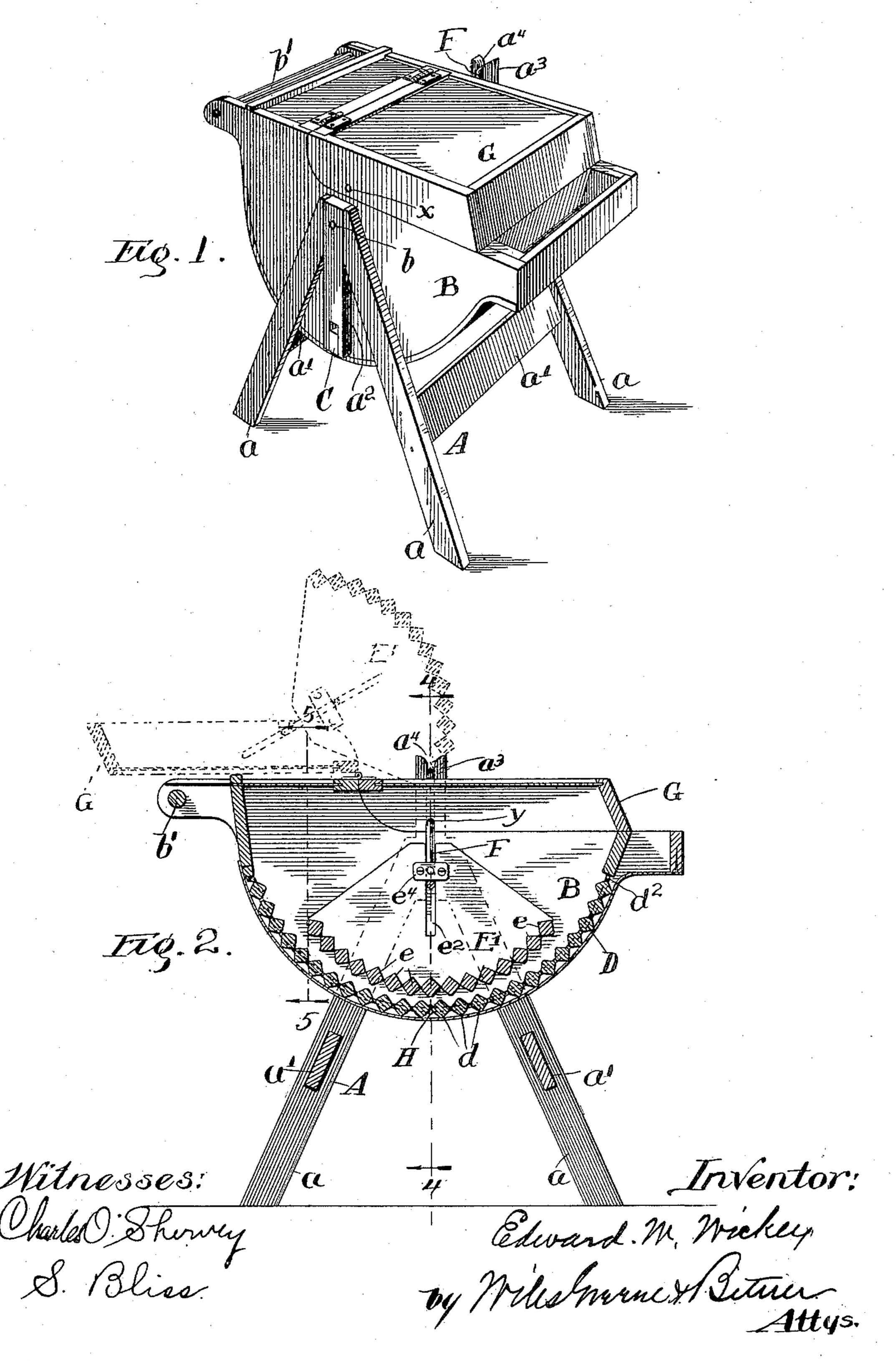
E. W. WICKEY. WASHING MACHINE.

(Application filed Apr. 15, 1899.)

(No Model.)

2 Sheets—Sheet 1.



E. W. WICKEY. WASHING MACHINE.

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2 Sheets—Sheet 2.

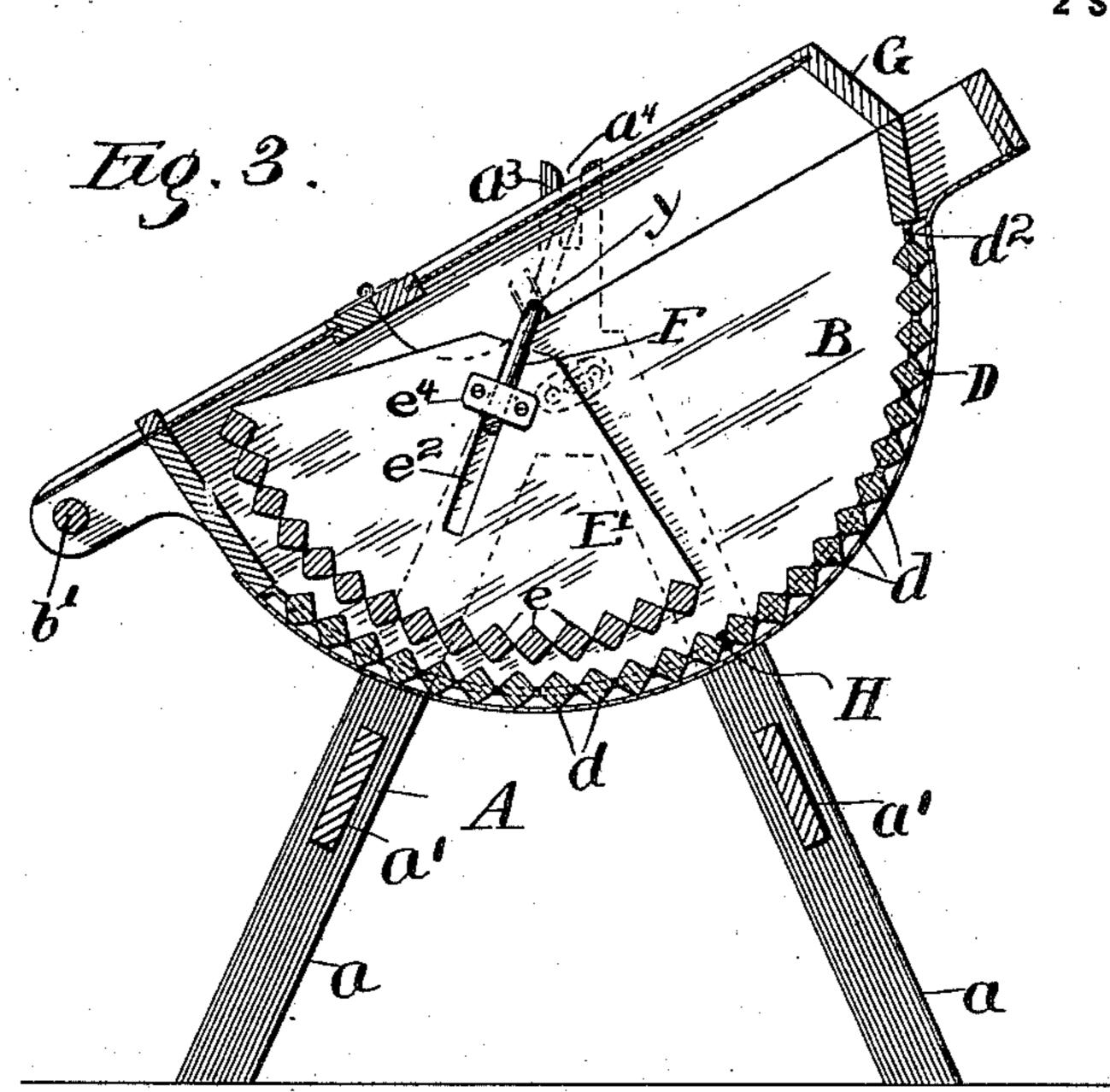
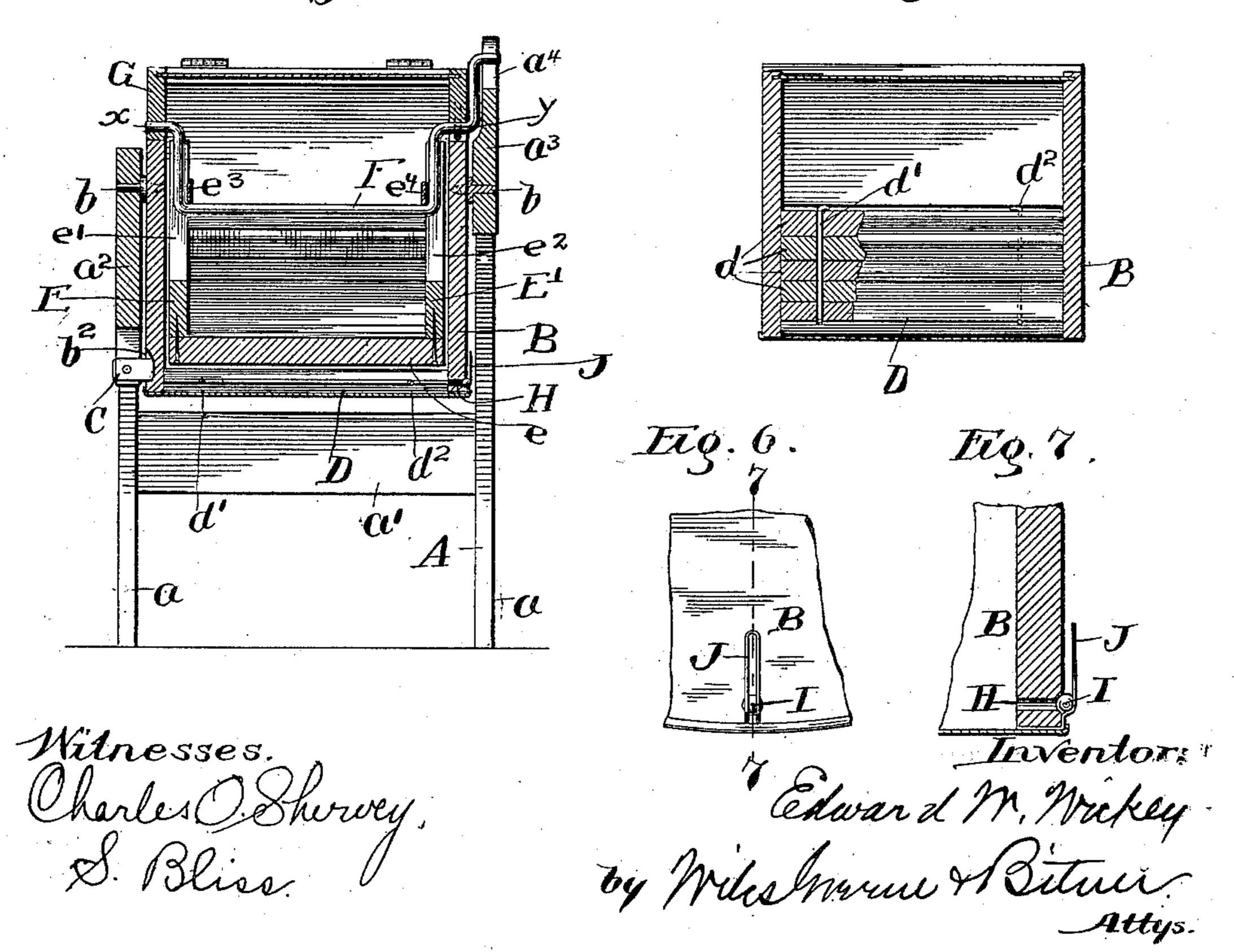


Fig. 4.

Fig. 5.



United States Patent Office.

EDWARD W. WICKEY, OF INDIANAPOLIS, INDIANA.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 652,467, dated June 26, 1900.

Application filed April 15, 1899. Serial No. 713,178. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. WICKEY, a citizen of the United States of America, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Washing-Machines, of which the following is a specification.

My invention relates to certain improvements in washing-machines, the object of which is to construct such a machine in the most practical and satisfactory manner and to incorporate therein an oscillating and vertically-sliding rubbing device so constructed and arranged with reference to the oscillating tub as to swing in the opposite direction from that of the tub, rubbing over the clothing and resting thereupon by its own weight. The various other advantages of the invention will appear as the same is described, and the essential features of all will be pointed out in the claims.

In the drawings, Figure 1 is a perspective of a complete machine in operative position. Fig. 2 is a vertical longitudinal section through the middle of the machine, showing said machine in the same position as Fig. 1 and also showing the open position of the cover in dotted lines. Fig. 3 is a similar section showing 30 the tub closed and swung to the limit of its oscillation in one direction. Fig. 4 is a vertical transverse section through the axis of the tub. Fig. 5 is a vertical transverse section in the line 5 5 of Fig. 2 looking in the direc-35 tion of the arrow 5 and showing a portion of the washboard cut in the curved plane of one of the wires upon which the strips are strung. Fig. 6 is an enlarged side elevation of the lower portion of the tub opposite to the side 40 seen in Fig. 1, showing a stopper, consisting of a rubber ball, designed to close the opening through which the water is run off; and Fig. 7 is a section in line 7 7 of Fig. 6, showing said opening and the ball in position to 45 close the same.

Referring to the figures by means of reference-letters applied to the same parts throughout, A is a supporting-frame, consisting of four legs a, united by means of the lateral cross-pieces a' and the vertical posts $a^2 a^3$. A tub B is swung between said posts upon gudgeons b, turning in the posts, and is provided

with a handle b', conveniently shaped to be grasped by the hand in operating the machine. A button C, pivoted in the post a^2 55 and turning into a notch b^2 in the tub, furnishes means for locking the tub against oscillation when desirable—as, for instance, in inserting and removing the clothes and in using a wringer upon the tub. Within the 60 tub is a washboard D, made up of a series of transverse strips d, strung upon longitudinal curved wires $d' d^2$, bent to make the board conform to the inner surface of the bottom of the tub. The latter is curved, preferably in the 65 form of a circle, about the axis of the oscillating rubber. Said rubber is composed of two sector-shaped side pieces E E', connected by transverse strips e, preferably similar to those of the washboard, but secured to the curved 70 edges of the side pieces. The side pieces have radial slots e' e^2 , in which is guided an oscillating crank-rod F, the latter being kept from complete withdrawal by means of crossplates $e^3 e^4$, spanning the slots. This crank- 75 rod is pivoted in the box at x y and has an arm extended without the latter sliding up and down in a vertical notch a^4 in the post a^3 . The crank-rod is pivoted in the box above the gudgeons, upon which the latter swings, 80 and the arm extends upward from the pivotal line, so that as the tub is oscillated the holding of the sliding end of the arm in a vertical plane causes the rubber to be swung back and forth in a direction opposite to that 85 of the tub. Said rubber is free to rise and fall upon the crank-arm to accommodate any thickness of clothing beneath it and always rests upon the latter with an even pressure due to its own weight.

The box is provided with a hinged cover G, extending down upon the sides of the box sufficiently to contain the pivoted portions of the crank-rod, so that when the cover is lifted it lifts said crank-rod out of the notch 95 in the post and carries it, together with the rubber, out of the tub into the position seen in Fig. 2, where it rests upon the top of said tub, leaving the interior thereof free for the putting in or taking out of the clothes.

A discharge-opening H is provided in the lower portion of one of the sides of the tub, and a rubber ball I is held tightly against the outside end of said opening by means of a

wire loop J, secured at its lower end to the tub and holding the ball tightly against the outside thereof, while at the same time permitting it to be forced up or down to open or close the discharge-orifice.

I claim as new and desire to secure by Let-

ters Patent—

1. The combination with a frame provided with an open-topped notch, of an oscillating tub hung therein upon a pivot below said notch, said tub having a hinged portion adapted to form a cover therefor, an oscillating rubber, and a supporting device therefor, pivoted in the hinged portion of the tub and having an arm extending outside of said tub and guided in said notch, whereby the opening of the cover lifts the arm from the notch and the rubber from the tub; substantially as described.

2. The combination with a frame having 20 an open-topped notch, of an oscillating tub swung therein upon a pivot below the notch, a hinged portion of said tub adapted to form a cover therefor, a crank-rod pivoted in said hinged portion above the axis of the tub, an 25 upwardly-extending arm upon said crank-rod, guided in said notch, a downwardly-extending portion upon said crank-arm within the tub and a rubber hung upon said downwardly-extending portion and adapted to 30 slide upward thereon, substantially as described.

In witness whereof I have hereunto set my hand this 7th day of April, A. D. 1899.

EDWARD W. WICKEY.

Witnesses:

CHAS. O. SHERVEY, S. BLISS.