(No Model.)

# J. G. BIBB.

## WASHING MACHINE.

No. 591,069. Patented Oct. 5, 1897.

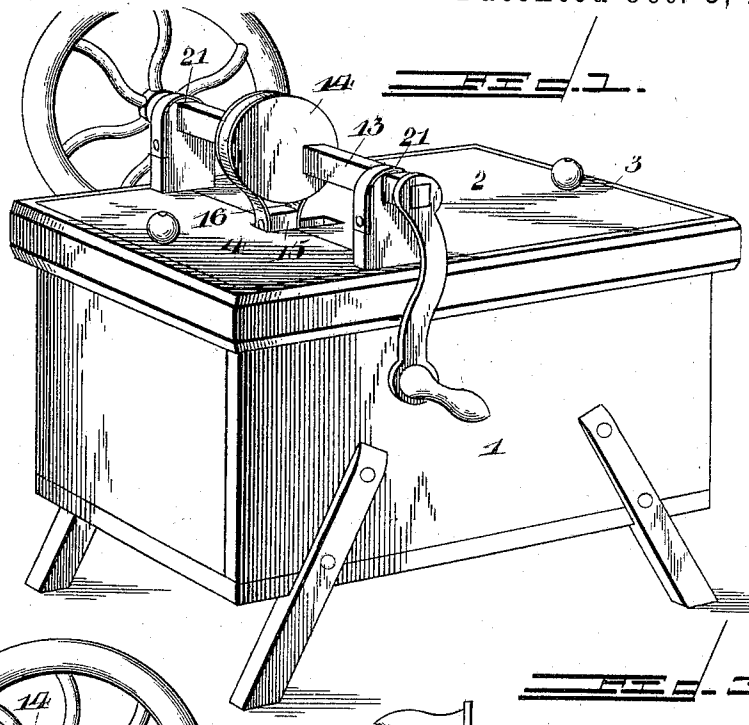


FIG. 1.

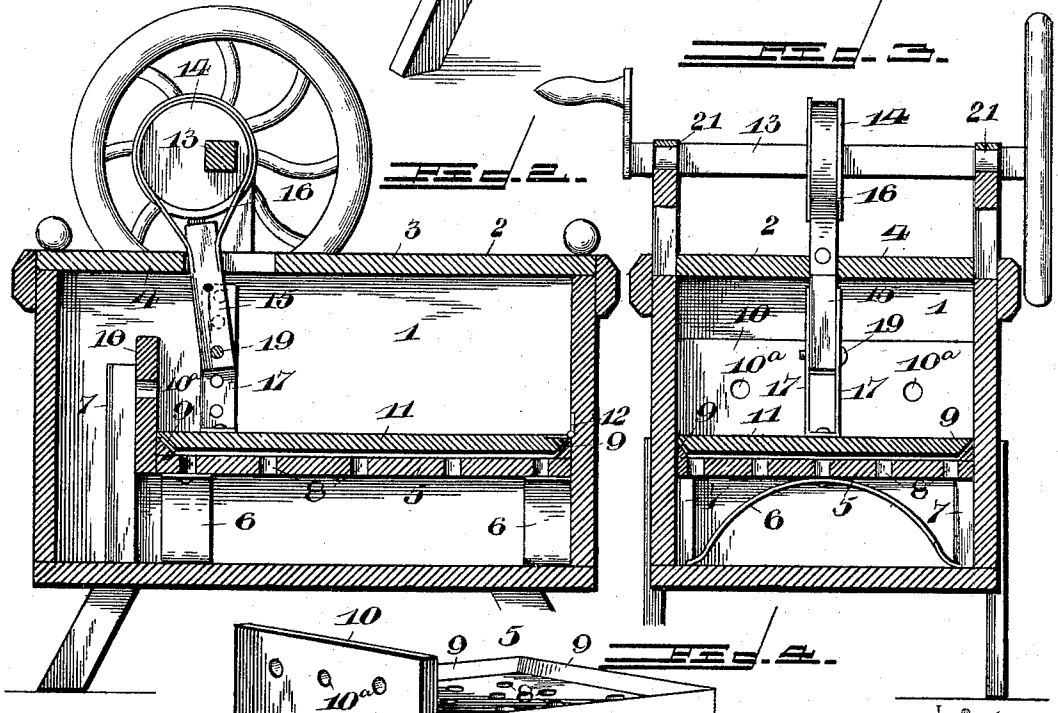


FIG. 2.

FIG. 3.

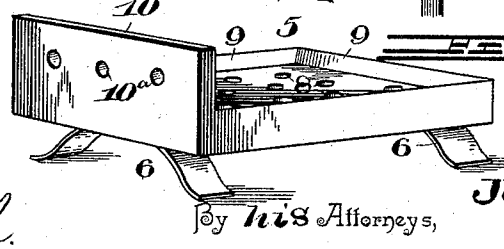


FIG. 4.

Witnesses
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T. G. Riley

Inventor,
John G. Bibb,
By his Attorneys,
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# UNITED STATES PATENT OFFICE.

JOHN G. BIBB, OF CANTON, MISSOURI.

## WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 591,069, dated October 5, 1897.

Application filed April 17, 1896. Serial No. 587,965. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN G. BIBB, a citizen of the United States, residing at Canton, in the county of Lewis and State of Missouri, have 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 improve the construction of washing-machines and to provide a simple, inexpensive, and efficient one capable of rapidly and thoroughly washing clothes without wearing, tearing, or otherwise injuring the fabrics.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim 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 central longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the yieldingly-supported bed.

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

1 designates a rectangular washing-machine body supported by suitable legs and provided with a cover 2, composed of sections 3 and 4. Within the washing-machine is arranged a yieldingly-mounted bed 5, supported by transversely-disposed springs 6 and fitting against one end of the washing-machine body and held against longitudinal movement by a pair of vertical cleats 7, which form guides. The bed is provided at intervals with perforations 8, and it has a marginal flange 9, formed by strips beveled at their inner sides. At one end of the bed adjacent to the vertical cleats is arranged an extension or end 10, disposed vertically, provided with perforations $10^a$, and adapted to hold the clothes on the bed during the operation of washing.

The springs, which are substantially semicircular, are centrally secured to the lower face of the bed at the ends thereof and have their terminals resting upon the bottom of the washing-machine body adjacent to the sides of the same, and they permit the bed to have an upward and downward movement to cause the water to pass through the clothes and other fabrics, and thereby remove the dirt and stains.

The bed is operated by an imperforate rectangular presser 11, consisting of a board, connected at one end to the washing-machine body by hinges 12 and located directly above the bed, with its free edge adjacent to the extension of the latter. The presser, which is beveled at its edges, fits snugly within the washing-machine body between the sides thereof and also between one end of the same and the end or extension of the bed, and it is oscillated, by means hereinafter described, to move the clothes and the bed upward and downward to force the water through the clothes, as above described.

The presser is oscillated by a transverse shaft 13, provided with a centrally-arranged eccentric 14, which is connected with a pitman 15 in the usual manner by a yoke or strip 16. The pitman is adjustably connected with the presser to accommodate itself to the quantity of clothes being washed. The presser is provided with a pair of upwardly-extending arms 17 and connected with the pitman by a removable pin 19, adapted to be arranged in any set of the perforations. The transverse shaft is journaled in suitable bearings 21, which may be of any desired construction. It is provided at one end with a fly or balance wheel, and it has a crank at its other end by which the washing-machine is operated. The sections of the cover are provided at opposite sides with notches to form openings for the bearings of the transverse shaft, and they have centrally disposed notches forming a slot for the pitman. The transverse shaft is located directly above the free edge of the presser, and by being adjustably connected with the same through the perforations of the arms 17 the tension of the springs 6 is regulated in order to produce the desired pressure and squeezing action on the clothes at the end of the downstroke of the presser. By adjusting the removable pin 19 the springs, during the operation of the machine, may be compressed to a greater or less extent. Either section of the cover is adapted to be readily removed, and during the operation of wash-

ing the clothes are carried rapidly through the water and the dirt and stains are quickly removed without rubbing or injuring the clothes in any manner. The oscillating presser is detached from the pitman and swung upward when it is desired to place the clothes in or remove them from the washing-machine body. The downward movement of the presser squeezes the clothes between it and the bed, forcing the water from the clothes and through the perforations 8, and the downward movement of both the presser and the bed causes the water to flow up through the space between the extension 10 and the adjacent end of the body and pour over the former upon the presser. On the upstroke of the presser water is permitted to pass beneath the same to the clothes in order that it may be again forced through them on the downstroke. By this construction a complete circulation of the water is produced.

The washing-machine body is provided with a suitable discharge-opening to enable the water to be drawn therefrom after the operation of washing is completed, and the body is preferably provided at its top with a flange surrounding the cover and forming a close joint to prevent the water from escaping during the operation of washing.

It will be seen that the washing-machine is exceedingly simple and inexpensive in construction, that it is capable of rapidly and thoroughly washing clothes, and that during the operation of washing the clothes are not rubbed and will not be worn, torn, or otherwise injured.

The inwardly-beveled flange 9, which is arranged at the edge of the bed on its upper surface, serves as a guard to prevent fabrics supported by the bed from being forced by the pressure and movement of the bed into the joint or interval between the edges of the bed and the contiguous walls of the receptacle, while the beveled or undercut edge of the presser avoids the application of pressure to the portions of fabrics which are located contiguous to the walls of the receptacle.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

In a washing-machine, the combination with a rectangular receptacle, of a vertically-movable yieldingly-supported bed spaced at one end from the adjacent end of the receptacle to provide a passage and having its other edges in contact with the corresponding walls of the receptacle, the upright extension 10 rising from that edge of the bed which is spaced from the end wall of the receptacle, the bed and the extension being perforated and the latter terminating short of the cover of the receptacle, whereby when the bed is depressed the liquid contents of the receptacle will flow upward through the said passage and over the upper edge of the extension, the inwardly-beveled flange arranged around the edge of the bed at its upper face, the imperforate oscillating presser provided with a beveled or undercut edge and hinged at one end to the receptacle, the vertical cleats 7 secured to the side walls of the receptacle at the outer face of the extension 10 and forming guides for the bed, and means for oscillating the presser, substantially as described.

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

JOHN G. his × mark BIBB.

Witnesses:
JOSEPH A. MILLER,
LAURISTER H. CONANT.