May 10, 1949. H. F. REICHENBACH 2,469,991

BIMETALLIC DRAIN FITTING

Filed Dec. 6, 1945

FIG. 1.

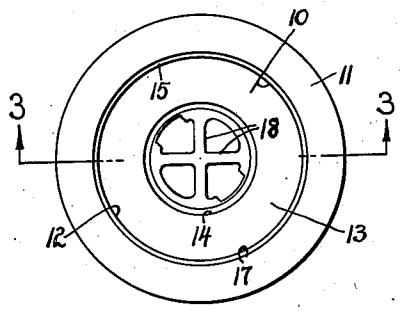


FIG. 3.

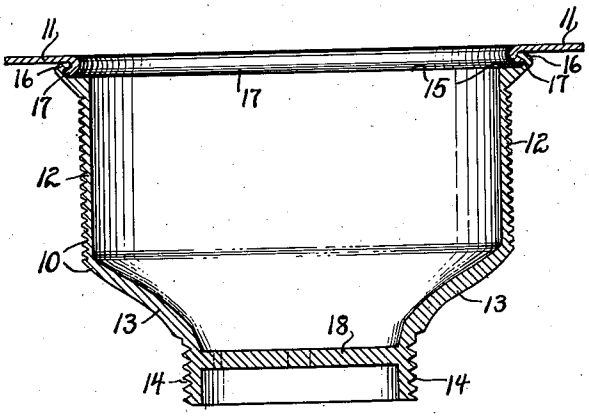


FIG. 2.

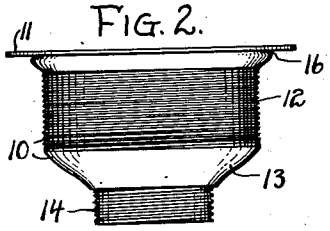


FIG. 6.

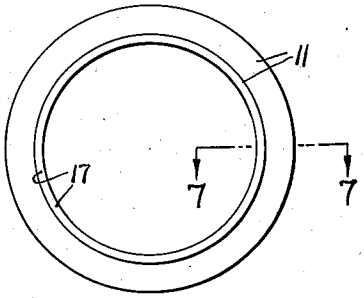


FIG. 4.

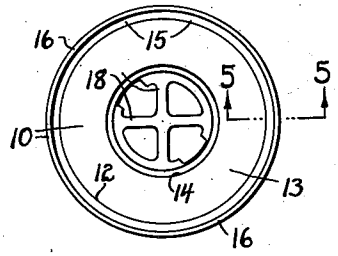


FIG. 7.



FIG. 5.

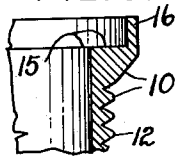
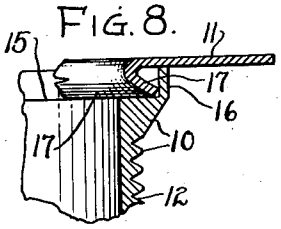


FIG. 8.



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BIMETALLIC DRAIN FITTING

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2 Claims. (Cl. 285—49)

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The present invention relates to improvements in drain-fittings and relates more particularly to improvements in drain-fittings of bimetallic character and which are adapted to receive drain-valves for kitchen sinks, tubs and the like.

It may be first explained that drain-fittings of the type to which the present invention relates, are provided with annular seating-flanges which project substantially-radially and which are adapted to be seated substantially-flush with the bottom surface of a sink, tub or the like, and hence are in position to be subjected to the same scouring action which is ordinarily applied to the bottom surface of the said sink or the like.

Under the conditions above referred to even the most carefully-plated drain-fitting will have the plating on its seating-flange eroded away after a very brief period of use, with the result that a very unsightly fitting results.

Efforts have heretofore been made to remedy the defects above referred to, by providing the seating-flange of the drain-fitting with an overlay of stainless steel or the like. Such an overlay, however, has not been fully satisfactory, inasmuch as it is necessarily relatively flimsy, as well as expensive to form and, in addition, creates inaccessible pockets in which material collects to thus produce not only unsanitary but odorous conditions.

One of the main objects of the present invention is to provide at a low cost for manufacture, a superior bimetallic drain-fitting which will resist scouring in its area mainly exposed thereto and otherwise withstand rough usage.

Another object of the present invention is to provide a superior bimetallic drain-fitting comprising a body-member of one metal and a seating-member of another metal, and which latter is so constructed and arranged as to successfully withstand scouring and which is rigidly secured to the body-member in a manner which will substantially eliminate unsanitary conditions.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a top plan view of a bimetallic drain-fitting embodying the present invention;

Fig. 2 is a side view thereof;

Fig. 3 is a transverse sectional view taken on the line 3—3 of Fig. 1 but on a larger scale;

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Fig. 4 is a top or plan view of the body-member showing the same prior to the application thereto of the seating-member.

Fig. 5 is a broken detail sectional view taken on the line 5—5 of Fig. 4 but on a larger scale;

Fig. 6 is an underside view of the seating-member, detached;

Fig. 7 is a broken detail sectional view taken on the line 7—7 of Fig. 6; and

Fig. 8 is a broken detail sectional view showing the fragment of the body of Fig. 5 united with the fragment of the seating-member of Fig. 7, just prior to the rigid attachment of the said seating-member to the said body-member.

The completed drain-fitting embodying the present invention as illustrated in Figs. 1, 2 and 3, comprises a body-member generally designated by the reference character 10 together with a separately-formed ring-like seating-member 11. The said body may be conveniently forged from brass or other suitable material and includes a relatively-large-diametered externally-threaded portion 12 and an inwardly-and-downwardly sloping portion which serves to integrally-connect the portion 12 with a relatively-small-diametered neck 14 which is also externally-threaded as shown.

At its upper end the large-diametered portion 12 of the body-member 10 is formed with an upwardly-facing annular clamping-shoulder 15 surrounded by an annular clamping-flange 16 which slopes inwardly-and-upwardly as is especially well shown in Fig. 3.

Resting upon the clamping-shoulder 15 of the body-member 10 and held tightly thereagainst by the clamping-flange 16, is an outwardly-and-downwardly sloping attaching-flange 17 formed integral with the inner edge of the ring-like seating-member 11 proper before referred to. Preferably, the clamping-flange 16 of the body-member 10 is so very firmly engaged with the attaching-flange 17 of the seating-member 11 as to press the same tightly against the clamping-shoulder 15 and to preclude leakage.

As is usual in the art, the neck 14 of the body-member 10 is formed interiorly with an apertured web 18 through which drain water passes to any suitable drain pipe (not shown) which may be connected to the neck 14. The threads upon the exterior of the large-diametered portion 12 of the body-member 10 provide for its attachment to a sink or the like in a manner well known in the art.

In producing the finished attained fitting illustrated in Figs. 1, 2 and 3, I preferably first form

the body-member 10 with its clamping-flange 16 directed upwardly as is shown in Figs. 4, 5 and 8. With its clamping-flange upstanding the internal diameter of the latter is slightly greater than the diameter of the attaching-flange 17 of the seating-member 11. The seating-member 11 is placed over the upper end of the body-member 10 so that its attaching-flange 17 fits within the upright clamping-flange 16 as is shown in Fig. 8, after which the said clamping-flange may be spun or otherwise displaced inwardly into tight engagement with the attaching-flange 17 as is illustrated in Fig. 3.

By providing the inner edge of the seating-member 11 with an outwardly-directed attaching-flange such as 17, in combination with the inwardly-directed clamping-flange 16 of the body-member 10, the upper edge of the said body-member is sufficiently shielded from abrasion while at the same time remaining amply strong to support the structure in a tightly-clamped position in a sink or the like and without creating sanitation hazards.

Preferably the seating-member 11 is formed entirely of stainless steel or other suitable solid abrasion-resistant and corrosion-resistant material.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

I claim:

1. A bimetallic drain-fitting, including in combination: a body-member formed of a different metal from the herinafter mentioned seating-member; a flat ring-like seating-member formed of abrasion-resisting metal and surmounting and rigidly attached to the upper portion of the said body-member, the said ring-like seating-member being formed at its inner edge with an integral downwardly-and-outwardly directed attaching-flange having its upper surface spaced downwardly from the adjacent under surface of the seating-member proper; the said hollow body-member being provided at its upper end with a clamping-flange projetcing upwardly above its upper end, said clamping-flange being bent inwardly into the space between the under surface of the said flat seating-member and the upper surface of the attaching-flange of the said flat seating-member to clamp the upper end of said body-member beneath the under surface of said attaching-flange whereby said flat ring-like seating-member overlies and protects the upper end of said hollow body-member.

2. A bimetallic drain-fitting, including in combination: a body-member formed of a different metal from the hereinafter mentioned seating-member; a ring-like seating-member formed of abrasion-resisting metal and surmounting and rigidly attached to the upper portion of the said body-member, the said flat ring-like seating-member being formed at its inner edge with an integral downwardly-and-outwardly directed attaching-flange having its upper surface spaced downwardly from the adjacent under surface of the seating-member proper; the said hollow body-member being provided at its upper end with an upwardly-facing clamping-shoulder which intersects the inner wall of said body-member and is surrounded by a clamping-flange projecting upwardly above said clamping-shoulder, said clamping-flange being bent inwardly into the space between the under surface of the flat seating-member and the upper surface of its attaching-flange, to clamp the upwardly-facing clamping-shoulder of said body-member beneath the under surface of said attaching-flange whereby said flat ring-like seating-member overlies and protects the upper end of said hollow body-member.

HOWARD F. REICHENBACH.

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