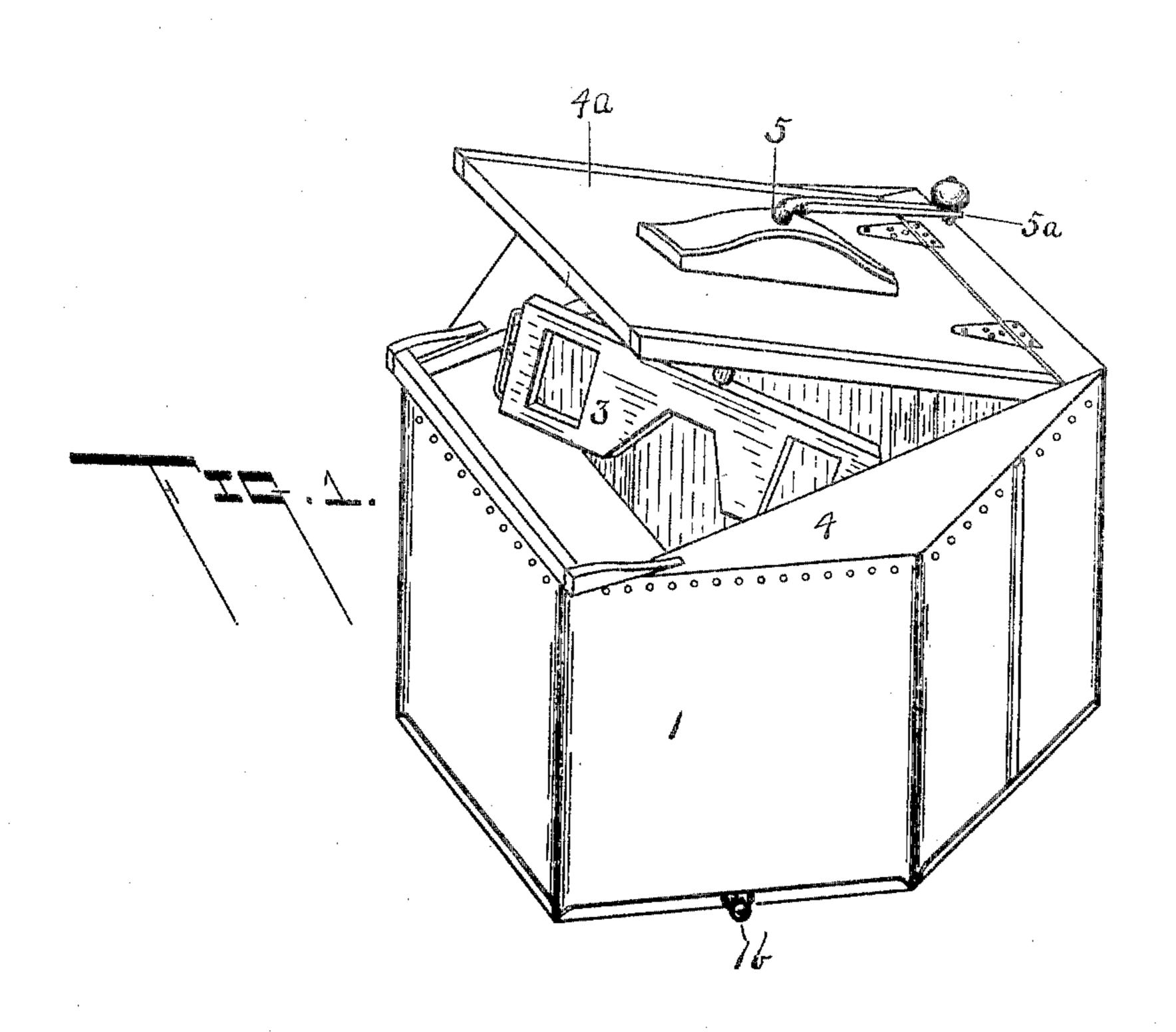
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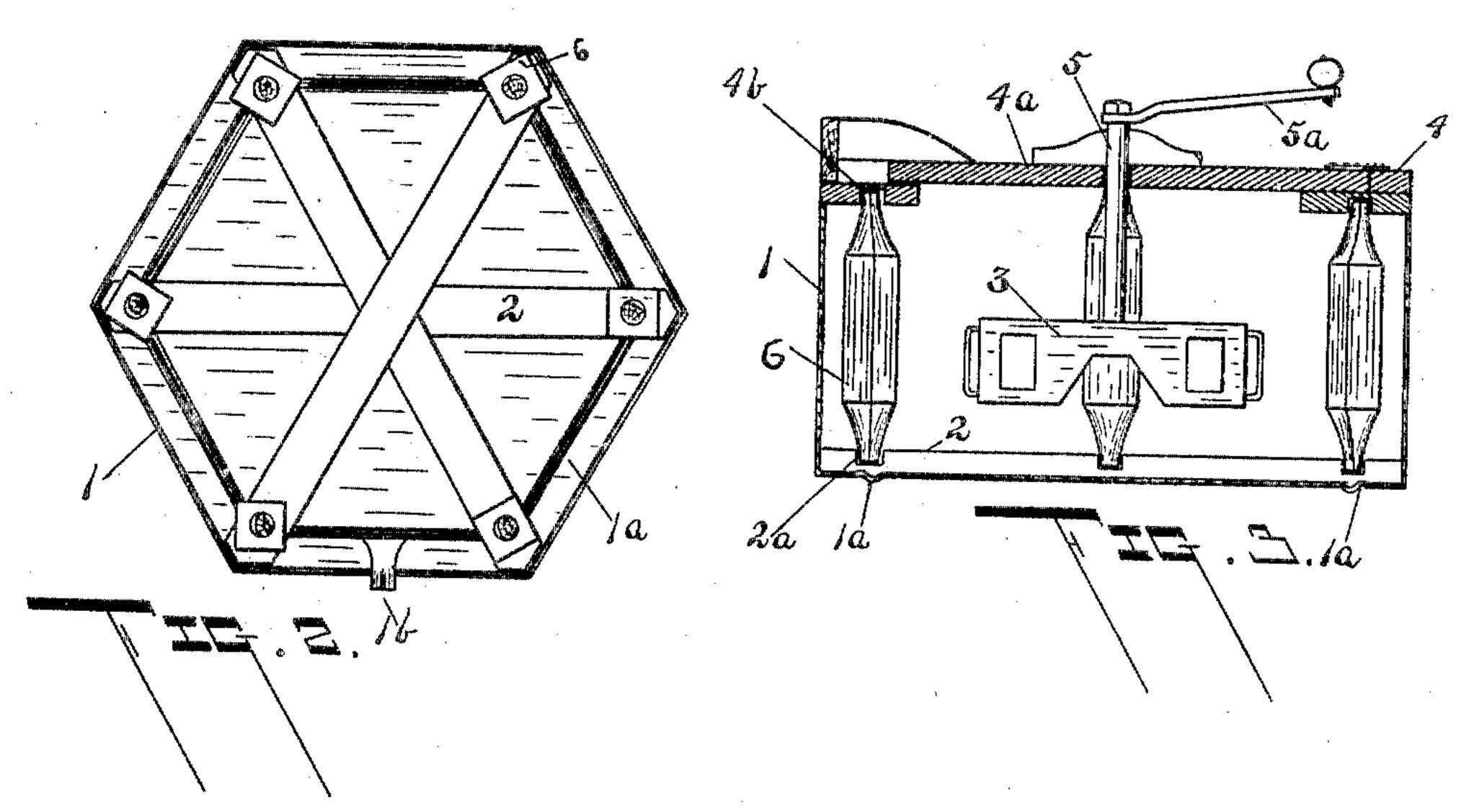
PATENTED JULY 4, 1905.

J. A. CARPENTER & J. A. DOWKER.

WASHING MACHINE.

APPLICATION FILED JAN. 8, 1904.





WITNESSES:

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JAMES A. CARPENTER AND JOHN A. DOWKER, OF BAY CITY, MICHIGAN.

SPECIFICATION forming part of Letters Patent No. 793,987, dated July 4, 1905.

Application filed January 3, 1904. Serial No. 188,247.

To all whom it may concern:

Be it known that we, James A. Carpenter and John A. Dowker, citizens of the United States, residing at Bay City, in the county 5 of Bay and State of Michigan, have invented certain new and useful Improvements in Washing-Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as vill enable others skilled in the art to which it appertains to make and use the same.

This invention is a washing-machine.

The improvements consist in certain devices, their combination and the equivalents 15 thereof, as will be more fully set forth in the specification.

The objects of the invention are to provide a simple and inexpensive washing-machine that is not liable to get out of order, 20 and to so arrange its interior mechanism that there will be small liability of tearing or injuring the clothes being washed. Means is also provided for effectually draining the tub.

Reference is had to the accompanying

drawings, in which—

Figure 1 is a perspective view of the washing-machine with the cover partly raised. Fig. 2 is a plan view of the tub with its top 30 removed. Fig. 3 is a vertical sectional elevation through the middle of the tub.

As is clearly shown in the drawings, the device consists in a polygonal casing or tub 1, preferably made of sheet metal, such as 35 sheet-zinc, and preferably formed with six sides. The bottom is provided with a channel 1ª, extending around its periphery and formed by depressing the metal of the bottom to form a continuous downwardly-pro-40 jecting rib, as shown in Figs. 2 and 3. This rib not only strengthens and stiffens the bottom, but also serves as a channel by which to drain the tub through the dischargespout 1^b into which the channel 1^a leads. 45 Diagonally arranged across the bottom of the tub from corner to corner are wooden slats or strips forming a spider 2, which strengthens the bottom, the slats serving as stationary ribs against which the clothes are 50 dashed by means of the revolving dasher 3.

The ends of the slats are fitted to and pressed tightly down into the corners of the tub, the pressure due to elasticity of the metal corners serving to hold the spider firmly in place, and the spider serving the additional 55 purpose of preventing the bottom from buckling and keeping the thin metal shell or tub stretched taut and preserving its shape. The top 4 of the tub is provided with a hinged cover 4a, and through the cover is passed a 60 downwardly-projecting shaft 5, to the upper end of which is secured a crank 5^a, and to the lower end is fixed the dasher 3, by which the clothes are agitated. The dasher is so arranged that it can revolve through a com- 65 plete revolution.

Near the extremities of each of the slats in the corners of the tub are loosely mounted in sockets 2a or otherwise upright spindles 6, which are preferably of polygonal cross-sec- 70 tion, usually square. The upper ends of the spindles 6 are revolubly mounted in recesses

4^b formed in the cover 4.

It is found in practice that the materials being washed strike the spindles 6 and are 75 thoroughly agitated. The spindles are free to turn under the rubbing action of the clothes, and thus avoid tearing or injuring them.

What we claim as our invention, and de- 80 sire to secure by Letters Patent, is as follows:

In a washing-machine the combination with a polygonal tub formed of sheet metal and having a peripheral rib formed in its bottom by depressing the metal thereof, and 85 having a discharge-outlet; a spider formed of diagonally-arranged slats extending from corner to corner of said tub and secured to the bottom thereof by pressure of the sides of said tub; said slats having sockets near 90 their outer ends; vertical spindles revolubly mounted in said sockets; a revoluble dasher and means for operating said dasher.

In testimony whereof we affix our signatures in presence of two witnesses.

> JAMES A. CARPENTER. JOHN A. DOWKER.

Witnesses:

A. A. EASTERLY, J. STANLEY LEE.