Nov. 24, 1953 J. P. ROGERS 2,660,273

LAUNDRY APPLIANCE CONTROL PANEL CONSTRUCTION

Filed Sept. 15, 1952

Fig. 1.

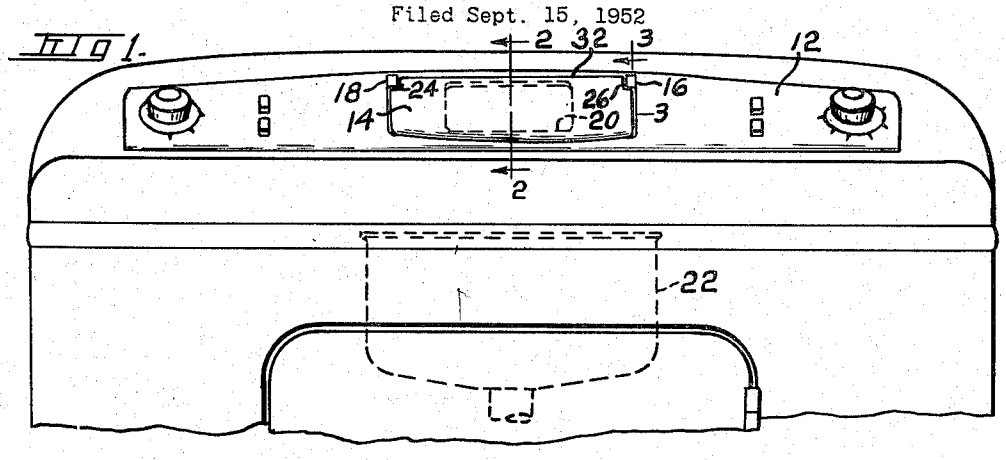


Fig. 2.

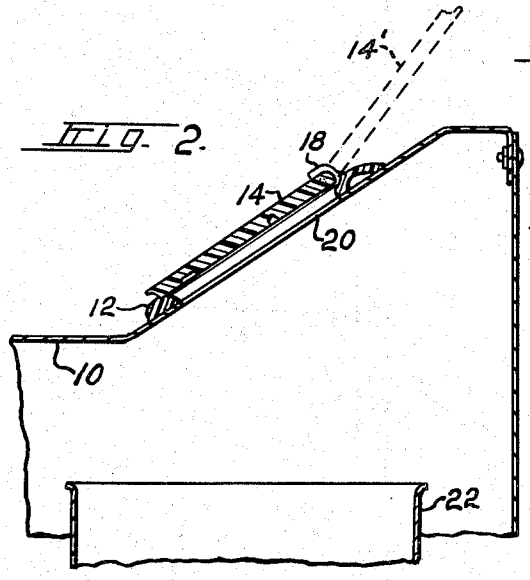


Fig. 3.

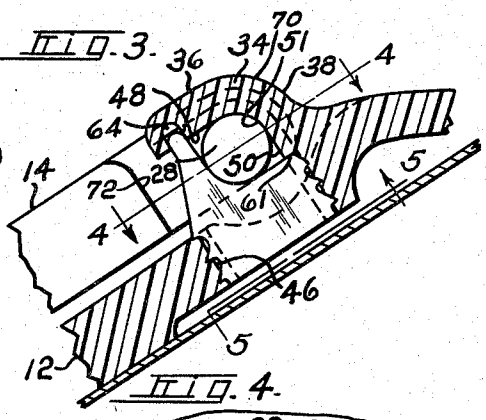


Fig. 4.

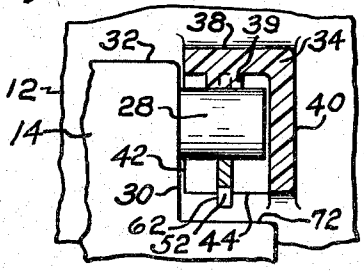


Fig. 5.

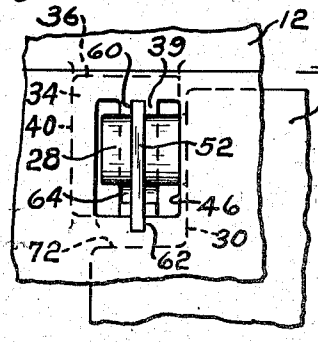
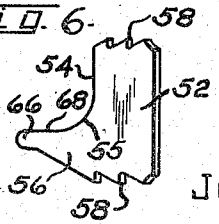


Fig. 6.



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Patented Nov. 24, 1953 2,660,273

UNITED STATES PATENT OFFICE

2,660,273

LAUNDRY APPLIANCE CONTROL PANEL CONSTRUCTION

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Application September 15, 1952, Serial No. 309,725

2 Claims. (Cl. 189—46)

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This invention relates to laundry appliance control panel construction, and more particularly to a panel having a soap access doorway and hinged door cover therefor.

An object of the invention is to provide a panel and door construction comprising parts capable of being molded, and which will be capable of ready assembly. The construction embodies a panel and door frame part, a door proper, and a construction whereby an insertable keeper performs the necessary function of securing the parts together while completing the hinge journal for the door.

The above and other novel features of the invention will appear more fully hereinafter from the following detailed description when taken in conjunction with the accompanying drawings. It is expressly understood that the drawings are employed for purposes of illustration only and are not designed as a definition of the limits of the invention, reference being had for this purpose to the appended claims.

In the drawings, wherein like reference characters indicate like parts:

Figure 1 is a front elevational view of the panel and door;

Figure 2 is a transverse sectional view taken substantially on the line 2—2 of Figure 1;

Figure 3 is an enlarged sectional view through a pintle and journal box taken substantially on the line 3—3 of Figure 1;

Figure 4 is an enlarged axial sectional view taken through the pintle, taken substantially on the line 4—4 of Figure 3;

Figure 5 is a fragmentary enlarged elevational view looking upward from the plane 5—5 of Figure 3; and

Figure 6 is a perspective view of the keeper.

Referring to Figures 1 and 2, there is shown a cabinet 10 of a laundry appliance such as a washing machine, having an inclined back control panel 12. Such panel is provided with a door 14 hinged as at 16 and 18 to cover an aperture indicated at 20. Such aperture is arranged directly over a soap-mixing hopper 22. The door 14 is notched at its upper corners as at 24 and 26, and is provided with oppositely extending pintles as indicated, for example, at 28 in Figures 3–5, inclusive, the right handle pintle being shown. Opposed pintles extend from the opposite end edges such as 30 in the notched corners 24 and 26 of the door adjacent to the connecting side edge 32.

The pintles 28 are positioned each within right

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and left hand integral upstanding journal boxes as indicated with respect to the right hand end at 34, each of such journal boxes having a top wall 36, a rear wall 38, and an end thrust wall 40. Each of the boxes are open on their facing sides as indicated at 42, and are open toward the door as at 44. The panel proper is provided with apertures 46 extending therethrough in substantial alignment with each of the journal boxes. It will be seen that the inside surface 48 of the top wall 36 and the inside surface 50 of the rear wall 38 are provided with a rib 39, which forms in part a bearing for the pintle 28, such rib having a curved fillet 51 having a radius substantially that of the pintle.

The open sides 42 and 44 of each of the journal boxes permit the ready assembly of the door and the positioning of its pintles 28 in bearing engagement with the respective rib 39 and fillet 51 in each of the journal boxes 34. In order to retain the door in position and to maintain the pintles 28 within the journal boxes, there is provided in conjunction with each of the journal boxes a keeper member (see Figure 6) adapted to be projected from the under side of the panel into position. Each of such keeper members comprises a body portion 52 having a shoulder 54 from which there is provided a projection or tongue 56. The side edges of the keeper member are provided with saw-teeth 58 adapted to engage the opposed walls of the aperture 46. The aperture 46 is provided on one side with a slot 60 of a width substantially that of the keeper member 52 to the rear thereof, and a slot 62 oppositely disposed on the other side, such slots 60 and 62 being adapted to snugly receive the saw-toothed edges of the keeper member 52 when projected into position. The slot 60, formed in the rib 39, terminates in a shoulder 61 adapted to engage the shoulder portion 54 of the keeper to properly position the keeper when inserted in position. The rib 39 in the top wall 36 is provided with a recess 64 to receive the extreme end 66 of the tongue 56. As is shown in Figure 3, when the keeper is in position, the shoulder 54 and the inside edge 68 of the tongue 56 and the curved fillet 55 form bearing surfaces opposed to the surface of the rib 39 and rib fillet 51 of the journal box whereby the door pintles are positioned for ready rotation upon their axis for opening or closing of the door. The exterior of each of the journal boxes is so curved as at 70 to permit passage of the shoulder 72 of the notched corners of the door and permit the door

to open to a position out of and to the rear of the vertical, as is indicated at 14' in Figure 2.

From the foregoing, it will be seen that there is provided a panel with integral journal boxes which may be readily molded, and which is adapted to receive a molded plastic door having integral pintles in a manner to retain the door in proper pivotal relation merely by the insertion of the keepers 52 in conjunction with each journal box. The saw-teeth 58 permit ready insertion of the keeper, and at the same time prevent dislocation thereof when once inserted. In practice, the door may carry upon it any suitable indicia, and will provide an adequate closure for the aperture 20 located therebeneath, while at the same time being adapted to be swung to an out-of-the-way open position.

While a single embodiment of the invention has been illustrated and described, it is to be understood that the invention is not limited thereto. As various changes in the construction and arrangement may be made without departing from the spirit of the invention, as will be apparent to those skilled in the art, reference will be had to the appended claims for a definition of the limits of the invention.

What is claimed is:

1. In a hinged door construction for a panel opening, a panel member having an opening therein, and a door member hinged thereon to close said opening, said door member having opposed pintles projecting from its opposite end edges, adjacent a connecting side edge, said panel member having integral upstanding journal-receiving boxes for receiving said pintles, said boxes being open on the sides facing one another, and on the sides facing in the direction of the door when in closed position, and having a top and rear wall adapted to tangentially engage the pintle and a pintle end thrust wall, whereby the door pintles may be positioned within said journal boxes by movement transverse of the pintle axis, said panel having a journal access aperture extending therethrough in substantial alignment with the interior of each of said journal boxes, and keeper members positioned in said access apertures, each having a transverse shoulder and a tongue, the latter projecting into said journal box forward of the wall thereof opposite the door facing open side, said tongue and shoulder being spaced from the tangentially pintle-engaged journal box walls to provide bearing surfaces for said pintle diametrically opposed to said last-named journal box walls.

2. In a hinged door construction for a panel opening, a panel member having an opening therein, and a door member hinged thereon to close said opening, said door member having opposed pintles projecting from its opposite end edges, adjacent a connecting side edge, said panel member having integral upstanding journal-receiving boxes for receiving said pintles, said boxes being open on the sides facing one another, and on the sides facing in the direction of the door when in closed position, and having a top and rear wall adapted to tangentially engage the pintle and a pintle end thrust wall, whereby the door pintles may be positioned within said journal boxes by movement transverse of the pintle axis, said panel having a journal access aperture extending therethrough in substantial alignment with the interior of each of said journal boxes, and keeper members positioned in said access apertures, each member having a transverse shoulder and a tongue, the latter projecting into the respective journal box forward of the wall thereof opposite the door facing open side, said tongue and shoulder being spaced from the respective tangential pintle-engaged journal box walls to provide bearing surfaces for said pintle diametrically opposed to said last-named journal box walls, the top wall of each box having a tongue-receiving recess, and the end of each tongue projecting thereinto, and the access aperture engaging edges of said keeper being saw-toothed to facilitate insertion of the keeper into the access aperture and to secure the same from subsequent dislocation.

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