

(No Model.)

K. F. RICE.  
WASHING MACHINE.

No. 545,311.

Patented Aug. 27, 1895.

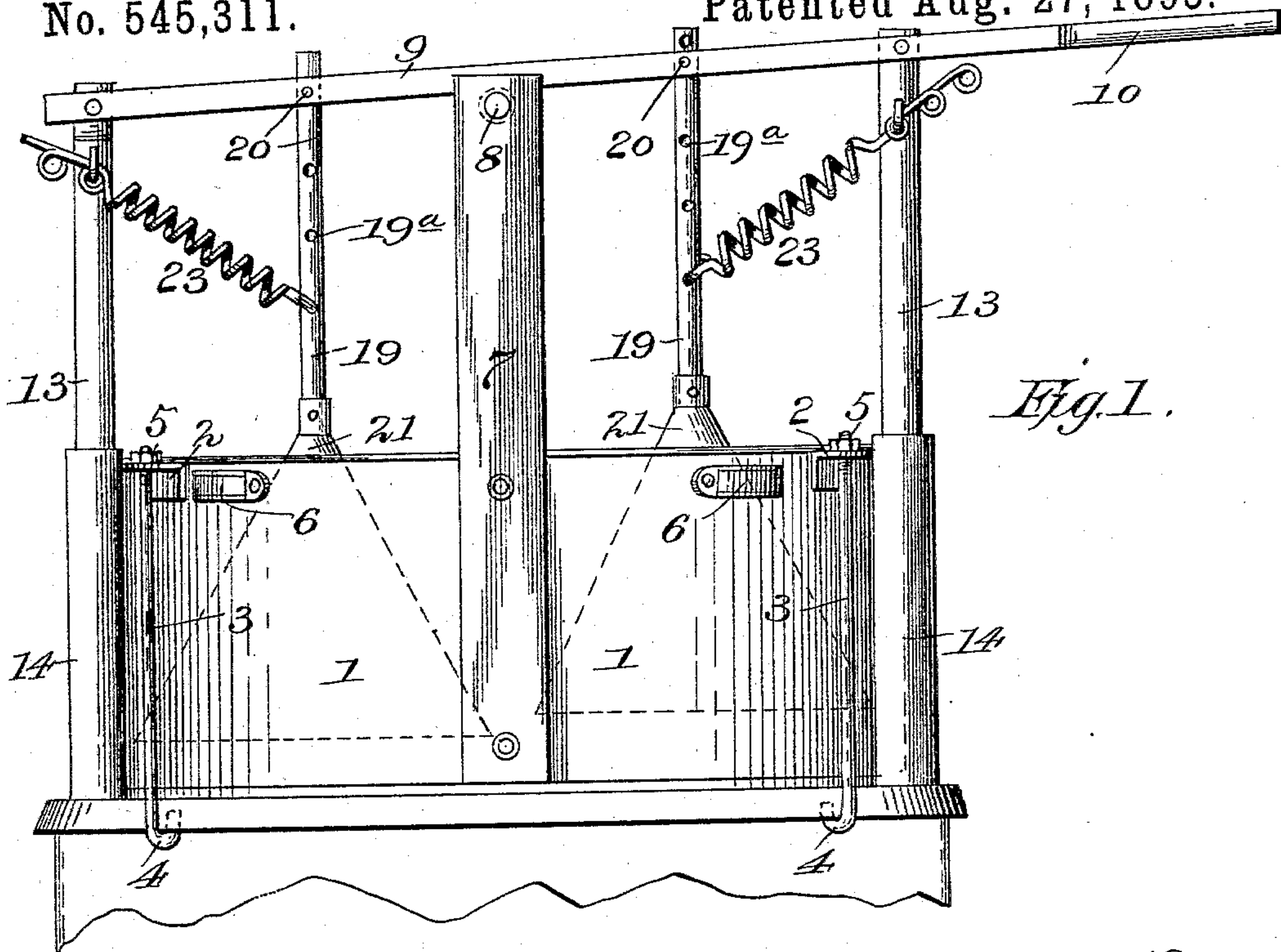


Fig. 1.

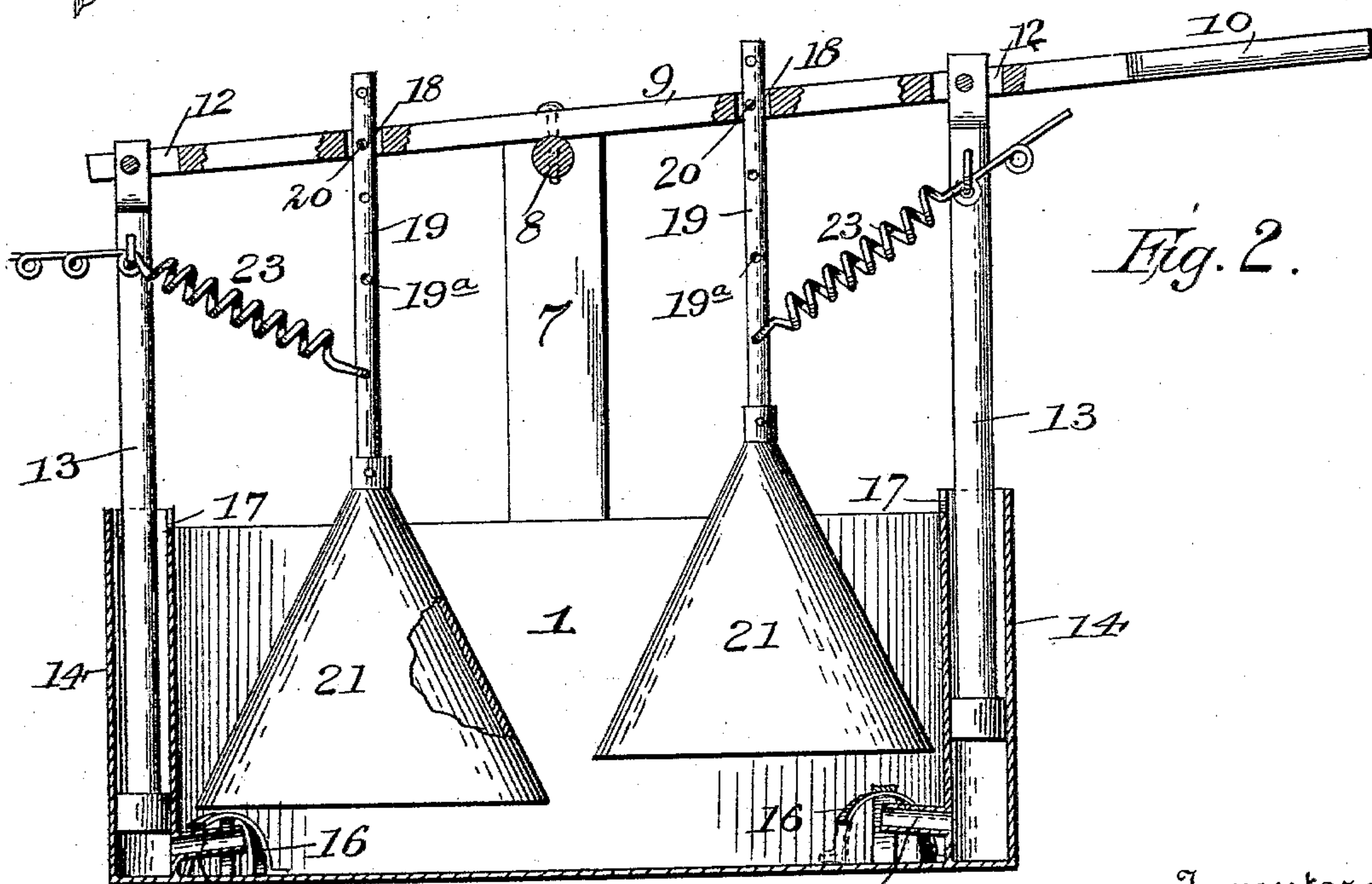


Fig. 2.

Witnesses: 15  
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# UNITED STATES PATENT OFFICE.

KENESS F. RICE, OF EUREKA SPRINGS, ARKANSAS, ASSIGNOR OF ONE-HALF  
TO JOHN B. PENDERGRASS, OF SAME PLACE, AND WILLIAM M. EDGAR,  
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## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 545,311, dated August 27, 1895.

Application filed February 26, 1895. Serial No. 539,789. (No model.)

*To all whom it may concern:*

Be it known that I, KENESS F. RICE, a citizen of the United States, and a resident of Eureka Springs, in the county of Carroll and State of Arkansas, 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 of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in washing-machines; and its object is to provide an improved construction which shall possess superior advantages with respect to efficiency in operation.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a washing-machine constructed in accordance with my invention. Fig. 2 is a central longitudinal section of the same.

In the said drawings the reference-numeral 1 designates a boiler or receptacle for containing the clothes to be washed, and adapted to be set on a stove, and is provided at each end at its upper edge with lugs 2, through which pass downwardly depending rods 3, having their lower edges bent into hooks 4, which are adapted to engage with the edge of the stove and hold the boiler in place thereon. The upper ends of these rods are screw-threaded to receive nuts 5. The boiler is also provided with handholds 6. Secured to each side of the boiler is an upright 7, which up-rights are connected together at their upper ends by an oscillating shaft 8 journaled therein, and secured to this shaft is a horizontal lever 9 having an extension 10, forming a handle. Pivoted in slots 12 in this lever are two vertical piston-rods 13, which work in pumps 14 secured to each end of the boiler. Each of these pumps at its lower end is provided with an inwardly-extending pipe 15 communicating with the boiler, which pipes are protected by means of a spider or cage 16 con-

sisting of a series of bent metal strips, the ends of which are secured to the bottom of the boiler. These spiders or cages prevent the clothes from coming in contact with the pipes. At the upper ends the pumps are provided with slots 17, which will allow any water which collects in the pumps above the lower ends of the piston-rods to escape into the boiler.

Passing through holes 18 in the lever 9 between shaft 8 and piston-rods 13 are vertical rods 19, having a series of holes 19<sup>a</sup> therein, through which pass pins 20 for holding the rods in place. These rods may be adjusted vertically by removing the pins and passing them through other holes. At their lower ends these rods are provided with compressors 21 consisting of conical shells secured to said rods so as to move up and down therewith. Coiled springs 23 are connected with rods 19 and with the piston-rods, so as to hold the compressors in proper position. The compressor at the end of the boiler, opposite the handle of the lever 9, is made heavier than the other compressor, so that it will act as a counterbalance to the lever when the handle is raised.

The operation will readily be understood. The boiler is placed on the stove and partly filled with water and the clothes to be washed placed therein. By now moving the lever up and down the piston-rods will be alternately reciprocated and water will be alternately drawn into the pumps and forced back into the boiler, thus keeping up a constant circulation in the latter. At the same time the compressor strikes the clothes alternately, forcing air, steam, and water downward and through the clothes, turning them over and over, and thoroughly cleansing them.

Having thus fully described my invention, what I claim is—

In a washing machine of the character described, the combination with the boiler, the pumps, the pipes connecting the pumps and boiler, the uprights secured to the boiler, the oscillating shaft, and the piston rods connected with said lever, of the vertically adjustable rods and formed with a number of holes, the conical compressors secured to the



lower ends of said rods, the coiled springs  
having their inner ends bent into hooks which  
engage with said holes, and their other ends  
bent into a number of loops, and the hooks se-  
5 cured to the piston rods with which said loops  
engage, substantially as described.

In testimony that I claim the foregoing as

my own I have hereunto affixed my signature  
in presence of two witnesses.

KENESS F. RICE.

Witnesses:

RICHARD H. JONES,

JOHN WATKINS.