Jan. 20, 1970 A. FIRTH 3,490,083

PLUGS FOR OUTLETS OF WASH-HAND BASINS AND THE LIKE

Filed Feb. 26, 1968

Fig. 1.

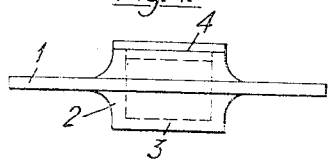


Fig. 2.

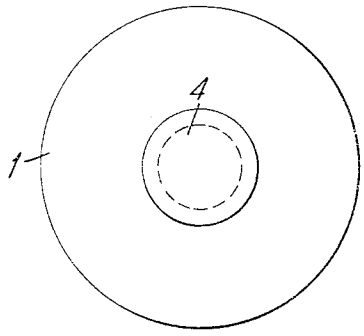


Fig. 3.

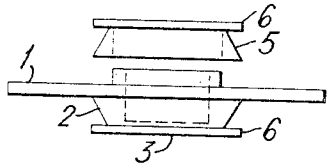
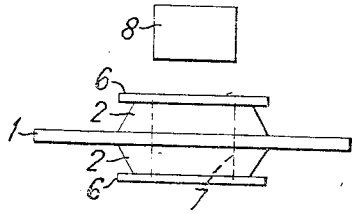


Fig. 4.



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3,490,083
Patented Jan. 20, 1970

3,490,083

PLUGS FOR OUTLETS OF WASH-HAND BASINS AND THE LIKE

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Filed Feb. 26, 1968, Ser. No. 708,174
Claims priority, application Great Britain, Mar. 14, 1967, 11,971/67
Int. Cl. A47k *1/14;* E03d *1/34*
U.S. Cl. 4—295 1 Claim

ABSTRACT OF THE DISCLOSURE

A sealing plug for a wash-hand basin or the like has a central body portion of solid low-density material with an annular flange projecting from it. The flange and at least part of the body may be an integral moulding. The body may be hollow and packed with solid material such as cork or foamed plastics.

This invention relates to plugs for outlets of wash-hand basins and the like, and aims at the provision of a plug of simple construction offering greater convenience than those heretofore in use.

The invention consists in a plug for the outlet of a wash-hand basin or the like adapted to close and seal the outlet when associated therewith, and being of buoyant construction adapted to float in liquid in the basin when free to do so.

The plug may comprise a body in the form of a closed air or gas chamber or an insert of low-density material. A rim or flange may extend from the body of sufficient size to close the basin outlet.

The invention will be clearly understood from the following description of forms (given, however, merely by way of example) which it may assume, and this description will be more readily followed by reference to the accompanying drawings wherein:

FIGURES 1 and 2 represent in side elevation and plan respectively a plug for a wash-hand basin or the like in accordance wtih the invention: and

FIGURES 3 and 4 represent in side elevation modified forms of plug in accordance with the invention.

In carrying the invention into effect conveniently, as shown in the aforesaid drawings, a plug for the outlet of a wash-hand basin or the like comprises a buoyant body with a flat annular surrounding flange.

In the form of plug shown in FIGURES 1 and 2 the flange **1** surounds a central cylindrical enclosure **2** closed by a base **3**, and by a lid **4** at its mouth. The enclosure **2** extends substantially equally above and below the flange **1**, with which it may be integral, or to which it may be rigidly secured. The lid **4** is a tight sealing fit in the mouth of the enclosure, and may be removable (being held therein mainly or wholly by friction), or may be permanently secured in the body, e.g. by adhesive. The interior of the enclosure sealed by the lid **4** may contain air or other gas, or may be packed with a buoyant material, such as cork or a foamed plastic material. In either event the enclosure **2** forms a buoyant body which when free will float (carrying the solid flange **1**) in water or other liquid in a basin. To close the outlet of a basin the flange **1** is placed over the outlet (being of greater diameter than the outlet) with the lower body portion **2**, **3** projecting down into the outlet, and when

water enters the basin the pressure holds the plug in that sealing position. To release water from the basin the plug is moved sideways in order to displace the flange **1** and thus partially or fully open the drainhole, whereafter, since pressuer is then equalized on opposite sides of the plug, it floats and rises in the water. The shapes of the sides of the plug, as ilustrated, facilitate the escape of the plug from the drainhole, to become free to float.

In a modified plug shown in FIGURE 3 the led **4** is replaced by an internally bored sealing cover **5** adapted to fit outside the uper part of the body **2**. The outer surfaces of the cover **5** and the body **2** beneath the flange **1** may be frusto-conical, as shown, and each may be provided with a rim **6**.

In the form of plug shown in FIGURE 4 a frusto-conical body portion **2** with a rim **6** is rigidly secured to each side of the flange **1**, but a bore **7** open at one, or both, ends extends through the body, and into it is permanently or removably fitted a buoyant body **8** (which may be a closed air chamber, or an insert of cork or other suitable material).

In all plugs in accordance with the invention the flange and body portions may be moulded from rubber or a suitable plastics material, or may be fabricated from wood or a light metal, e.g. aluminum.

From the above description it will be seen that the invention provides a simple and effective form of buoyant plug for a wash-hand basin or the like, but it should be understood that the invention is not limited solely to the details of the form described above, which may be modified, in order to meet various conditions and requirements encountered, without departing from the scope of the invention.

What I claim is:

1. A plug for removably closing a waste-water outlet comprising an open-ended hollow body adapted to be inserted into the outlet, said body having an annular flange extending therefrom and a first annular rim portion projecting horizontally from the bottom of said body, said flange being greater in diameter than said body and sapced from the bottom thereof, and an end closure having a second annular rim at the top thereof, said end closure being adapted to fit and close the open end of the hollow body, and being removable therefrom to allow the insertion of buoyant material into the hollow body, the parts being formed of a low-density material, and the plug as a whole being buoyant.

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U.S. Cl. X.R.

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