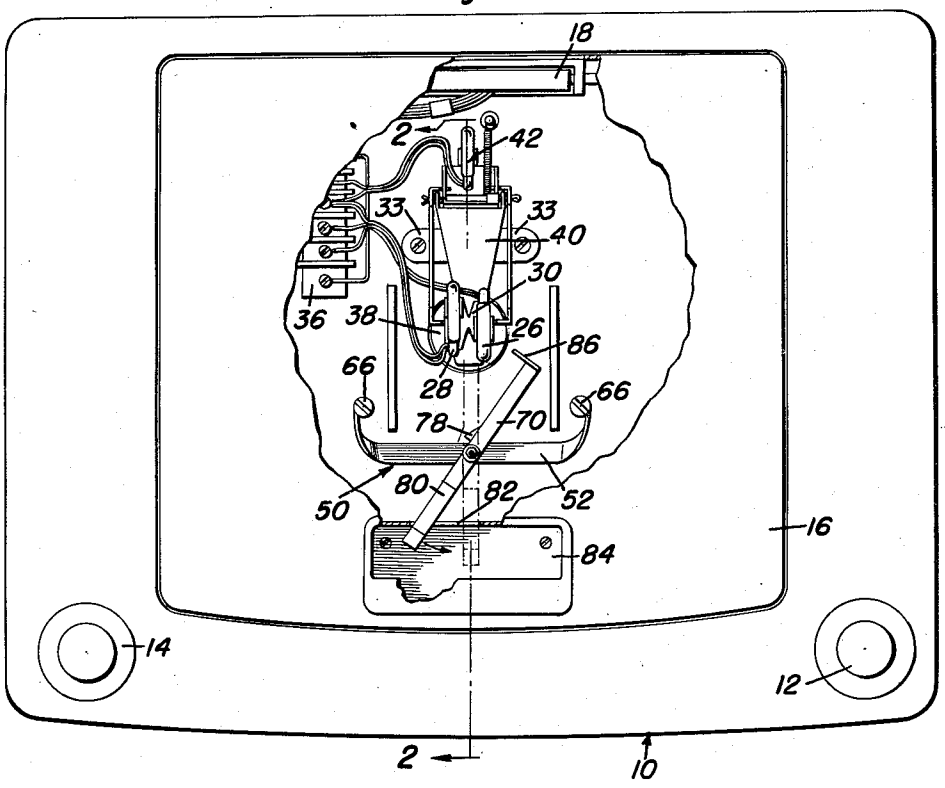
Dec. 2, 1952 D. W. WIBLE 2,619,822

WASHING MACHINE PROVIDED WITH MANUALLY OPERABLE LID MOUNTED SEQUENTIAL CONTROL SWITCH

Filed Oct. 20, 1950 2 SHEETS—SHEET 1

Fig.1



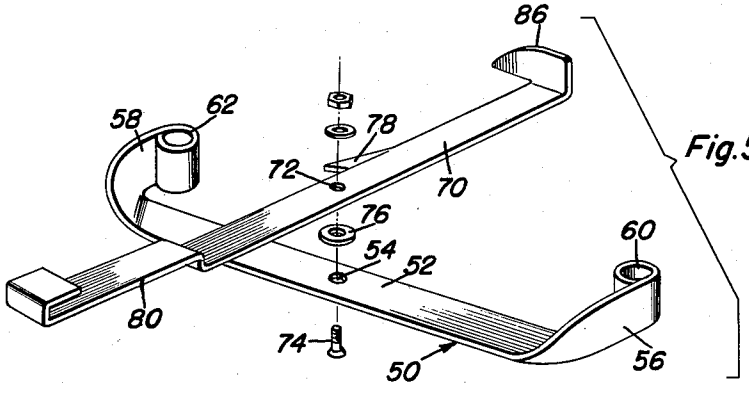


Fig.5

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Filed Oct. 20, 1950 2 SHEETS—SHEET 2

Fig.2

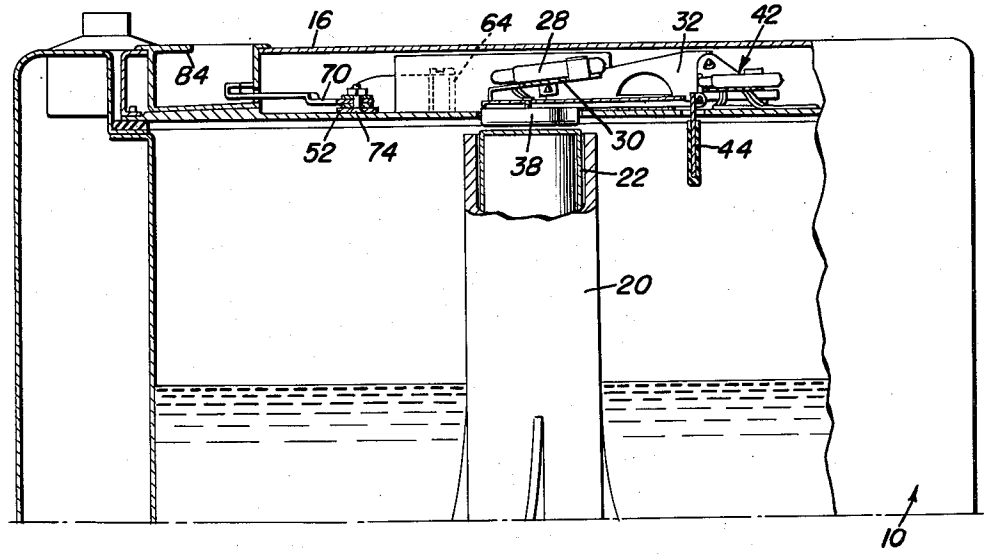


Fig.3

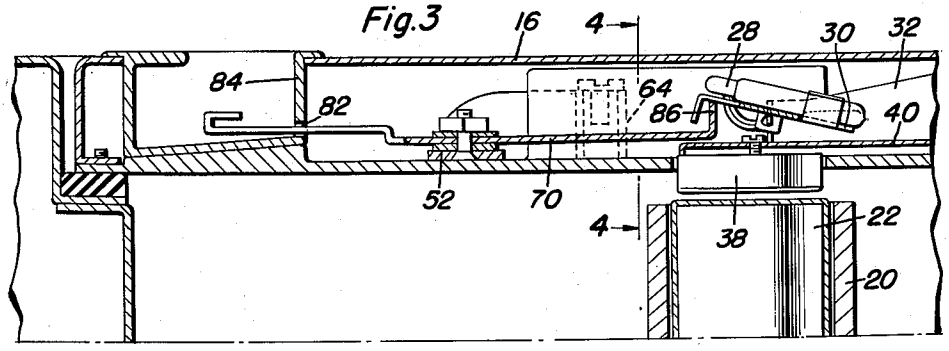
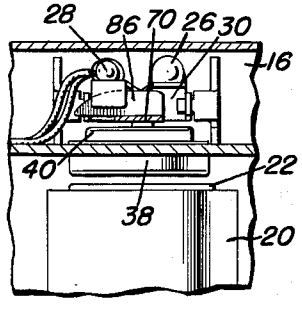


Fig.4



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UNITED STATES PATENT OFFICE

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WASHING MACHINE PROVIDED WITH MANUALLY OPERABLE LID MOUNTED SEQUENTIAL CONTROL SWITCH

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Application October 20, 1950, Serial No. 191,133

6 Claims. (Cl. 68—12)

1

This invention relates to attachments for washing machines of the automatic type.

An object of this invention is to provide an attachment for a washing machine which is of the automatically operative type, the attachment making it possible to convert from automatic operation to manual operation through the agency of preventing normal operation of various control switches.

Ancillary objects and features of importance will become apparent in following the description of the illustrated form of the invention.

In the drawings:

Figure 1 is a plan view of a standard automatic washing machine having portions of the lid broken away to illustrate internal detail;

Figure 2 is a longitudinal sectional view taken substantially on the line 2—2 of Figure 1 and in the direction of the arrows;

Figure 3 is an enlarged sectional view of some of the structure shown in Figure 2, illustrating it in a second position;

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 3 and in the direction of the arrows, and;

Figure 5 is an exploded perspective view of the elements of the attachment.

In the drawings there is a washing machine 10 with a standard water temperature control 12 and timer control 14. A lid 16 hinged as at 18 to the washing machine housing is provided over the clothes receiving aperture. As disclosed in Figure 1 there is an agitator tube 20 with a float 22 disposed in the bore thereof. All of this structure is standard as is certain other structure to be discussed at this time.

The illustrated washing machine is of the automatic type and certain operations are controlled in response to the position of the lid 16. The agitator mercury switch 26 and the water control switch 28 are mounted upon the bracket 30, this bracket being pivoted to the fixed support 32. Said support is secured by the ears 33 to the bottom wall of the lid 16. The mercury switches are so arranged and so wired through the terminal block 36 that lowering the lid causes the water to flow into the tub, after the master switch is thrown, until such time that the float 22 rises sufficiently far that the button 38 is contacted, raising it along with the pivoted plate 40 to which it is attached, causing pivotal movement of the bracket 30. Then, the water stops flowing and the agitator begins to operate.

The standard spring loaded safety switch 42, which is latched and released by the balance bar

2

44 is also located in the lid, but this part of the standard construction does not have any bearing on the operation of the attachment for these washing machines aside from the fact that the safety switch 42 is unaffected by the presence of the attachment.

The above briefly describes the normal operations of at least one type of standard automatic washing machine. It is some times desirable to use only half the normal quantity of water in washing clothes. Therefore an attachment has been provided for purpose of preventing the normal operation of the switches 26 and 28 or at least, causing them to operate prematurely. The saving of water does not on its face appear to be of great significance. However it must be considered that the water has to be heated and that for an excess amount of water to be used, an excess amount of soap must also be used. These factors taken into consideration make the use of the instant attachment valuable.

As disclosed in Figure 5 there is a mounting bracket 50, said bracket consisting of a flat bar 52 having an aperture 54 intermediate its ends. The actual ends of the bar are curved as at 56 and 58 and are rolled to constitute the bearings 60 and 62.

The standard washing machine lid 16 is already provided with posts 64 and therefore the bearings 60 and 62 have been specifically designed to be inserted there over and may be held in place by the screws 66 if found desirable, although they may be omitted.

An arm 70 is provided with an aperture 72 through which the bolt 74 passes. This bolt also passes through the aperture 54 and serves the purpose of a pivot pin, there being a spacer washer 76 located between the bar 52 and the arm 70. Standard lock washers and nuts or a nut are used at the outer end of the bolt 74 to hold it in place.

There is a stop 78 on the arm 70 intermediate its ends and it is arranged to contact the rod 52 for the purpose of preventing excess movement of the arm 70. The outer end of the arm 70 has an offset 80, this offset passing through a slot 82 which is in the hand grip case 84, this case being standard equipment in the lid 16.

The opposite end of the arm 70 is provided with a cam 86, made from the same stock as the arm 70 but extending at right angles to the upper or lower surfaces of the arm 70.

The function of the cam 86 is to pass under the mounting bracket 30 for the switches 26 and 28 and lift one end of the mounting bracket there-

by causing it to be operated pivotally and thereby causing the switches to be actuated. This of course, will stop the flow of water into the tub and will cause agitation to begin. The use of the device allows the person washing clothes to use any desired amount of water and yet, the machine may be used as was originally intended by simply moving the arm 70 to an inoperative position.

Having described the invention, what is claimed as new is:

1. In a washing machine of the automatic type which has a lid and a liquid level control float as well as a water control and agitation switch control assembly operated by said float carried by said lid, an attachment for operating said switch assembly prior to the normal float actuation thereof, said attachment including an arm displaceably carried by said lid of the washing machine and having one end thereof constituting a hand grip for manual displacement of said arm, and means operatively connected with said arm for actuating said switch assembly.

2. In a washing machine of the automatic type which includes an agitator, a tub within which the agitator is disposed, a lid for the tub and control means carried by the lid for controlling the quantity of liquid which enters the tub, the improvement which comprises an arm carried by said lid, a stop on said arm limiting the movement of said arm, and a cam carried by said arm and arranged to engage said control means for prematurely actuating said means thereby controllably regulating the quantity of liquid entering the tub.

3. In a washing machine of the automatic type which has a lid and normally operable control switch assembly carried by the lid, the

improvement comprising an attachment for actuating said control switch assembly prior to normal automatic actuation thereof, said attachment including an arm displaceably carried by the washing machine lid, one end of said arm constituting a hand grip for manual displacement thereof, the other end of said arm being located with respect to said switch assembly to operate said switch assembly in response to displacement of said arm so that said switch assembly may be manually operated.

4. The combination of claim 3 and a stop operatively connected with said arm to limit the extent of displacement of said arm, and a mounting bracket for said arm carried by said lid.

5. The combination of claim 3, said lid being provided with a hand grip case in which said hand grip is located.

6. In a washing machine of the automatic type having a lid and a liquid level control float as well as a liquid control and agitation switch assembly carried by the lid, an attachment comprising a manually operable arm mounted for pivotal movement on the lid, and means at one end of said arm being arranged to actuate the switch assembly in response to movement of said arm.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
2,026,980	Joy	Jan. 7, 1936
2,346,259	Hutchings	Apr. 11, 1944
2,449,634	Baade	Sept. 21, 1948