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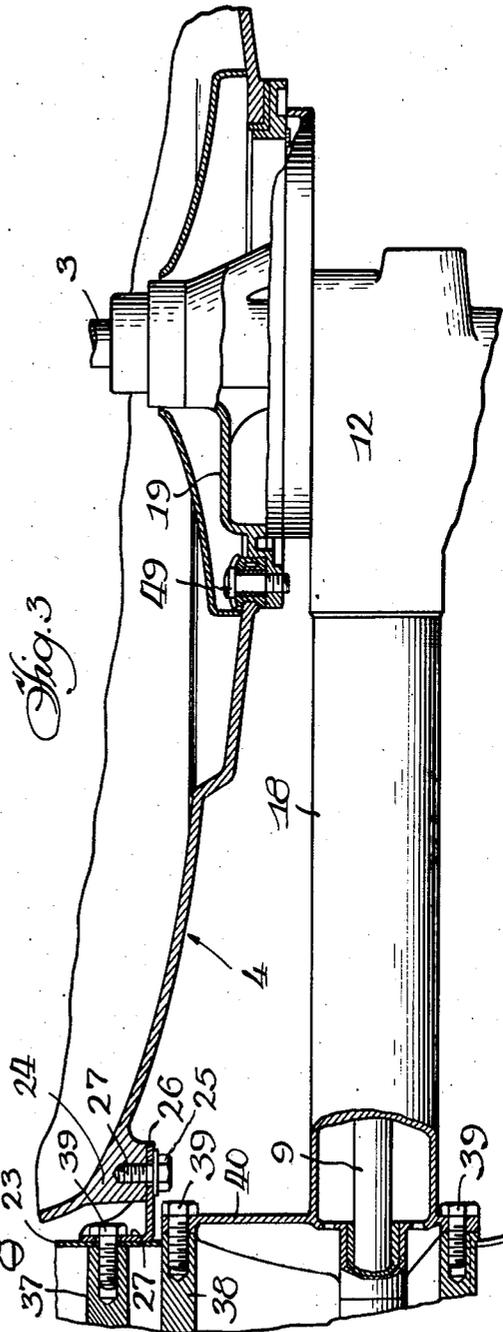
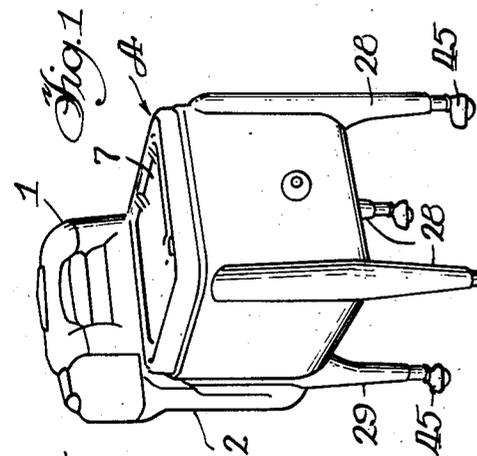
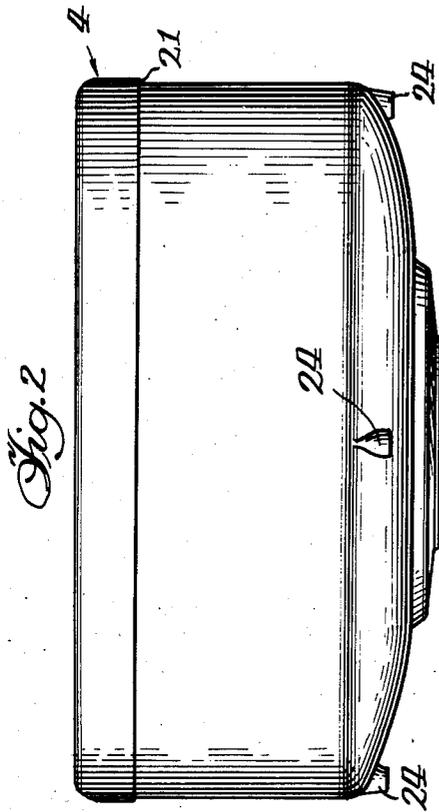
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2,351,237

SUPPORT AND MOUNTING FOR WASHING MACHINE TUBS

Filed July 29, 1940

2 Sheets-Sheet 1



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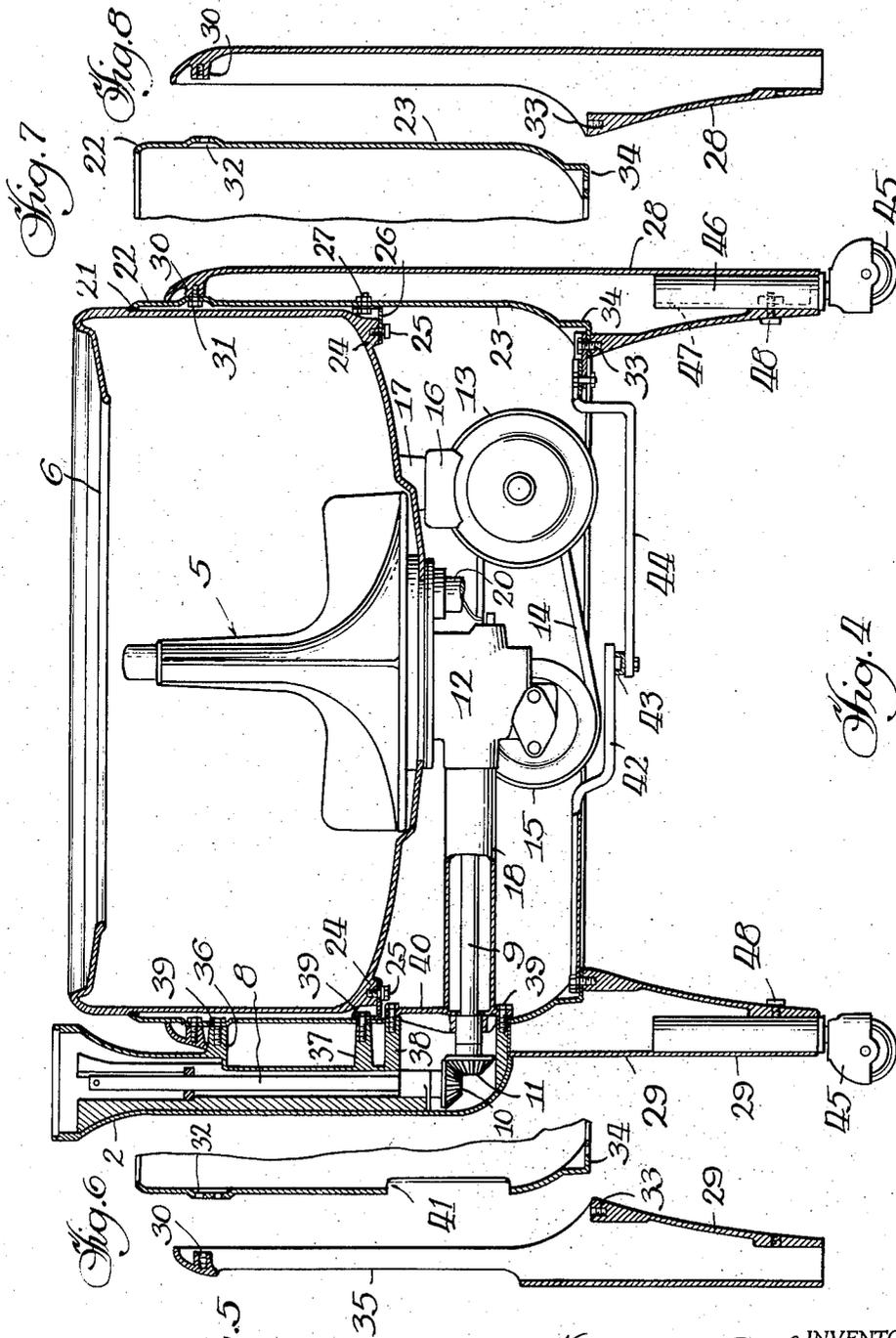
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SUPPORT AND MOUNTING FOR WASHING MACHINE TUBS

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2 Sheets-Sheet 2



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# UNITED STATES PATENT OFFICE

2,351,237

## SUPPORT AND MOUNTING FOR WASHING MACHINE TUBS

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2 Claims. (Cl. 68—3)

The present invention relates to a washing machine and more particularly to a novel support and mounting for the tub. In the disclosed embodiment, the tub is supported upon a frame or skirt in such manner that the tub is relieved of the weight and strains usually imposed upon it, and may be quickly and easily assembled or removed, should the occasion arise.

In the present construction, the tub is carried by an encompassing frame or skirt which provides a protection for the tub and its drive mechanism and power unit, as well as a most effective insulator for maintaining the temperature of the washing liquid. By spacing the skirt from the walls of the tub, an air space is provided therebetween.

Another novel feature of the present invention is the construction of the supporting legs which mount the frame or skirt. The entire assembly provides a most compact and rugged construction, with the associated parts so arranged and related that the assembly or disassembly may be carried out with a minimum of effort and in a minimum period of time. The construction admirably lends itself to standardization.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly and operation, and such further objects, advantages and capabilities as will later more fully appear and are inherently possessed thereby.

The invention further resides in the construction, combination and arrangement of parts illustrated in the accompanying drawings, and while I have shown therein a preferred embodiment, it is to be understood that the same is susceptible of modification and change, and comprehends other details, arrangements of parts, features and constructions without departing from the spirit of the invention.

In the drawings:

Fig. 1 is a view in perspective of a washing machine constructed in accordance with the novel invention.

Fig. 2 is a view in side elevation of the novel tub.

Fig. 3 is a fragmentary enlarged view, part in vertical cross section and part in side elevation, of the wringer drive and mounting therefor.

Fig. 4 is a view in vertical cross section through the tub and support assembly.

Fig. 5 is a view in vertical cross section of the power leg.

Figs. 6 and 7 are fragmentary views in vertical cross section taken through the opposite sides of the frame or skirt.

Fig. 8 is a view in vertical cross section of one of the supporting legs.

Referring more particularly to the disclosure in the drawings, the embodiment therein selected to illustrate the invention comprises a washing machine A having a wringer 1 swingably mounted upon the wringer post 2. A rotating or oscillating shaft 3 projects through the bottom of the tub 4 and upon this shaft is mounted a washing element or agitator 5. The tub is shown as provided with an inwardly inclined draining ledge 6 and a lid 7 for closing the opening in the top of the tub.

Within the wringer post 2 is mounted a wringer shaft 8 connected to and driven by a shaft 9 through a pair of meshing bevel gears or pinions 10 and 11. The shaft 9 is driven from any suitable drive mechanism housed within the gear case 12, such drive mechanism deriving its power from a motor or other power source 13 through a belt 14 and pulley 15. The motor is shown as mounted upon or supported from a bracket 16 suspended from lugs 17 on the under side of the tub. The gear housing or case 12 and the housing 18 for the wringer drive are suitably connected as a unit, with the gear case 12 having an upper section or cover 19 secured thereto and forming a portion of the tub bottom. Also depending from the gear case cover and tub bottom 19 is a drain hose 20 which has been broken away for clarity.

The side walls of the tub are provided with a continuous shoulder or offset 21 against which seats the upper edge 22 of the encompassing frame or skirt 23. A rubber ring or gasket is preferably interposed between this edge and the offset or shoulder. The skirt is so contoured as to allow for an insulating space between its upper portion and the outer walls of the tub, and with the sides of the skirt depending for a substantial distance below the tub so as to surround and substantially enclose the motor or power unit and drive mechanism. The tub bottom at each of its four corners is provided or formed with a depending lug 24 threaded to receive a bolt 25 for clamping thereto an angle bracket 26, the upper leg of which bracket is bolted to the skirt at 27.

The legs 28 and power leg 29 are each connected to and support the skirt. Each leg 28 is so contoured as to tightly embrace the skirt or frame 23 and adjacent its upper end is provided or formed with a threaded lug 30 for receiving a bolt or other securing means 31, the head of which is adapted to seat within a depression 32 provided in the skirt or frame. Each leg 28 is also provided with a threaded opening 33 for receiving a bolt or other securing means for connecting the angular

offset 34 of the skirt to the leg. The power leg 29 is similarly formed and connected to the skirt or frame, but this leg is in addition provided with a cut-out or recess 35 for receiving the wringer post, the latter being connected to the skirt or frame by offset projections 36 and 37, and additionally connected to and supported by a projection 38 on the wringer drive housing 18. Bolts or other securing means 39 may be used for this purpose. The wringer drive housing is provided with a substantially elliptical end plate 40 provided or formed on the end of this housing and extending into an opening 41 in the skirt.

In order to additionally brace and transversely support and connect the skirt and legs 28 and 29, the invention comprehends the brace bars 42, 43 and 44, the outer ends of which are connected to the skirt or frame and legs 28 and 29. In order that the machine may be readily moved about, each leg is provided with a caster 45. One or more of these casters may be provided with locking means to retain the machine in a predetermined position. To permit ready adjustment of the height of the machine, each leg is provided with an adjustable standard or pipe 46 slidably mounted in the leg. This standard or pipe is provided with a longitudinally extending slot 47 (see Fig. 4) and an adjusting bolt and nut 48.

From the above description and the disclosure in the drawings, it will be apparent that the invention comprehends a novel support and mounting for a washing machine tub and its operating mechanism and associated parts in which the parts may be quickly and easily assembled, and when assembled, provide a rugged unit, as well as a novel skirt or frame for insulating the tub and an enclosure and protection for the drive mechanism. Although the tub and frame or skirt are shown as substantially square in cross section, it is to be understood that the invention is not limited thereto and that the support and mounting is applicable to tubs of various shapes. Furthermore, it will be seen from the disclosure in Figs. 3 and 4 that all of the bolts or attaching means for mounting the tub in the frame and this frame on the legs, are concealed. All that is necessary to disassemble the tub is the removal of the bolts 25,

disconnection of the motor 13 and bracket 16 from the tub, and the removal of the bolts or screws 49 which connect the combined cover and bottom 19 to the gear case 12. The tub may then be lifted out.

Having thus disclosed the invention, I claim:

1. A support and mounting for a washing machine tub, comprising a shoulder provided on the exterior of the tub adjacent to but located below its upper edge, a frame adapted to encompass the tub and enclosing and insulating the wash water and the tub throughout the greater portion of the height of the tub and having an inturned upper edge for engaging under the shoulder on the tub and an angular offset at its lower edge, brackets on the frame for connecting the bottom of the tub to an intermediate portion of the frame for additionally supporting the tub, the frame being spaced in parallel relation from the side walls of the tub and projecting to a substantial distance therebelow, and legs spaced about the exterior of the frame and connected thereto adjacent the upper edge of the frame and to the angular offset at the lower edge of the frame for supporting the frame and tub above the floor.

2. In a power driven washing machine of the wringer type, a tub, a peripheral offset on the tub located below the upper edge thereof, a tub support comprising a frame adapted to surround the tub and spaced therefrom to provide an enclosure for substantially the entire height of the tub and extending a substantial distance below the bottom of the tub for enclosing the operating mechanism and power unit of the machine, the upper edge of the frame being turned inwardly and abutting the tub adjacent its upper edge, and the lower edge of the frame being offset, supporting legs contoured to extend over and conformably receive the frame and provided with an inwardly projecting offset adapted to support the offset lower edge of the frame, a wringer post projecting through an opening in one of said legs and an opening in the frame, and means for connecting the frame adjacent its upper and lower offset edge to the legs and wringer post in such manner as to conceal such connecting means.

THOMAS R. SMITH.