

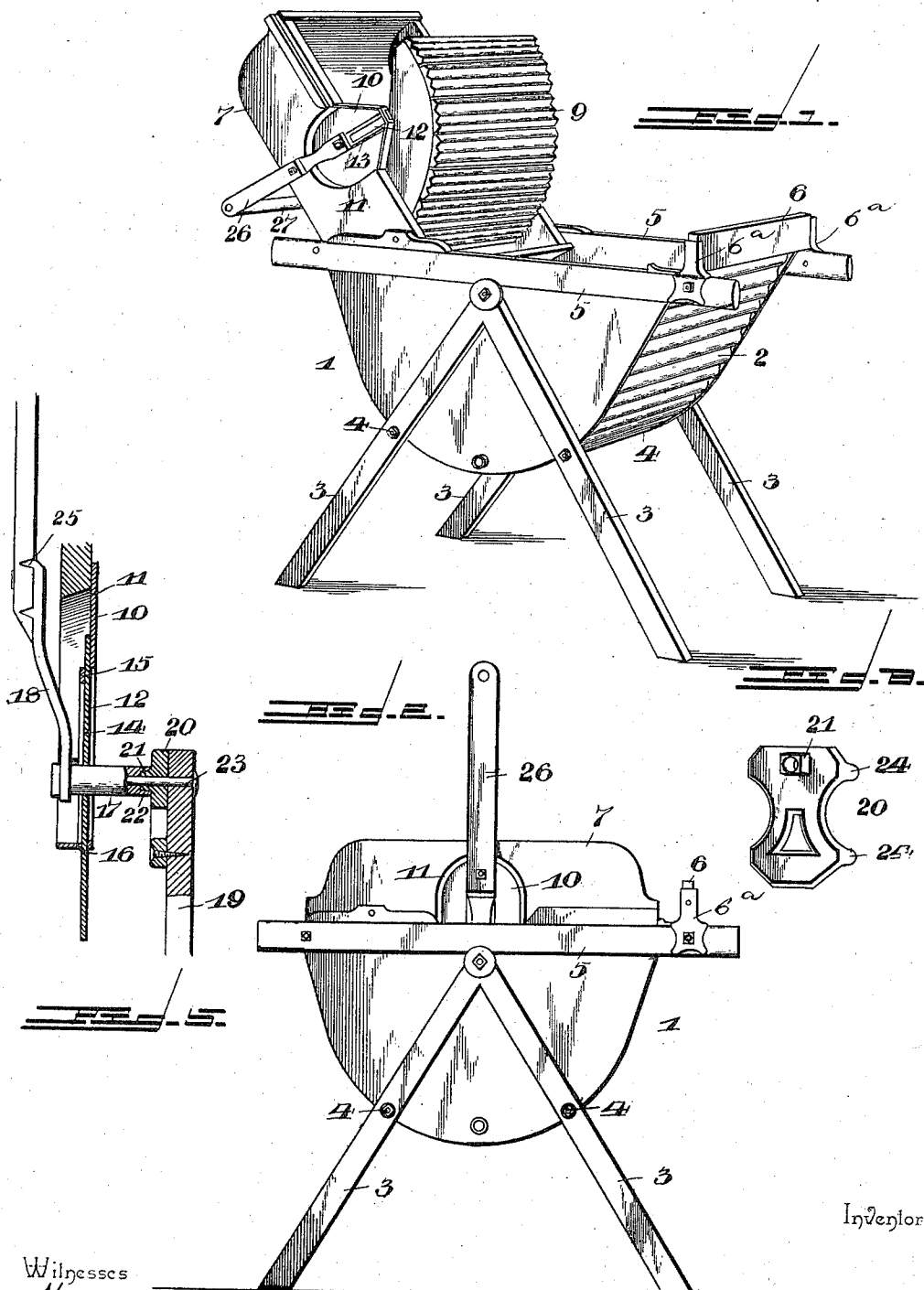
(No Model.)

2 Sheets—Sheet 1.

J. H. DOUB.
WASHING MACHINE.

No. 577,729.

Patented Feb. 23, 1897.



Inventor

Witnesses

H. F. Doyle
J. F. Riley

By *his* Attorneys,

John H. Doub
C. A. Snow & Co.

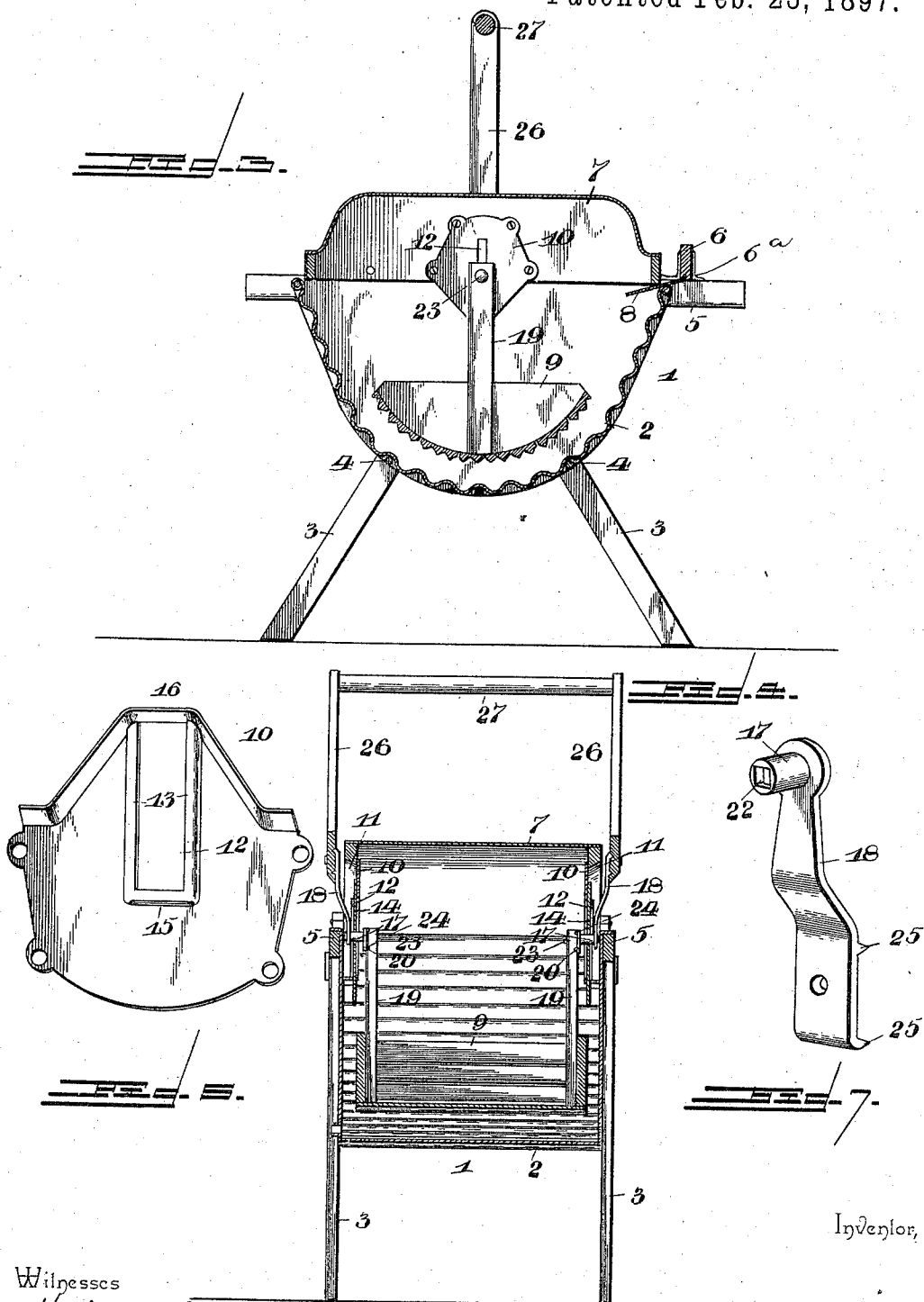
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UNITED STATES PATENT OFFICE.

JOHN H. DOUB, OF WALNUT, KANSAS, ASSIGNOR OF ONE-HALF TO THOMAS F. JONES, OF SAME PLACE.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 577,729, dated February 23, 1897.

Application filed March 26, 1896. Serial No. 584,944. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. DOUB, a citizen of the United States, residing at Walnut, in the county of Crawford and State of Kansas, have invented a new and useful Washing-Machine, of which the following is a specification.

The invention relates to improvements in washing-machines.

10 The object of the present invention is to improve the construction of washing-machines, to provide one which will be simple and inexpensive in construction and adapted for washing all kinds of fabrics whether fine or
15 heavy, and capable of automatically adjusting itself to the quantity of clothes being washed.

20 A further object of the invention is to provide a washing-machine which during the operation of washing will be entirely closed to prevent water splashing on the operator or on the floor or the like, and which, when opened for the reception or removal of clothes, will cause all drippings to run back into the washing-machine body.

25 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.

30 In the drawings, Figure 1 is a perspective view of a washing-machine body constructed in accordance with this invention, the cover being swung back. Fig. 2 is a side elevation, the cover being closed. Fig. 3 is a central
35 longitudinal sectional view. Fig. 4 is a transverse sectional view. Fig. 5 is an enlarged detail sectional view of one of the bearings of the oscillating rubber. Fig. 6 is a perspective view of one of the bearing-plates. Fig. 7
40 is a detail perspective view of one of the journals and its arm. Fig. 8 is a detail perspective view of the attachment-plate, which is secured to the arms of the oscillating rubber.

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

1 designates a washing-machine body constructed of any suitable material, preferably
50 sheet metal, having a curved corrugated bot-

tom 2 and supported by legs 3, secured to the sides of the body and connected at the bottom thereof by transverse rods 4, which pass through the lower depending edges or flanges of the sides and are arranged in the adjacent
55 grooves or corrugations of the bottom 2. The washing-machine body, which has a suitable vent or discharge opening, is provided at opposite sides at its upper edges with horizontal bars 5, which extend beyond the ends of
60 the body to form suitable handles, and at one end of the body is mounted a wringer-supporting board 6, arranged a sufficient distance beyond the end of the body to permit a hinged cover 7 to swing upward when a wringer is in
65 position. The wringer-supporting board is mounted in suitable brackets or castings 6^a, located at opposite sides of the washing-machine body and secured to the side bars 5. The brackets or castings 6^a extend above the
70 horizontal bars and are provided at their inner faces with vertical grooves receiving the wringer-supporting board, which rests upon the upper edges of the horizontal bars.

The cover 7, which is provided with rounded
75 ends, is hinged or pivoted a short distance from one end at opposite sides of the washing-machine body, and when swung upward the lower end of the cover is received within the washing-machine body, and all drippings
80 are caused to run into the latter. By hinging the cover at a point intermediate of the ends of the washing-machine body the machine is more compactly arranged, and during the operation of washing there is less strain on
85 the pivots or hinges thereof. When the cover is closed, its end adjacent to the pivots or pintles fits snugly against the body, and the latter is provided at the other end with an inclined plate or shield 8, inclining down-
90 ward and inward from the lower edge of the wringer-supporting board and adapted to direct water therefrom into the washing-machine body. The transverse plate or shield 8 receives the adjacent end of the cover when
95 the latter is closed.

The cover, on which is journaled an oscillating rubber 9, is provided at opposite sides with bearing-plates 10, located at recesses 11
100 of the sides of the cover and secured to the

inner faces of such sides by means of screws or other suitable fastening devices passing through perforated ears of the bearing-plates. The bearing-plates are provided with vertical slots 12, and have at opposite sides thereof on the outer faces of the bearing-plates vertical ways 13, consisting of substantially L-shaped flanges and receiving-slides 14. The slides 14, which cover the vertical slots 12 of the bearing-plates, pass through openings of the flanges 15 and 16 at the top and bottom of the ways, and they are provided with perforations in which are arranged journals 17. The journals 17, which are provided at their outer ends with arms 18, extend inward through the perforations of the slides and are connected with upwardly-extending arms 19 of the oscillating rubber. The attachment-plates 20 are secured to the outer faces of the arms 19 and are provided near their upper ends with outwardly-extending polygonal lugs 21, slightly tapering and fitting in corresponding tapering openings or bores 22 of the journals 17, and the latter are connected with the attachment-plates by means of bolts 23 or other suitable fastening devices passing through the journals and the lugs, having their heads arranged at the inner faces of the arms 19 and provided at the outer ends of the journals with nuts. The attachment-plates are provided at their side edges with lips 24, arranged in pairs and embracing the arms 19 to support the latter and prevent them from splitting under any strain incident to washing.

The arms 18, which are rigid with the journals, are provided on their outer faces with transverse ribs 25, which engage side bars 26 of the handle-frame, consisting of the said side bars 26 and a transverse handle-bar 27. The lower ends of the side bars of the handle-frame are secured to the arms of the journals and are engaged by the transverse ribs 25 and held against any pivotal movement on the fastening devices.

The corrugated bottom of the washing-machine body forms an interior rubbing-surface, and the oscillating segmental rubber is provided with a curved rubbing-face, composed of corrugated transverse slats or bars, and during the operation of washing the rubber swings from one end of the washing-machine body to the other, thereby rapidly and thor-

oughly rubbing the clothes and quickly washing them without injuring the fabrics.

The slides of the bearing-plates are capable of vertical movement and enable the oscillating rubber to adjust itself automatically to the quantity of clothes being washed, and the top of the washing-machine body is entirely closed during the operation of washing and there is no liability of any water escaping and splashing over the operator or dripping upon the floor or the like.

It will be seen that the washing-machine is simple, strong, and durable, that friction of the parts is reduced to a minimum, and that by hinging the cover at a point intermediate of the ends of the body space is economized when the cover is swung upward and all drippings are caused to run back into the washing-machine body.

It will also be apparent that the washing-machine is adapted to adjust itself automatically to the quantity of clothes being washed and that it is capable of thoroughly and rapidly rubbing them and of effectually removing dirt and stains.

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 of a washing-machine body, a cover hinged to the same, an oscillating rubber, bearing-plates secured to the cover at opposite sides thereof, provided with vertical slots and having flanges at opposite sides thereof forming ways, said bearing-plates being provided at the top and bottom of the slots with flanges having openings, the slides mounted in the ways and extending through the openings of the top and bottom flanges of the plates, journals arranged in the bearing-openings of the slides and attached to the oscillating rubber, and a handle-frame connected with the journals, 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 H. DOUB.

Witnesses:

JAMES LOCKE,
CHAS. LOCKE.