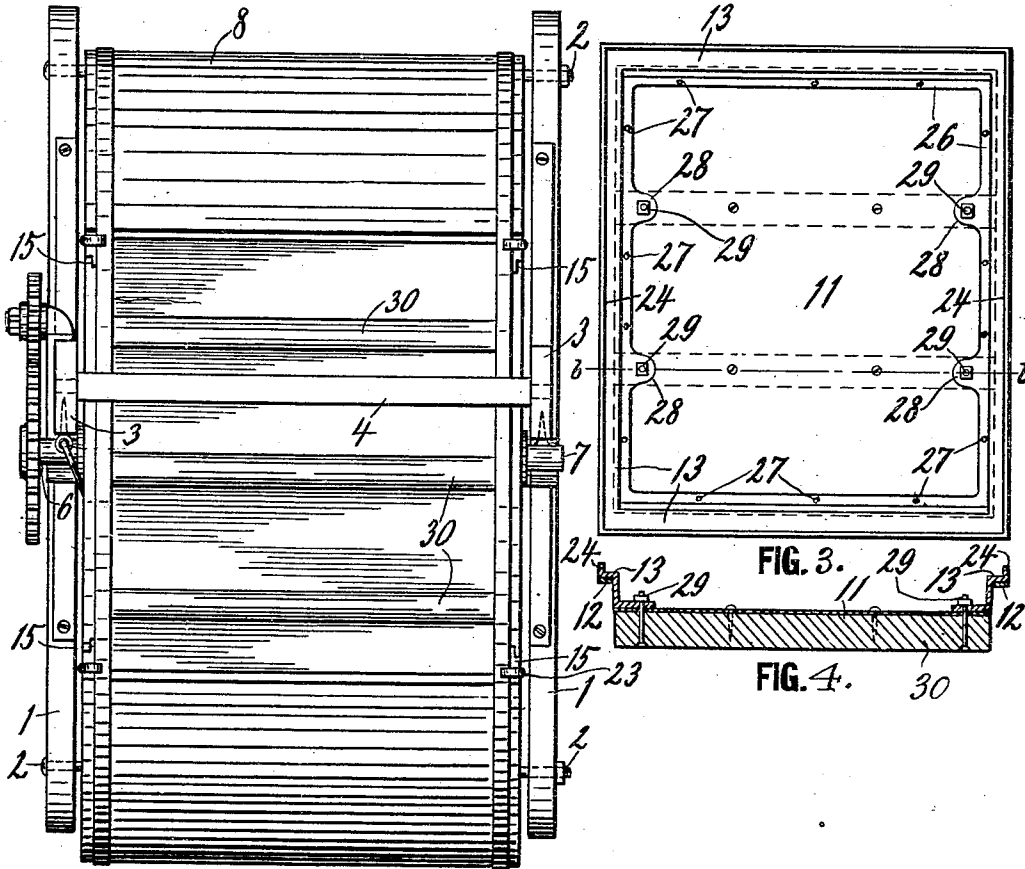
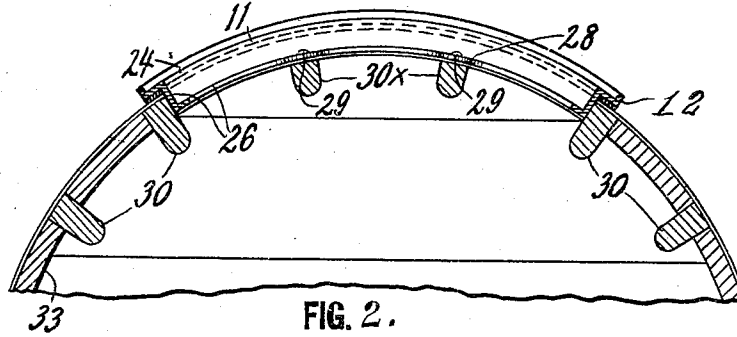


G. A. CARLSON.
WASHING MACHINE.
APPLICATION FILED MAR. 2, 1908.

943,177.

Patented Dec. 14, 1909.



WITNESSES:

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UNITED STATES PATENT OFFICE.

GUSTAV A. CARLSON, OF LAURIUM, MICHIGAN.

WASHING-MACHINE.

943,177.

Specification of Letters Patent.

Patented Dec. 14, 1909.

Application filed March 2, 1908. Serial No. 418,650.

To all whom it may concern:

Be it known that I, GUSTAV A. CARLSON, a citizen of the United States, residing at Laurium, in the county of Houghton and State of Michigan, have invented a new and useful Washing-Machine, of which the following is a specification.

This invention involves certain improvements in washing machines and relates particularly to a special form of cover construction for machines of this class.

For a full understanding of the invention, reference is to be had to the following detail description and to the accompanying drawings, in which—

Figure 1 is a top plan view, the lid or cover being removed; Fig. 2 is a sectional view through the upper part of the tub of the machine and the lid or cover; Fig. 3 is a plan view of the cover alone; Fig. 4 is a transverse section taken on the line *b—b* of Fig. 3.

Throughout the following detail description and on the several figures of the drawings, similar parts are referred to by like reference characters.

Specifically describing the invention and referring particularly to the drawings, the washing machine to which the invention is applied comprises the base pieces 1 connected by rods 2, and uprights 3 connected by a horizontal bar 4 above the tub and another below the tub not shown, the tub or body of the machine being rotatably mounted on the uprights 3 by means of suitable journals 6 and 7. The tub is of cylindrical form and rotates about a horizontal axis.

At one side of the top is provided the curved cover or lid 11 adapted to fit tightly against the portion of the tub adjacent to which it is arranged and by means of a packing strip 12 interposed between the cover and the tub. The cover 11 is formed with flanges 13 on its edge portions, said flanges being pressed into engagement with the packing strip 12 by the fastening means for the cover, when the latter is secured in operative position.

The means for holding the cover closed comprises clamps 15 mounted on opposite ends or heads of the tub.

The cover 11 is preferably made of galvanized sheet iron and is strengthened by a metallic frame 26 secured thereto by means of rivets 27, the frame being of somewhat Z-shape in cross section and having an edge rib on its flanges 13 to be engaged by hooks of the clamp device 15. The frame 26 has lugs 28 to receive fastening members or bolts 29 by which transverse cleats 30*, shown clearly in Figs. 2 and 3 and corresponding to the cleats 30 of the tub body, are attached.

It will be observed that an exceedingly rigid cover construction is provided by the present invention. Furthermore, said construction is particularly advantageous in that the cover is so arranged that the agitating cleats 30* carried thereby are in substantially the same relative position with respect to the tub, as are the cleats 30. Said cleats 30* reënforce the cover, acting as braces to make it more rigid, and performing as well their function as agitating means. The cleats 30* of the cover, also, are parallel with those of the tub.

Having thus described my invention, what I claim is:

A washing machine comprising a tub having an opening in a side thereof, agitating cleats projecting from the tub into the space surrounded thereby, and a cover for said opening comprising a plate adapted to fit into the same, a frame secured to the outer side of the plate at the edges thereof and formed with an offstanding flange adapted to overlap the tub aforesaid at the edges of the opening, said frame being formed with lugs projecting inwardly from the sides thereof, and brace means for the cover consisting of cleats arranged upon the inner side of the plate above mentioned and fastened to said plate and the lugs of the frame on the outer side of the plate, said cleats being parallel with the main agitating cleats before referred to and also constituting agitating means.

In testimony whereof I affix my signature, in presence of two witnesses.

GUSTAV A. CARLSON.

Witnesses:

GEORGE A. LADD,
D. E. CARLSEN.