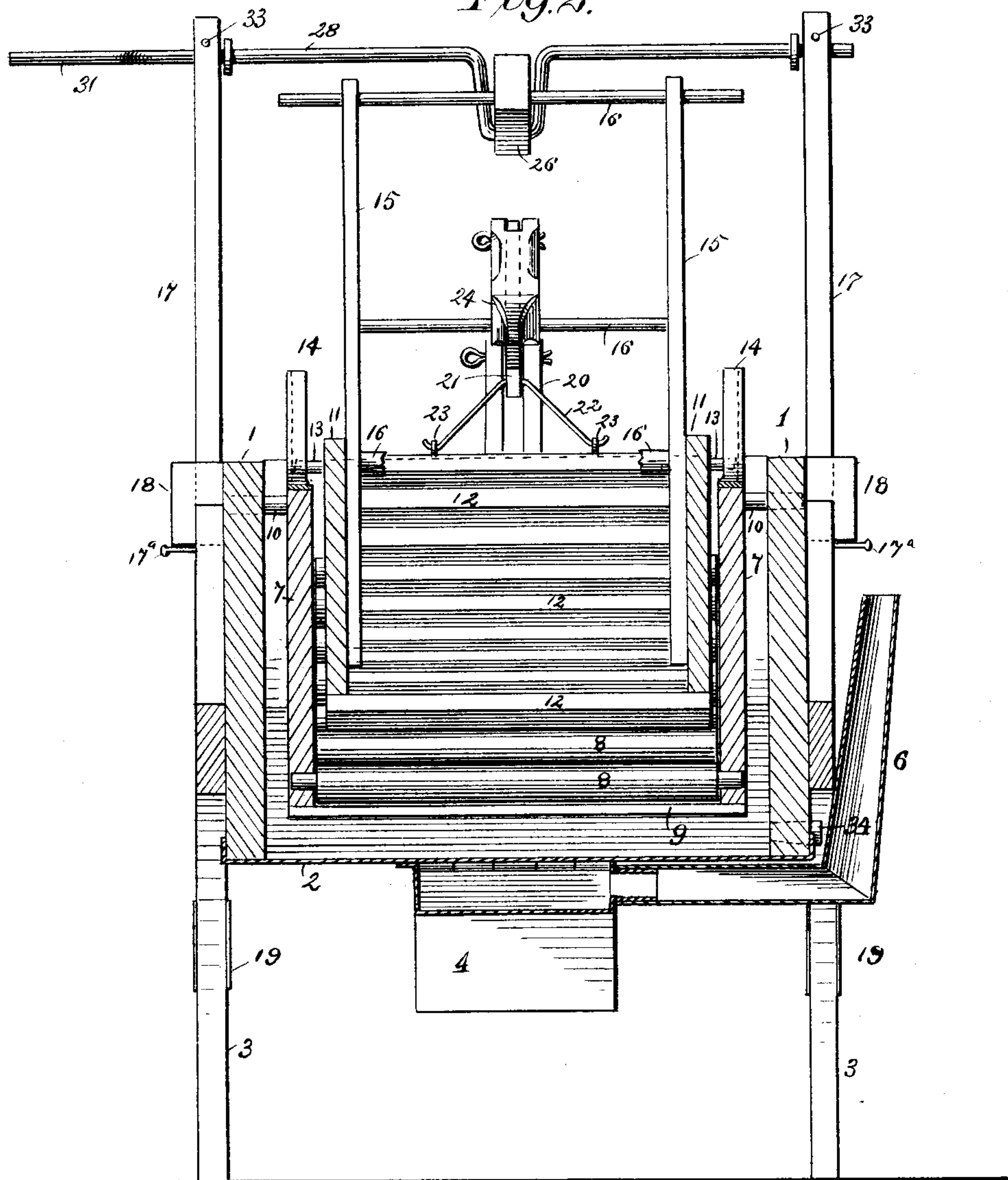
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Fig. 2.



WITNESSES:

J. D. Garfield.
E. Sedgwick.

INVENTOR:

J. W. Lasswell.
BY *Munn & Co.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN W. LASSWELL, OF AUGUSTA, KANSAS, ASSIGNOR TO HIMSELF AND
JOSEPH HADLEY, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 388,207, dated August 21, 1888.

Application filed January 31, 1888. Serial No. 262,493. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. LASSWELL, of Augusta, in the county of Butler and State of Kansas, have invented a new and Improved
5 Washing-Machine, of which the following is a full, clear, and exact description.

This invention relates to washing-machines in which two oppositely-reciprocating rubbers are employed in a tub or vat, and has for its
10 object to provide a washing-machine of this kind which will be thoroughly effective, simple in operation, and durable.

Reference is to be had to the accompanying drawings, forming a part of this specification,
15 in which similar letters of reference indicate corresponding parts in both figures.

Figure 1 illustrates the invention in longitudinal section. Fig. 2 represents it in vertical section on the line *x x*, Fig. 1.

20 In constructing this machine a vat or tub, 1, is employed of suitable shape and size and having a bottom, 2, of sheet metal, whereby the water therein may be heated, if desired. The tub 1 is supported by means of inclined
25 legs 3, or in any other suitable way. The bottom 2 is provided with a furnace, 4, of sheet metal, arranged, as shown, with a hinged drop-door, 5, and a chimney, 6, located at the side of the furnace. Within the tub 1 is located a
30 receptacle, 7, in which the clothes to be washed are placed, constructed with an oval bottom formed of rollers 8. The sides of the receptacle 7 are braced by means of cross-pieces 9 and have trunnions 10 resting in sockets
35 in the sides of the tub 1. The sockets are open, so that the receptacle 7 may be lifted out of the tub. Within the receptacle 7 is suspended a rubbing device, 11, constructed with sides, and an oval bottom formed of angular strips 12, and conforming in outline to the
40 bottom of receptacle 7 and at a sufficient distance therefrom to afford room for the clothes to be washed to be placed between the rollers 8 and angular strips 12. The rubbing device 11 is provided with trunnions 13, which
45 rest in the grooved uprights 14, secured to the sides of rubber 11, and open at the top, so that the trunnions 13 may be lifted out of the uprights 14.

50 The receptacle 7, which serves as a rubber,

and rubber 11 are to be reciprocated or vibrated on their trunnions in opposite directions. For this purpose suitable mechanism is employed, as follows: The sides of rubber 11 are provided with uprights 15, connected
55 by cross-bars 16. Removable uprights 17 pass through socket-pieces 18 on the sides of the tub 1 and have their lower ends resting in sockets 19, secured to legs 3, and are held in place by pins 17^a.

To a forked post, 20, on the edge of one end of tub 1 is detachably pivoted an elbow-lever, 21, having one arm loosely connected by a V-shaped rod, 22, with the receptacle or rubber 7, engaging eyes 23 thereon, and the other
65 arm pivoted to a connecting-bar, 24, detachably connected by an open slot, 25, with one of the cross-bars 16 of uprights 15. The top cross-bar, 16, of uprights 15 has one end of a connecting-bar, 26, detachably engaging it by
70 means of the open slot 27, the other end of bar 26 engaging a crank-shaft, 28, by means of the slot 29 and a removable retaining-pin, 30. The crank-shaft is formed with an operating-handle, 31. The crank-shaft 28 rests in open
75 slots 32 in uprights 17 and is retained therein by means of removable pins 33. It will be seen that by the foregoing construction the operating mechanism may be readily removed, as well as the rubbers 7 and 11.

80 The rubber 11 may be lifted out to place the clothes to be washed in receptacle 7, and will adjust itself to accommodate any amount of clothes so placed, by means of its trunnions freely lifting upward in their grooved sockets. 85 By means of having the angular strips 12 and rollers 8 and their being disposed in parallel arcs of circles the clothes will be effectively washed and there will be no danger of their bunching up and clogging the machine so that
90 it cannot work.

In use water is placed in the tub 1, which is closed by a plug, 34, and the water is heated by the furnace 4.

If preferred, the furnace 4 need not be used, 95 hot water and suds being poured into the tub instead. The operating mechanism may also be removed and the rubber 11 be alone operated by taking hold of the uprights 15; or the connecting-bar 24 only may be detached 100

and the rubber 11 operated by connecting-bar 26 and crank-shaft 28.

The connecting-bar 26 may be unhooked and the rubbers 11 and 7 operated by means of the uprights 15 and connecting mechanism. The reciprocating rubbers are thus operated independently or together by a simple and quick adjustment.

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

In a washing-machine, the combination, with vat 1, having post 20 and removable uprights 17, of removable reciprocating rubbers 7 and

11, the latter having uprights 15, with cross-bars 16, and the operating mechanism consisting of the bell-crank lever 21, link 22, detachable connecting-bar 24, with notch 25 engaging bar 16, crank-shaft 28, with handle 31, mounted in uprights 17, and detachable connecting-bar 26, with notch 27, engaging cross-bar 16 in uprights 15, substantially as described.

JOHN W. LASSWELL.

Witnesses:

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T. C. RULAND.