(No Model.)

W. V. BURGESS.

WASHING MACHINE.

No. 348,543. Patented Sept. 7, 1886.

Fig. 1.

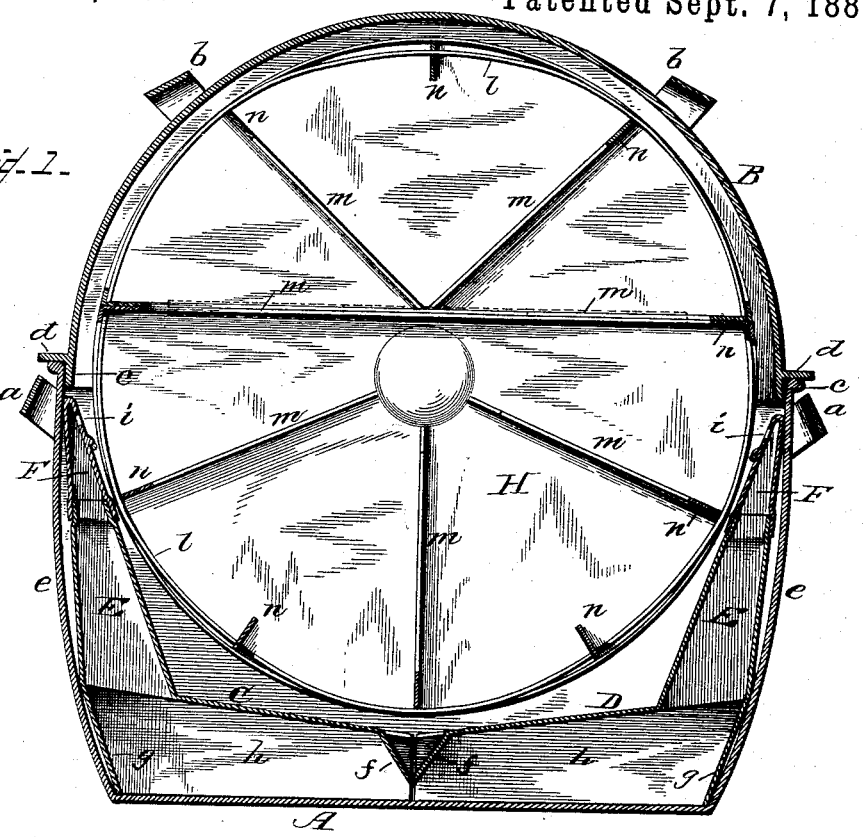


Fig. 2.

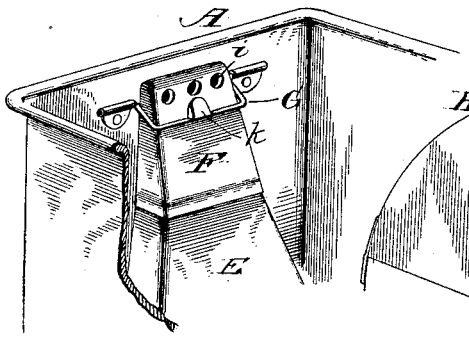
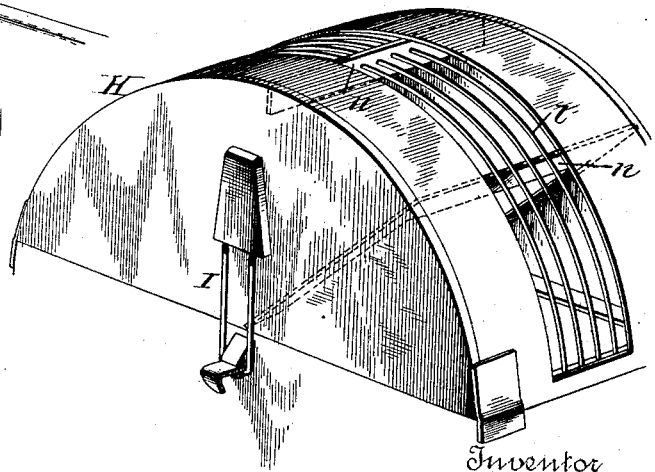


Fig. 3.



Witnesses,
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UNITED STATES PATENT OFFICE.

WILLIAM V. BURGESS, OF STERLING, KANSAS.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 348,543, dated September 7, 1886.

Application filed April 29, 1886. Serial No. 200,499. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM V. BURGESS, a citizen of the United States, residing at Sterling, in the county of Rice and State of Kansas, 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 same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical section of my invention. Fig. 2 is a detail perspective view of one end of the boiler, and Fig. 3 a detail perspective view of the revolving cylinder.

The present invention has reference to that class of boiler washing-machines for which a patent was granted to me February 22, 1881, No. 237,956, and is designed as an improvement thereon, such improvements being substantially shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents the boiler for containing the wash-water and suds, provided at its ends with handles *a* for lifting it. The cover B of the boiler is also provided with handles *b*, and flanges *c d*, at right angles to each other and extending around the four sides of the cover. The vertical flange *c* fits nicely against the interior sides of the boiler A, and the horizontal flange *d* rests on the edge of said boiler, thereby making a double-sealed joint between the cover and boiler to retain the steam and heat therein.

Unlike my former patent, the boiler A has its ends convex, as shown at *e*, thus making it of greater capacity above the bottom, and giving more room for the water to circulate, also the steam. The false bottom, as in my former patent, consists of two sections, C D; but, instead of being hinged together, they are entirely separate, and are provided at their inner edges with an incline flange, *f*. The two flanges, when the sections are in position, as shown in Fig. 1, incline in a direction toward each other and make a V-shaped receptacle for the dirt or sediment, dispensing with any valve device, as the flanges will act as deflecting-plates to direct the water toward the fountain-tubes E, projecting from the outer end of the false-bottom sections. The false-bottom sections C D having end flanges, *g*, as well as the side flanges, *h*, makes the space under the false bottom much tighter, and the steam therefore acts with greater force in ascending the fountain-tubes, and escaping therefrom with more effect upon the clothes. A further advantage of the incline flanges *f*, and the V-shaped chamber formed thereby, is that the chamber being wider at the top the water is allowed to pass down freely to the space under the false bottom after passing through the clothes. The upper ends of the fountain-tubes E are provided with detachable sections F, having suitable perforations, *i*, for the escape of the steam and water. The tube-sections F are held to the fountain-tubes E by means of bails G, pivoted to the ends of the boiler A, which extend over the ends of the sections and engage with a catch, *k*, thereby enabling the tubes E to be cleaned by first removing the sections F.

The cylinder H, for containing the clothes to be washed, is made in two detachable sections, the smaller of which serves as the cover, the two sections being connected together by a spring-latch device, I, of any desirable form or construction.

It is preferred that the two sections of the cylinder H be hinged together at one side, and the two sections held in a closed position by the spring-latch device hereinbefore described. A grating extends around the periphery of the cylinder H, which is formed of a series of parallel wires, *l*, the grated opening admitting of the free access of the jets of steam and hot water upon the clothes contained in the cylinder, and also as the clothes are expanded and the dirt loosened the dirt is carried by the water in its return to the V-shaped chamber formed by the flanges *f*, and thence to the space under the false bottom.

On the inside of the cylinder H are agitator blades or bars *m n*, the former extending radially from the center to the periphery of the cylinder, and secured to the sides thereof, and the bars or blades *n* extending transversely across the inner periphery of the cylinder. The blades or bars *m n* form braces for the cylinder to increase its strength, as well as agitators to change the position of the clothes as the cylinder is revolved, the bars *n* serving as a means for securing the wires thereto. The

bars or blades *m* are preferably formed with their outer ends of increased width, and when the cylinder revolves the bars or blades not only assist in changing the position of the clothes, but when the clothes drop and fall upon the lowest part of the cylinder they are pressed against the wires *l*, and the bars or blades will assist them in forcing out the dirt.

The cylinder H is journaled in the sides of the boiler A, and revolved by a suitable crank-handle, as is common in this class of washing-machines. The outer ends of the false bottom, formed of the sections C D, being the highest and the inner ends the lowest, an additional advantage is obtained by having the ends of the boiler A convex, as shown at *e*, in that the water is prevented from forming in a back current, as the boiler is smaller at the bottom than at the top.

It will be noticed that the direction in which the flanges *f* are disposed prevent, to an extent, the water from passing up between them, and directs the current in an outward direction to the base of the fountain-tubes E.

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

In a boiler washing-machine, the revolving cylinder for containing the clothes, provided with a grated opening and agitator bars or blades, in combination with a false bottom consisting of two independent and unattached removable sections having at their inner ends inwardly and downwardly inclined flanges to form a V-shaped chamber, and at their outer ends provided with fountain-tubes, having removable perforated sections held thereon by suitable fastenings, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM V. BURGESS.

Witnesses:
JNO. VAN PATTAN,
B. H. BURGESS.