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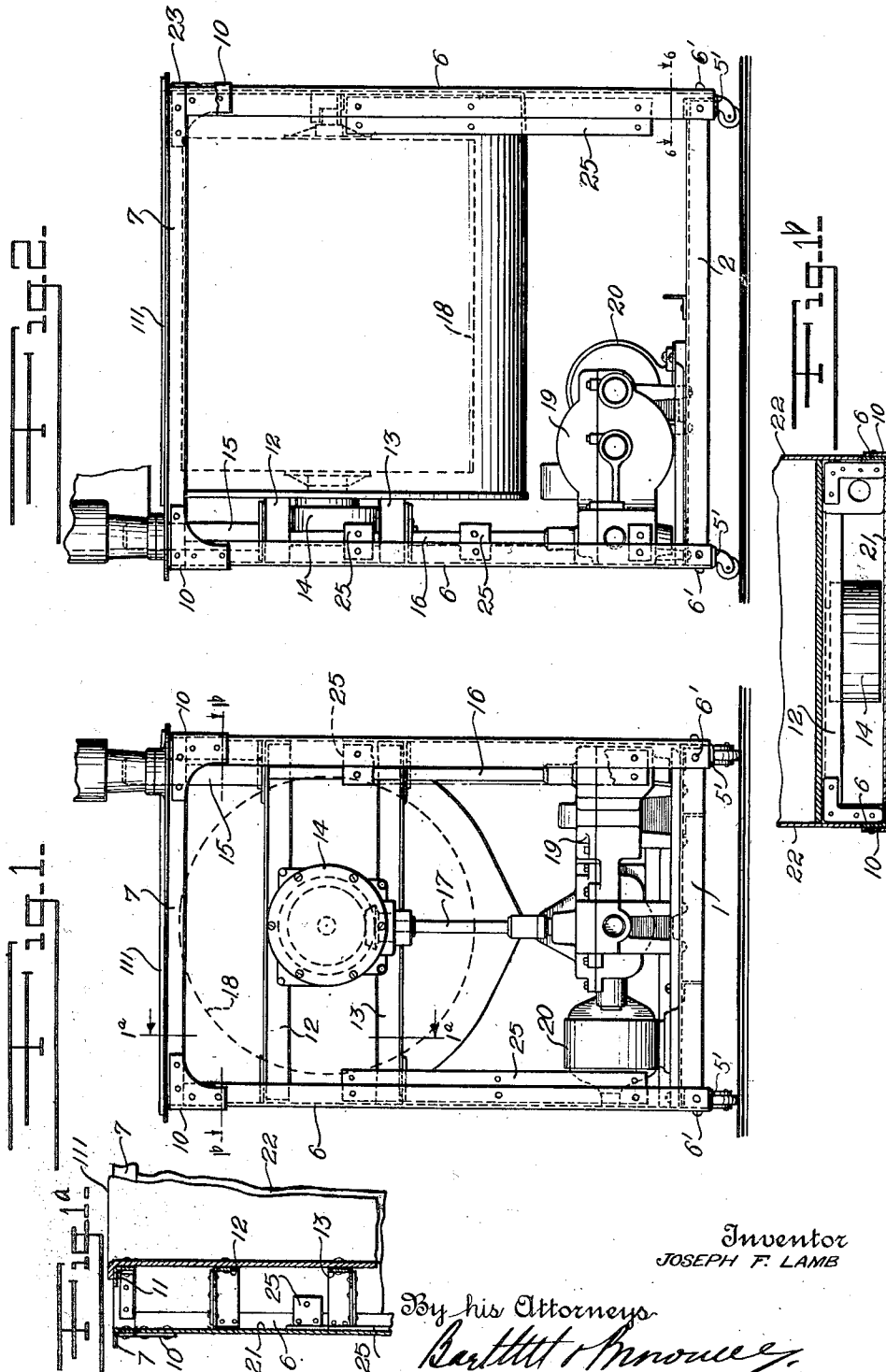
J. F. LAMB

1,494,313

WASHING MACHINE

Filed May 18, 1922

2 Sheets-Sheet 1



Inventor
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By his Attorneys
Bartlett & Monroe

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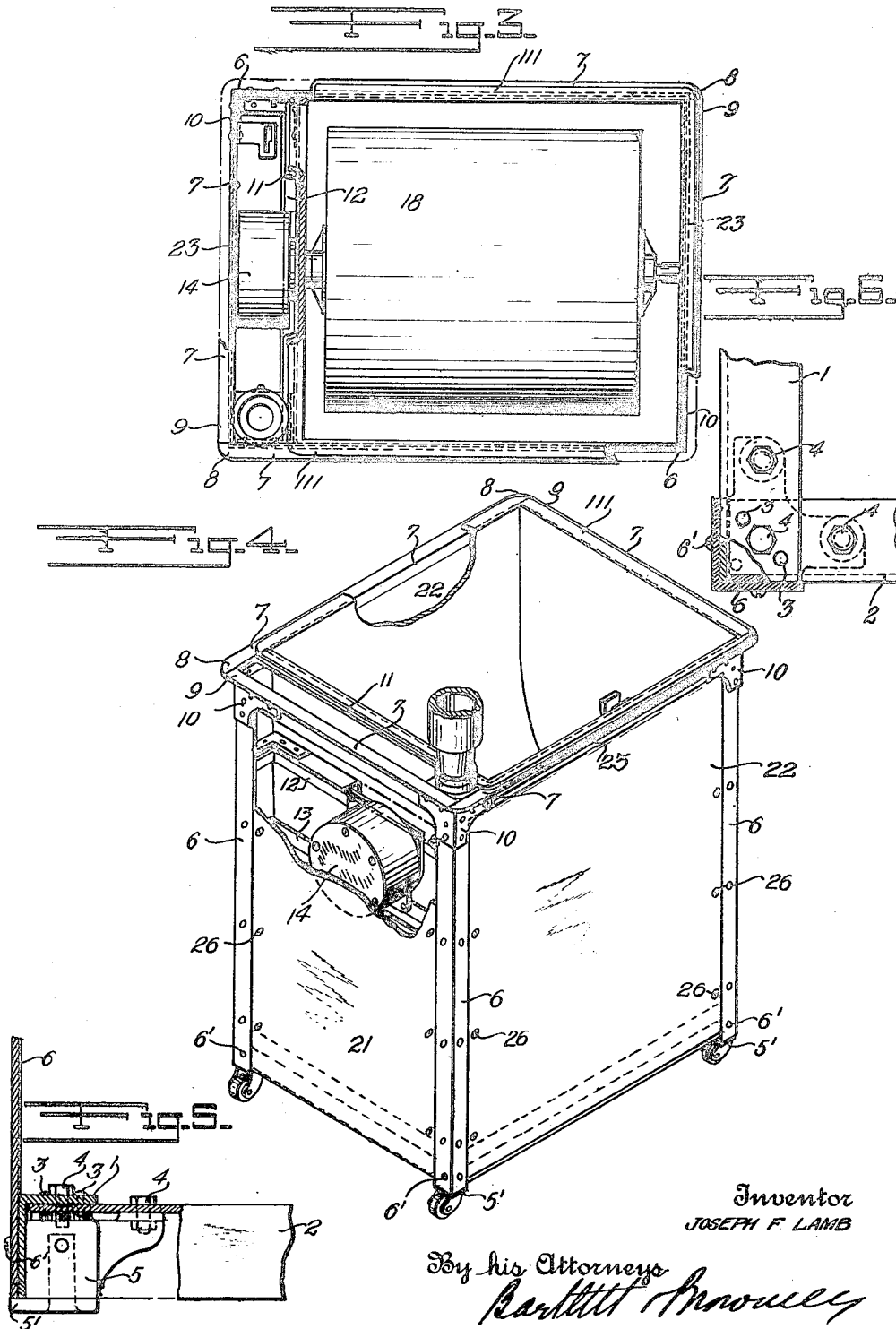
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UNITED STATES PATENT OFFICE.

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WASHING MACHINE.

Application filed May 18, 1922. Serial No. 561,842.

To all whom it may concern:

Be it known that I, JOSEPH F. LAMB, a citizen of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented a certain new and useful Improvement in Washing Machines, of which the following is a full, clear, and exact description.

My invention relates to washing machines and has for its object to provide a frame for supporting and enclosing the tub and mechanism of a washing machine so that it may be surrounded and concealed by plain paneling. It further has for its object to provide a frame which will support the tub of the washing machine and furnish a space within the casing and adjacent to one end of the tub which shall enclose both the tub cylinder operating shaft and the wringer operating shaft and to provide means for supporting a gear case in said space; and to provide a rectangular frame having panels flush with the upright supports of said frame. It further has for its object to provide a new and improved means for supporting said upright supports.

The following is a description of an embodiment of my invention, reference being had to the accompanying drawing, in which,

Fig. 1 shows an end elevation of the frame with the paneling removed, showing the tub and driving mechanism of the washing machine;

Fig. 1^a shows a section of a portion on the line 1^a—1^a, Fig. 1;

Fig. 1^b shows a partial section on the line 1^b—1^b, Fig. 1;

Fig. 2 shows a side elevation of the machine with the paneling removed;

Fig. 3 shows a plan view with parts broken away and the two cover sections for the tub and shaft compartments removed;

Fig. 4 shows a perspective view of the frame with the tub and paneling in place, the washing cylinder being removed;

Fig. 5 shows a vertical section of a portion of one upright and the caster socket supporting the same; and

Fig. 6 shows a plan view of a portion

shown in Fig. 5 with the upright in section on the line 6—6, Fig. 2.

Referring more particularly to the drawings, 1 and 2 are the end and side members of a rectangular base which at the corners of the base are secured together by rivets 3 and are secured by bolts 4 to a caster socket 5. These bars 1 and 2 are angle-irons having one of their sides projecting vertically downward and the other sides projecting horizontally inward from the upper edge of the vertical sides. Embracing each corner of the frame is a vertical angle-iron 6 secured to the member 5 by screws 6'. The caster sockets 5 have lateral flanges 5' which are engaged by the lower ends of the vertical members 6 so that the vertical members are supported by said flanges 5' even if the screws 6' become loosened or removed. On the top of each vertical angle-bar rest the downwardly projecting flanges of two horizontally extending angle-bars 7—7 having upon their upper edges outwardly projecting flanges, the shorter or end angle-bars being cut off transversely to their axes and the longer angle-bars having a portion 8 of their horizontal flanges protruding so as to be flush with the outer ends and the edges 9 of the horizontal flanges of the shorter bars as shown in Fig. 3. Attached to the upper end of each vertical upright 6 and to the adjacent portions of the bars 7 are two angular corner plates 10. The vertical portions of the bars 7 rest on the tops of the uprights 6. The parts above described constitute the rectangular skeleton of the framework of my washing machine. In order to support the tub, I provide an additional angle-iron 11 so located that the distance between the angle-iron 11 and the more remote short angle-iron 7 is just sufficient to admit the body of the tub. The tub may be formed with a flange 111 which rests upon the upper edges of the crossbar 11 and the portions of the bars 7—7 surrounding the tub opening.

In order to support the gear casing for the gears upon the cylinder operating shaft, I provide two other angle-irons 12 and 13,

having their vertical sides in the same plane as the vertical side of the angle-iron 11 and, like the angle-iron 11, having the horizontal sides projecting away from the tub opening. These angle-irons 12 and 13 are parts of U-shaped structures and to that end preferably have their ends bent at a right angle, as shown in Figs. 1^a and 1^b, and reinforced by angle plates. They are secured to the two uprights 6 which are located at one end of the frame. The vertical flange of the angle-iron 12 projects downwardly from its horizontal flange, while the vertical flange of the angle-iron 13 projects upwardly from its horizontal flange. The gear casing 14 for the cylinder operating gear is located between the horizontal flanges of the angle-irons 12 and 13 and secured to their vertical flanges so as to be supported thereby. These bars 12 and 13 form a strong anchorage so as to relieve the tub from strain.

Secured between the angle-iron 11 and the adjacent parallel angle-iron 7 is a tubular wringer support 15 into which extends the vertical wringer operating shaft 16. 17 is a vertical shaft entering the gear casing 14 for driving the washing cylinder 18. These shafts 16 and 17 are driven by mechanism contained in a gear case 19 supported by the rectangular base portion of the frame and driven by an electric motor 20 also carried thereby. The projections of the gear case 14, shafts 16 and 17, gear case 19 and motor 20 will all fall within the rectangular base portion of the frame with the result that none of these portions protrude beyond the plane corresponding to any two adjacent corners of the vertical angle-irons 6 so that the tub and all its operating mechanism can be enclosed by flat panels secured to the adjacent angle-irons 6.

21 and 22 are such panels, each having on its upper edge portions 23 lying between two of the corner brackets 10. The panels are secured by screws to the depending flange of the corresponding angle-iron 7 and have corners slipped under those angle-irons. The two vertical angle-irons 6 have secured to their inner surfaces plates 25 having tapped holes for receiving the screws 26 for securing the vertical edges of the outside panels 21 and 22 in place. These outside panels, thus secured, are flush with the adjacent portions of the upright angle-bars 6.

By these means a rectangular supporting casing for the tub and operating mechanism of the washing machine is secured, the tub and mechanism being entirely enclosed. The frame is strong and durable and provides a space, located at one end of the tub and within the enclosure, through which the wringer shaft 16 and cylinder operating shaft 17 both extend upwardly so as to be enclosed and concealed by the upright

panels of the casing. Furthermore, the uprights, inasmuch as their lower ends rest upon the flanges of the members 5, are still supported even if the screws which secure them to those members become loosened or entirely removed; so that a casing is secured which is strong and rigid and presents an attractive appearance and completely encloses the ugly parts of the mechanism by plain flat panels.

As will be evident to those skilled in the art my invention permits of various modifications without departing from the spirit thereof or the scope of the appended claims.

What I claim is:

1. A washing machine of the type described, having a tub and a driving mechanism located adjacent one end of the tub, said machine having, in combination, a frame comprising a top part having a rectangular opening adjacent to said end of the tub and a second rectangular opening in which substantially fit both sides and ends of the top of the tub, a rectangular base part substantially corresponding in shape and size to and arranged directly below the top part, standards connecting corresponding corners of the top and base part, and panels removably secured to the ends and sides of the frame.

2. A washing machine of the type described having, in combination a tub, a washing cylinder mounted therein, means for driving the washing cylinder comprising a driving motor arranged below the tub and driving connections with the washing cylinder arranged adjacent one end of the tub, a frame for supporting and enclosing the tub and said motor and driving connections comprising a rectangular top part having a rectangular opening surrounding the top part of the tub and a second rectangular opening adjacent said end of the tub, a rectangular base part arranged directly below the top part, means on the base part for supporting the driving motor, standards connecting the top and base parts, and panels removably secured to the frame.

3. A washing machine of the type described having a tub and a driving mechanism located adjacent one end of the tub, said machine having, in combination, a frame comprising a rectangular top part having a rectangular opening adjacent to said end of the tub and a second rectangular opening in which fit the ends of the top of the tub, said rectangular top part being made up of angle irons arranged to provide an outwardly projecting flange surrounding the top thereof, a rectangular base part made up of angle irons substantially corresponding in shape and size to and arranged directly below the top part with the horizontal sides of the angle irons projecting inwardly, standards comprising angle irons

connecting corresponding corners of the top and base part with the lower end of the angle irons fitting the corners of the base part and the upper ends of the irons abutting the lower edge of the top part, and panels removably secured to the ends and sides of the frame arranged substantially flush with the outer surfaces of the standards and enclosing the ends and sides of the tub and co-operating with the adjacent wall of the tub to provide a separate closed compartment for the driving mechanism. 10

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