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54 **Pop-up waste.**

57 A pop-up waste control for a sink or like, is for controlling the wastes in a plurality of sinks and has two or more shafts (24, 26) each carrying a radial lever (34, 36) at one end and a radial crank (28) at the other end, all of the shafts being rotatable individually in a common body (10) adapted to be fixed to the sink wall.

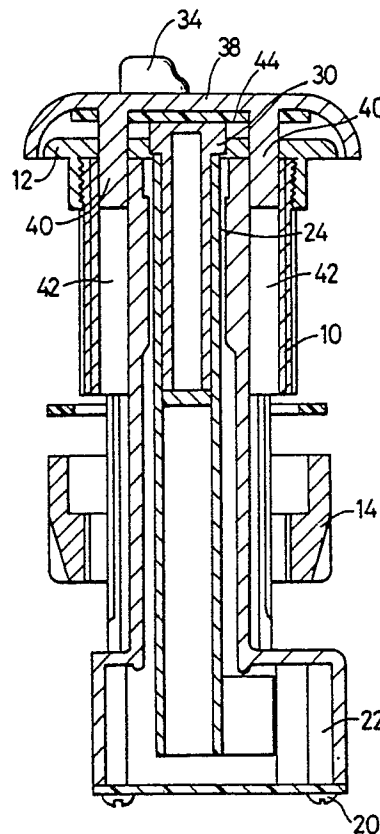


Fig. 3

POP-UP WASTE

This invention relates to pop-up wastes and more particularly controls for the same.

Patent GB 2184011 proposes a pop-up waste control comprising a body part to extend through an aperture in a wall of the sink (for example) and having a pair of flanges to clamp said part in position. A shaft extends through the said part and carries a crank at one end. The shaft has an operating knob to enable it to be turned so as to turn the crank and operate the waste plug via a Bowden cable connected to the crank.

Modern sinks often have two or more sink bowls each with their own waste aperture and closure plug. Hitherto it has been necessary to provide each bowl with a separate waste control. But this necessitates the provision of separate apertures in the sink, each of which have also to be sealed. It would be desirable to incorporate two or more shafts into a common body part in order to use only a single aperture and seal, but this has been considered to be impractical because the aperture would then be so large as to weaken the sink, apart from being clumsy in appearance. The invention aims to solve this problem by providing a multi-plug control of compact dimensions.

In accordance with the invention, a pop-up waste control for a plurality of sinks or like, comprises a single body part jouralling a plurality of generally parallel shafts each having a corresponding crank at one end for connection to a corresponding Bowden cable, and each shaft being angularly fast with an operating lever projecting generally radially of the shaft.

Hence, by using radially projecting operating levers instead of control knobs, the dimensions can be made particularly compact. Hence the shafts can be closely adjacent to one another enabling the body to be of small cross sectional area.

The invention is now more particularly described with reference to the accompanying drawings wherein:-

Figure 1 is an end elevation of a twin control for pop-up wastes;

Figure 2 is a sectional elevation taken on the line A-A of Figure 1; and

Figure 3 is a sectional elevation on an enlarged scale taken on the line B-B of Figure 1

Referring to the drawings, a single body part 10 is generally of circular cross-section and conveniently is formed with male screw threads over a major part of its length and which are engaged with an end flange 12 and a clamp nut 14. The sink or like wall is to be trapped between the parts 12 and 14 so as to fix the control in position, with a major part of the body 10 lying behind the sink wall and

out of sight of the user in normal circumstances.

Part 12, which is visible to the user, will be shaped and finished as desired with aesthetic considerations in mind. It may or may not be an injection moulding of plastics material.

An optional thick soft washer may be provided under Part 12 to accommodate non-planar or non-flat sink walls.

Body part 10 is formed integrally, conveniently as an injection moulding of plastics material, with a hollow box-like shape 16 closed by a lid 18 held in place for example by screws 20 (Figure 3) engaged in bosses 22 formed in the interior of the box 16 for this purpose.

The body 10 has a pair of parallel tubular bores therein, which serve to journal a pair of generally parallel and tubular operating shaft 24,26. Each of the shafts is formed integrally with a crank 28 lying in the box 16 and adapted for connection to the corresponding Bowden cable so that when its crank is turned it causes the inner wire of the Bowden cable to be displaced relative to the outer sheath of the same.

Each shaft extends to the end of the body 10 which is provided with the flange 12, and is there connected to a corresponding operating lever 32 which may have a non-circular cross-section shank 34 engaged in a complimentary cross-section bore portion of the corresponding tubular shaft. The levers 30,32 are provided with projecting lugs 34,36 for manual operation so as to turn the shafts. These levers are also shaped, and constructed with aesthetic considerations in mind.

The assembly is or may be completed by a cover 38 which is cutaway at diametrically opposed positions to enable the lugs 34,36 to project through the cutaways, and the cover has a pair of spigots 40 (Figure 3) which are a push-fit in further bores 42 formed in body 10. A rubber washer 44 is trapped between the cover plate 38 when used and the end face of the levers 30,32, and this can provide a slight frictional resistance to movement of the levers sufficient to hold them angularly in either of the possible positions corresponding to the respective waste plugs being fully open or fully closed. Conveniently the bores 42 are slightly tapered along their length so that the cover plate is wedged into position.

The required angle of movement of the levers 34,36 may be of the order of 45 deg. and it will be appreciated from consideration of Figure 1 that substantially the same construction could be used to accommodate three or even four levers and hence a like number of control mechanisms, without increasing the diameter of the body.

Claims

1. A pop-up waste control for a plurality of
sinks or like, comprising a single body part (10)
journalling a plurality of generally parallel shafts (24 5
26) each having a corresponding crank (28) at one
end for connection to a corresponding Bowden
cable, and each shaft being angularly fast with an
operating lever (30,32) projecting generally radially
of the shaft. 10

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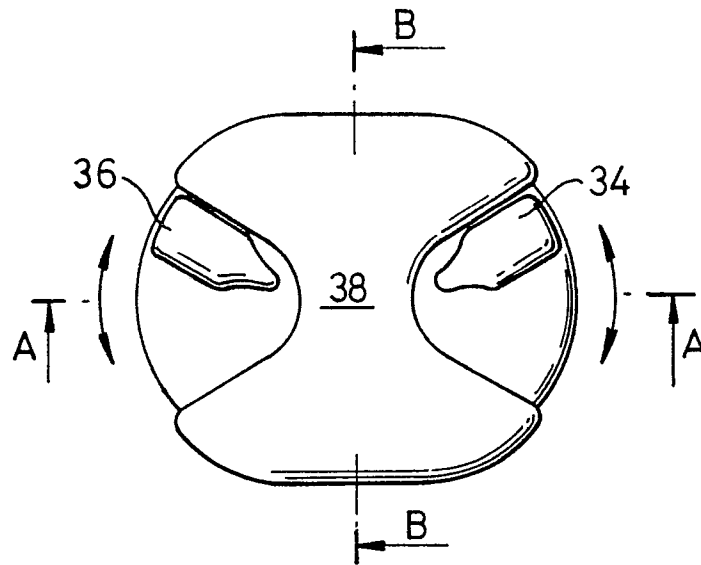


Fig. 1

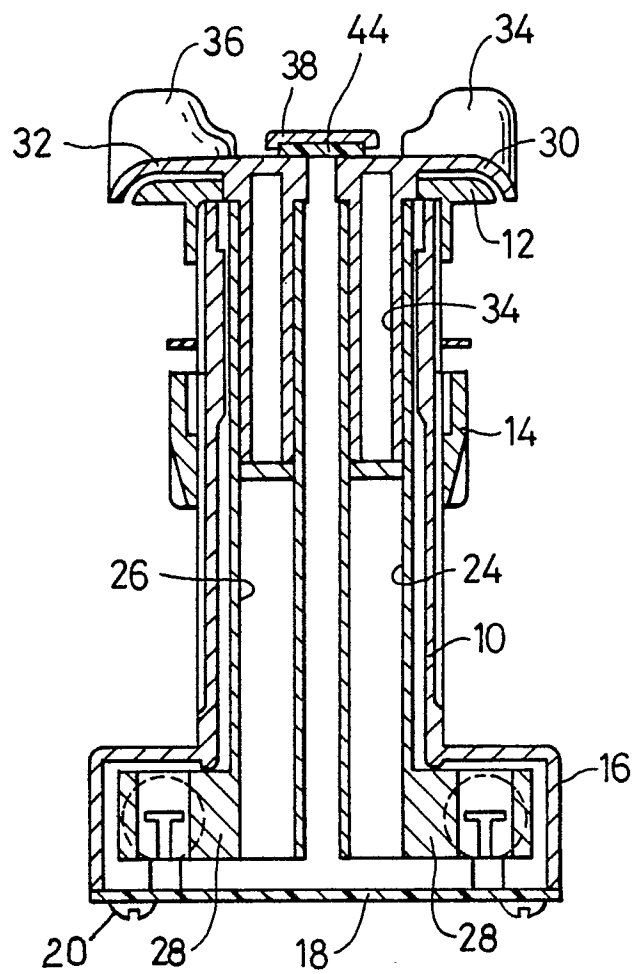


Fig. 2

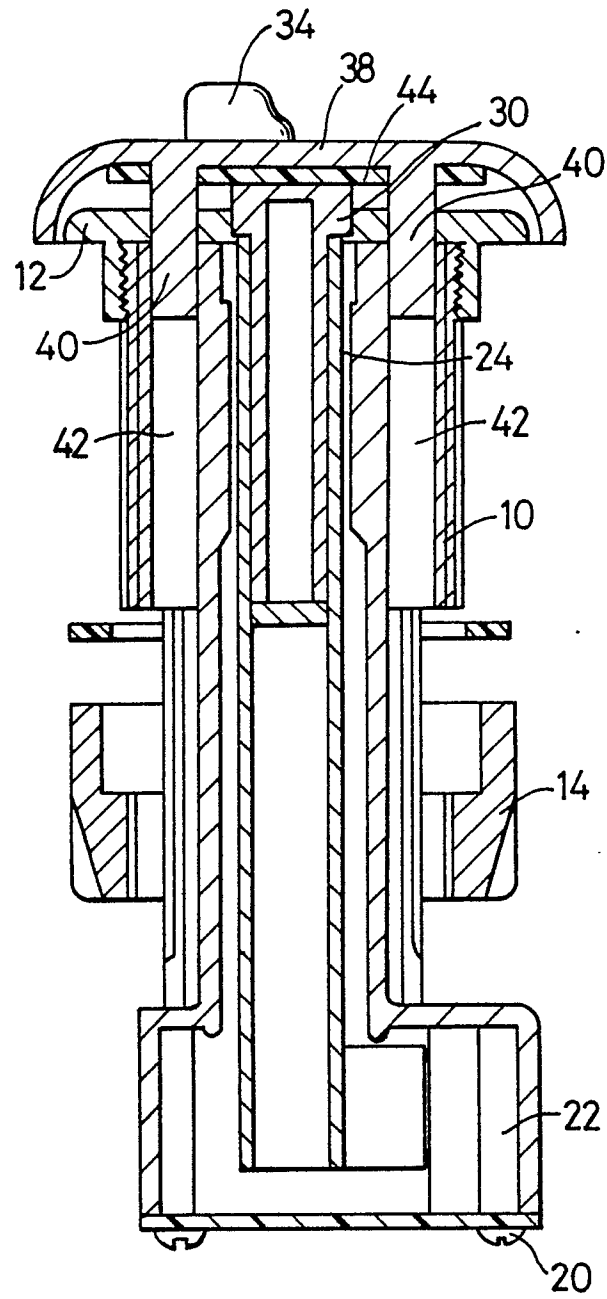


Fig. 3



DOCUMENTS CONSIDERED TO BE RELEVANT							
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)				
Y	GB-A-2 092 695 (FORD MOTOR CO.) * Abstract; page 1, lines 106-129; page 2, lines 1-21; figures 1,2 * ---	1	E 03 C 1/23				
Y,D	GB-A-2 184 011 (EDWARDS) * Page 1, lines 93-124; figures 4,5 * ---	1					
P,A	DE-A-3 708 182 (VIEGENER) * Whole document * ---	1					
A	US-A-1 930 633 (WATROUS) * Page 1, lines 84-95; figures 1-3 * ---	1					
A	FR-A- 385 368 (CONTI) -----						
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)				
			E 03 C F 16 C				
The present search report has been drawn up for all claims							
Place of search THE HAGUE		Date of completion of the search 12-09-1989	Examiner HANNAART J.P.				
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