June 3, 1958 J. HURWITZ 2,836,831

WASH BASIN

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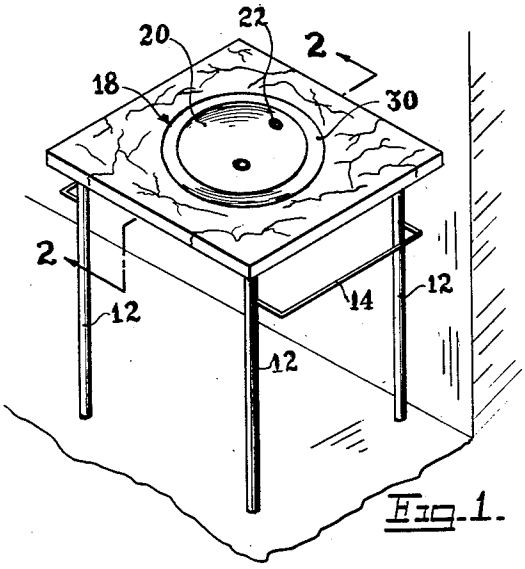



Fig. 1.

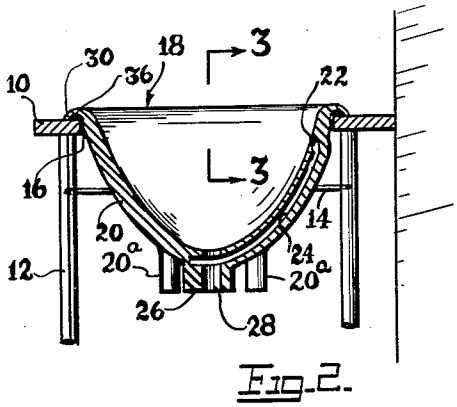



Fig. 2.

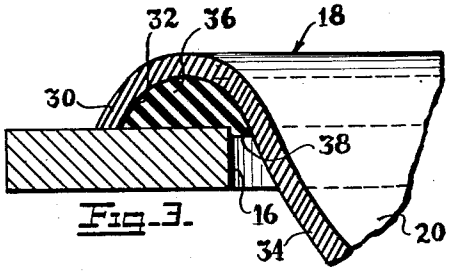



Fig. 3.

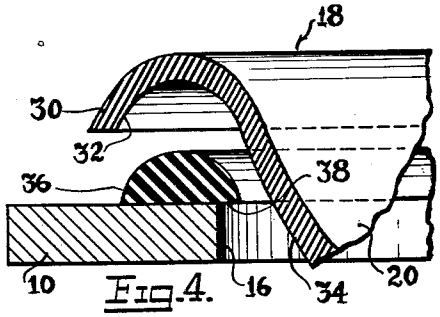



Fig. 4.

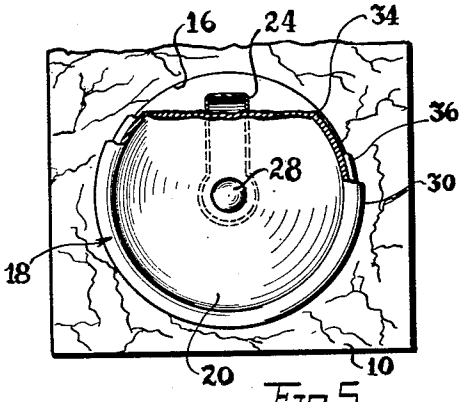



Fig. 5.

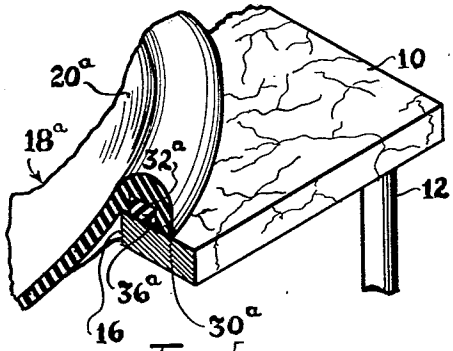



Fig. 6.

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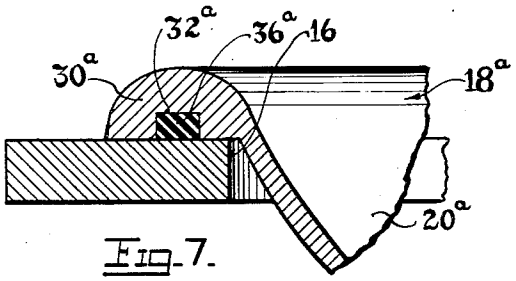



Fig. 7.

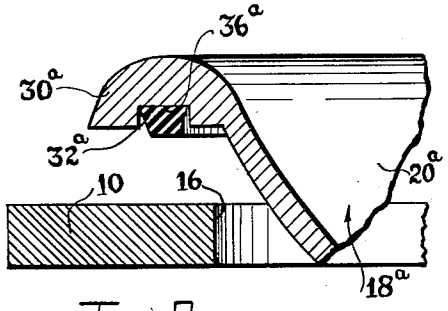



Fig. 8.

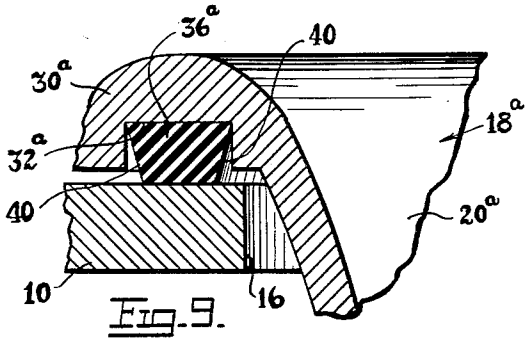



Fig. 9.

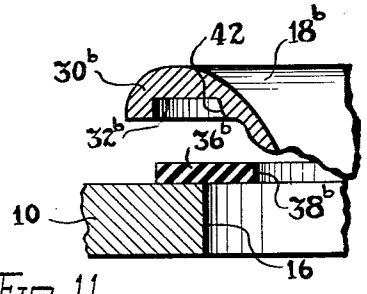



Fig. 11.

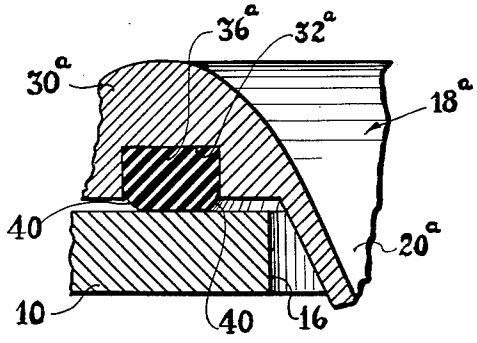



Fig. 10.

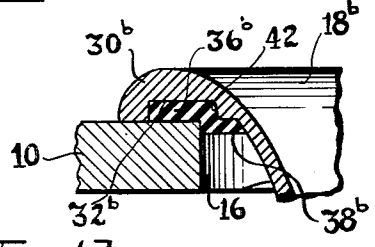



Fig. 12.

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# WASH BASIN

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Application November 9, 1956, Serial No. 621,386

3 Claims. (Cl. 4—166)

This invention relates to an improved construction for a wash basin, such as an ordinary bathroom basin. More particularly, the invention has reference to an improved means for supporting a basin of this type upon a marble ledge or other flat-surfaced, plate-like support.

Heretofore, it has been the practice to attach a wash basin to the underside of the plate-like support, through the use of bolts, screws or equivalent fastening elements. Conventionally, the basin has an outwardly directed peripheral flange, formed with spaced openings adapted to receive bolts extending upwardly through the openings, said bolts being engaged in the underside of the marble support plate.

This arrangement has certain notable disadvantages. One of the disadvantages of the construction presently employed resides in the fact that it is necessary to drill and tap the marble plate, which is a relatively expensive operation that must be carried out with considerable skill to insure that the bolts will be properly located.

Another deficiency is found in the present arrangement, in that crevices are defined, opening onto the interior of the wash basin. These not only provide spaces in which dirt lodges, rendering cleaning difficult and producing an unsanitary condition, but also causes the overall effect to be somewhat unattractive. It may be noted that reference is here made to the particular type of arrangement in which the basin is carried by a marble support plate. This arrangement is finding renewed favor in modern constructions.

In accordance with the invention, the wash basin has an outwardly directed flange, so designed that the basin may be merely positioned downwardly through the basin-receiving opening of the marble support plate. When the basin is so inserted, the flange at its underside seats upon the top surface of the support plate, so that the basin is properly supported without the requirement of screws, special fastening elements, drilling of the marble plate, etc. Further, crevices opening onto the inside of the basin are completely eliminated, the water-receiving container portion of the basin being wholly smooth-surfaced except, of course, for the provision of the usual drain and overflow openings.

One object of importance is to provide a generally improved basin construction for mounting in the openings of marble support plates, that will permit the installation to be carried out with maximum speed and ease.

Another object is to so design the wash basin as to eliminate the necessity of exact proportioning and determining of the basin-receiving aperture of the support plate or ledge.

A further object is to provide a basin construction as stated which, despite its having the above described advantages as compared to the conventional basins heretofore designed, will nevertheless be capable of manufacture at no greater cost than said conventional basins.

Still another object is to design the basin in such a manner that a novelly shaped sealing gasket, interposed between the support flange and the marble plate, will



serve efficiently to provide a leaktight engagement of the basin against the support plate, with the sealing action deriving from the weight of the basin imposed upon the sealing gasket.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

Fig. 1 is a perspective view of a wash basin formed according to the present invention, mounted within a marble stand.

Fig. 2 is a sectional view taken diametrically through the wash basin on line 2—2 of Fig. 1.

Fig. 3 is an enlarged, detail section on line 3—3 of Fig. 2.

Fig. 4 is a view similar to Fig. 3 in which the wash basin is shown as it appears when approaching a fully seated position.

Fig. 5 is an enlarged top plan view of the basin and stand, portions being broken away and other portions being shown in section.

Fig. 6 is a fragmentary perspective view showing a modified wash basin mounted in its associated stand.

Fig. 7 is a detail, vertical section through the marginal portion of the basin shown in Fig. 6, in its fully seated position.

Fig. 8 is a view similar to Fig. 7 in which the wash basin is approaching its seated position.

Fig. 9 is a greatly enlarged, detail sectional view, on the same cutting plane as Figs. 7 and 8, in which the wash basin shown in Fig. 8 has been inserted in the stand sufficiently to engage an associated gasket against the top surface of the stand.

Fig. 10 is a view like Fig. 9 in which the wash basin has moved downwardly beyond the position of Fig. 9 to partly compress the gasket, but has not reached its fully seated position shown in Fig. 7.

Fig. 11 is a view similar to Fig. 8 showing another modification.

Fig. 12 is a view similar to Fig. 11 in which the modified form shown in Fig. 11 has been illustrated in its fully seated position.

Referring to the drawings in detail, in the several figures of the drawing a marble basin stand has been shown, said stand including a marble support plate 10 supported upon legs 12 against a wall, with towel racks 14 extending between the legs at opposite sides of the stand.

The support plate 10 is formed with a center opening 16 which in the illustrated example is of circular configuration. However, the center opening, and the basin 18 seating herein, can be of various other shapes, as for example oval, rectangular, etc.

In any event, the wash basin 18 constituting the present invention includes a depressed body portion 20, which can be provided at a selected level above the bottom thereof with an overflow opening 22 communicating with the upper end of an overflow drain 24 integrally formed upon the body. Drain 24 terminates below the center of the body portion, and is in communication at the center of the basin with a drainpipe 26. The body portion is formed with a centrally disposed main drain opening, normally covered by a stopper 28 (see Fig. 5).

The body portion 20 is formed with downward projections $20^a$ to facilitate the manufacture of the same.

In accordance with the present invention, the body portion 20 at its periphery is formed with an outwardly projected flange 30 adapted to seat upon the support plate 10. The outer periphery of the flange 30 is substantially greater in diameter than the diameter of the opening 16,

so that when the basin is positioned through the opening **16**, the flange **30** will bear against the plate **10** and will hold the basin in supported position within the support plate **10** withuot the requirement of screws, bolts, or other special fastening elements. Heretofore, the basins have been formed with outwardly directed peripheral flanges, but these have been engaged against the underside of the support plate **10**, and have been secured in place by screws or the like.

In the form of the invention shown in Figs. 1–5, flange **30** is of a thickness substantially equal to the thickness of the body portion **20**. The flange **30** is arcuately bowed upwardly when viewed in cross section, through substantially 180° of a circle, thus defining on the underside of the flange a downwardly opening groove **32** extending substantially the full width of the flange and having an approximately semicircular shape when seen in cross section, as shown to best advantage in Fig. 3.

The wall of the groove **32**, at the inner side of the groove, merges smoothly into the outer surface of the body portion **20**, and said outer surface of the body portion as shown in Fig. 3 is spaced inwardly from the wall of the support plate opening **16**.

Disposed within the downwardly facing groove **32** is a gasket **36**, formed of soft rubber or other resiliently compressible, leak-preventive material. The gasket **36**, in its normal, uncompressed condition shown in Fig. 4, is of semicircular cross section, said gasket extending continuously through the full circumference of the wash basin.

Preferably the gasket **36**, at its point of greatest height, is slightly thicker than the maximum depth of the groove **32** as shown in Fig. 4. Accordingly, when the basin is inserted through the opening **16**, the flange **30**, as it comes to bear against the gasket **36**, will begin to compress the gasket. The gasket is freed to be deformed into the opening **16**, that is, the inner peripheral portion **38** which normally has a bottom surface coplanar with the top surface of the support plate **10**, is caused to be deformed or forced downwardly into the opening **16** to a slight extent, as shown in Fig. 3, so that said inner peripheral portion becomes a spacer between the wall of the opening **16** and the outer surface **34** of the body portion **20**.

By reason of this arrangement, the gasket becomes a centering device, which insures that the basin is properly centered within the opening **16** throughout of contact with the wall of said opening. Further, the basin is held against movement out of concentric relationship to the opening **16**, due to the deformation of the inner peripheral portion **38** of the gasket into the opening **16** between the walls of the body portion **20** and of the opening **16**.

The gasket can initially be cemented to the top surface of the support plate, before the basin is inserted in position within the gasket, thus to temporarily hold the gasket properly centered, as the basin moves into its finally seated position.

It is important to note that the gasket is compressed by reason of the weight of the basin, and further, the weight of the basin maintains the basin within the opening **16**, without the requirement of any special fastening elements.

The inner surface of the body portion **20** can be left smooth as shown, or alternatively, can be suitably shaped, either for utilitarian or for ornamental purposes. For example, it may be desired that the interior of the basin be formed with spiralling corrugations, so as to impart a swirling motion to the water as it flows into the basin. This is believed sufficiently obvious as not to require special illustration herein, and of course, does not constitute the invention. The invention resides in the particular manner in which the wash basin is formed in relationship to the marble stand and to a compressible gasket, for seating of the wash basin merely by insertion through the opening of the washstand, with the basin thereafter remaining in proper position without the requirement of screws or the like.



In Fig. 6 there is shown a modified construction wherein the basin **18ª** has a peripheral flange **30ª** on its body portion **20ª**, said flange being of approximately semicircural cross section but being solidly formed, except for the provision of a downwardly facing groove **32ª** in its underside, the side walls of which are spaced inwardly substantial distances from the opposite edges of the flange. The groove **32ª** is of rectangular cross section in this form of the invention, and is adapted to receive a compressible gasket **36ª**.

The gasket **36ª** can be cemented within the groove **32ª** as shown in Fig. 8, or alternatively, may be lightly wedged within the groove. The gasket **36ª** has a top surface which is of a width equal to the width of the groove **32ª**, and in its normal, uncompressed condition the gasket is slightly thicker than the depth of the groove as shown both in Figs. 8 and 9. The side walls **40** of the gasket, in the uncompressed condition of the gasket, converge downwardly when the gasket is viewed in cross section with the gasket being substantially narrower at its bottom than the width of the groove **32ª**.

With the gasket seated in the groove **32ª**, the basin is lowered into the opening **16** as shown in Fig. 8. Then, when the gasket initially contacts the top surface of the support plate **10**, the gasket will still be in its original shape shown in Figs. 8 and 9.

The weight of the wash basin **18ª** will now cause the wash basin to sink lower within the opening **16**, to the Fig. 10 position, and this causes the gasket to be compressed in a vertical direction, viewing the same as in Figs. 9 and 10, causing the gasket to expand widthwise. The side walls will now move into contact with the side walls of the groove **32ª**, and in Fig. 10, are shown deformed outwardly, though not completely filling the groove **32ª**. Ultimately, when the wash basin is fully seated with the underside of its flange **30ª** in engagement with the top surface of the washstand, the gasket **36ª** will have been fully compressed, so as to now have a rectangular cross section, completely filling the groove **32ª** in the manner shown in Fig. 7. A tight seal is thus effected between the wash basin and the washstand, resulting entirely from compression of the gasket caused by the continuous downward pressure exerted thereon by the weight of the washstand.

In Figs. 11 and 12, there is shown another modification wherein the basin **18ᵇ** has an outwardly directed peripheral flange **30ᵇ** forming a wide, relatively shallow groove **32ᵇ** of approximately rectangular cross section. The basin is formed in this instance with a shoulder at the inner side of the groove **32ᵇ**, and initially, the gasket **36ᵇ** is of a width substantially equal to the distance, in a direction radially of the basin, between the outer side wall of the groove **32ᵇ** and the inner edge of the shoulder **42**.

When the basin is lowered into the opening **16**, the shoulder **42** will deform the inner peripheral portion **38ᵇ** of the gasket, so as to force the same downwardly in a manner to offset the inner peripheral portion **38ᵇ** downwardly from the outer periphery of the gasket, into the opening **16**. As a result, the compressed gasket shown in Fig. 12 causes the basin **18ᵇ** to be fully centered within the opening **16**, while at the same time providing an effective seal about the basin and extending, in effect, as a locking means between the basin and the support plate **10**.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claims.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

1. In a washstand and basin construction, a horizontal

support plate having an opening, a wash basin including a dished body portion mounted in said opening, an outwardly directed circumferential flange on the body portion seated on the top surface of the support plate for supporting the basin in the opening, and a gasket engaged between the flange and said top surface, said basin being free of direct connections to said support plate, the gasket being of a resiliently compressible material and being adapted to compress responsive to the weight of the basin imposed upon the gasket on the basin in the opening, said flange being curved in cross section and being bowed upwardly, defining a downwardly opening groove in the underside of the flange, the gasket seating in said groove, said gasket, when in its uncompressed state, being of greater cross-sectional area than the groove for compression of the gasket between the flange and support plate under the weight of the basin, the inner diameter of the gasket being less than the diameter of said opening, for disposition of the inner peripheral portion of the gasket in the opening whereby, on extension of the basin downwardly through said opening, the inner peripheral portion of the gasket will be deformed downwardly into the opening to extend as a spacer between the wall of the opening and the body portion of the basin.

2. In a washstand and basin construction, a horizontal support plate having an opening, a wash basin including a dished body portion mounted in said opening, an outwardly directed circumferential flange on the body portion seated on the top surface of the support plate for supporting the basin in the opening, and a gasket engaged between the flange and said top surface, said flange being formed on its underside with a shallow, wide groove having a shoulder on its inner wall adapted to bear against the gasket, said gasket, when in the uncompressed state, being of greater cross-sectional area than the groove, the inner size of the gasket being less than the size of said



opening, the size of said shoulder being mediate the inner and outer sizes of the said gasket, whereby to deform the inner peripheral portion of the gasket downwardly into said opening responsive to positioning of the wash basin in the opening.

3. In a washstand and basin construction, a horizontal support plate having an opening, a wash basin including a dished body portion mounted in said opening, an outwardly directed circumferential flange on the body portion seated on the top surface of the support plate for supporting the basin in the opening, and a gasket engaged between the flange and said top surface, said flange being formed on its underside with a shallow, wide groove having a shoulder on its inner wall adapted to bear against the gasket, said gasket, when in its uncompressed state being of greater cross-sectional area than the groove whereby to deform the inner peripheral portion of the gasket downwardly into said opening responsive to positioning of the wash basin in the opening, the inner diameter of the gasket being substantially less than the diameter of said opening, the outer diameter of said shoulder being slightly less than the diameter of the opening, whereby, on positioning of the wash basin in the opening, said shoulder will offset the inner peripheral portion of the gasket downwardly relative to the outer peripheral portion of the gasket, with the downwardly offset inner peripheral portion of the gasket constituting a spacer disposed between the wall of the body portion of the basin and the wall of the support plate opening.

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