Feb. 7, 1933. C. A. SCHACHT 1,896,204

ANTISPLASHER

Filed Dec. 9, 1931

Fig. 1.

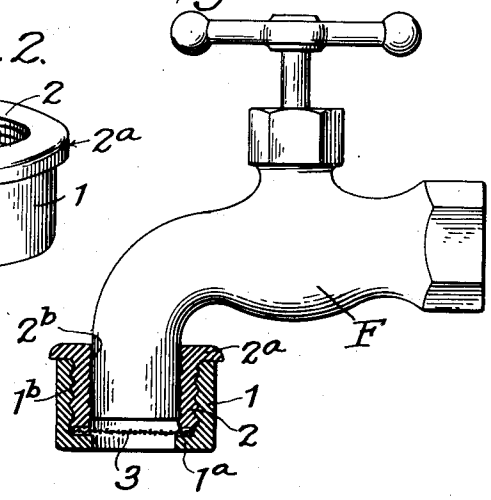


Fig. 2.

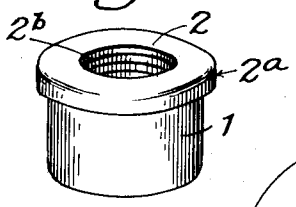


Fig. 3.

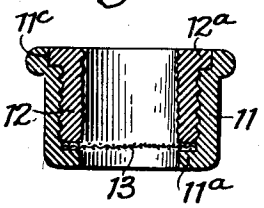


Fig. 4.

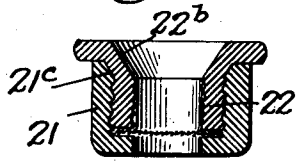


Fig. 5.

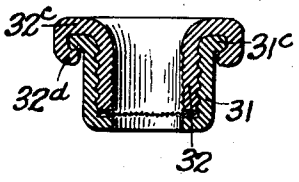


Fig. 6.

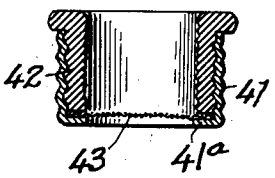


Fig. 7.

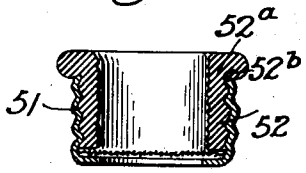


Fig. 8.

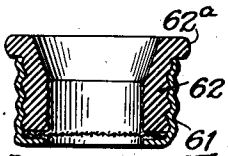


Fig. 9.

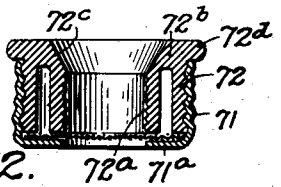


Fig. 10.

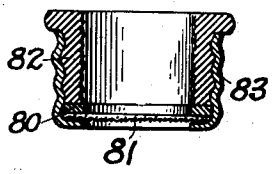


Fig. 11.

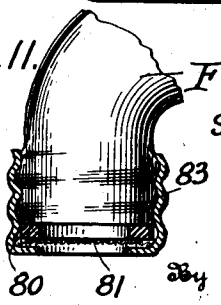
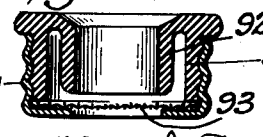


Fig. 12.



Inventor

Clifford A. Schacht

Alexander & Dowell

Attorneys

Patented Feb. 7, 1933 1,896,204

UNITED STATES PATENT OFFICE

CLIFFORD A. SCHACHT, OF HUNTINGTON, INDIANA

ANTISPLASHER

Application filed December 9, 1931. Serial No. 580,207.

This invention is a novel improvement in so-called anti-splashers or strainers adapted to be placed on the nozzles of water faucets for kitchen sinks, bath tubs, basins, and the like to prevent splashing of the stream of water when it contacts the bottom of the sink, etc., and to strain the water coming from the nozzles.

The principal objects of the invention are to provide an anti-splasher or strainer consisting of a pliable rubber body, molded in one piece, and having a bore to frictionally engage the end of the faucet nozzle, and having a metallic or molded rubber shell or casing surrounding the body for maintaining the body in shape; the body having a soft pliable exterior flange protruding beyond the upper end of the shell or casing, the flange preventing dishes and the like from being chipped if brought in contact with the anti-splasher or strainer, and covering the sharp unfinished edge of the metallic casing, and also enhancing the appearance of the article.

Further objects of the invention are to provide an anti-splasher or strainer having a neat finished appearance and which although made of soft pliable rubber will not bulge or swell out of shape and become worthless after short use; also to provide an anti-splasher which is easy to manufacture, and which gives the appearance of a one-piece anti-splasher.

I will explain the invention with reference to the accompanying drawing which illustrates several practical embodiments thereof to enable others to adopt and use the same; and will summarize in the claims the novel features of construction, and novel combinations of parts, for which protection is desired.

In said drawing:

Fig. 1 is an elevation of a faucet showing, in section, one form of anti-splasher applied to the nozzle.

Fig. 2 is a perspective view of the anti-spasher shown in Fig. 1, detached.

Figs. 3, 4 and 5 are vertical sections through modified forms of anti-splasher having a molded rubber outer casing.

Figs. 6, 7, 8 and 9 are vertical sections through still further modified forms in which the outer casing is made of metal.

Fig. 10 is an elevation of a modified form of anti-splasher shown in Fig. 6 showing a rubber washer interposed between the screen and rubber bushing.

Fig. 11 is a view showing the rubber bushing of Fig. 10 removed, and the metal casing threaded onto the nozzle.

Fig. 12 shows a modification of the form shown in Fig. 9.

As shown in Figs. 1 and 2, my novel anti-splasher or strainer is preferably made of two molded rubber parts, the outer casing 1 being open at both ends, and having an internal annular flange 1*a* at its lower end. The inner walls of the outer casing 1 are preferably threaded or corrugated as at 1*b* for the purpose of increasing the friction between the inner and outer casings and also to permit the casing to be screwed onto a threaded nozzle if desired (as shown in Fig. 11). The inner bushing 2 is preferably open at both ends and of such size as to make a relatively tight fit within the outer casing 1. The inner bushing 2 is provided at its upper end with an external annular flange 2*a* adapted to cover the upper end of the outer casing 1, said flange 2*a* projecting well beyond the periphery of casing 1. The flange 2*a* may be slightly rounded, or may be given any other desired shape. Between the lower end of the inner casing 2 and the shoulder 1*a* of the outer casing are one or more wire mesh screens 3 adapted to act upon the stream of water passing through the faucet F. The bore in the inner bushing 2 should be made slightly smaller than the faucet nozzle so that when placed upon the faucet the inner bushing will be expanded and will firmly engage the threads 1*b* of the outer bushing 1 and prevent separation of the parts. The bore in the inner bushing 2 can be molded with plain sides, or the sides can be threaded or corrugated as shown at 2*b* to frictionally maintain the inner bushing and anti-splasher upon the faucet nozzle.

In Fig. 3 a modified form is shown in which the flange 12*a* of the inner bushing 12 is

adapted to engage an annular recess 11*c* in the upper end of the outer casing 11. The structure otherwise is the same as that shown in Fig. 1, the walls of the inner and outer casings being threaded or corrugated as shown; and the screen 13 being positioned between the lower end of bushing 12 and the flange 11*a* of the outer casing 11.

In Fig. 4 the anti-splasher is substantially the same as that shown in Fig. 1, except that the bore in the inner bushing 22 is tapered at its upper end as at 22*b*. The outer casing 21 may also be tapered at its upper end as at 21*c* to accommodate the tapered portion 22*b* of the inner bushing. The inner and outer members are both made of molded rubber. The taper in the bore of the inner bushing will enable the anti-splasher to accommodate itself to different sizes of faucets.

In Fig. 5 a modification is shown in which the outer casing 31 is made of molded rubber, substantially the same as that shown in Fig. 1, except that the same has an exterior annular flange 31*c* at its upper end. The inner bushing 32 is substantially the same as that shown in Fig. 1, except that the flange 32*c* on the upper end of the inner bushing locks entirely around and under the flange 31*c* of the outer casing, as at 32*d*.

In Fig. 6 a modified type of anti-splasher is shown in which the outer casing 41 is of metal, and preferably has threads rolled in its sides. Also the outer casing 41 has an internal annular flange 41*a* at its lower end. The inner bushing 42 is made of molded rubber and is the same as that shown in Fig. 1; also the screen 43 is maintained between the lower end of the inner bushing 42 and flange 41*a* in the same manner as in Fig. 1.

In Fig. 7 the anti-splasher is substantially the same as that shown in Fig. 6, except that the flange 52*a* of the inner bushing 52 is thickened and has an annular groove 52*b* in its underside receiving the upper end of the metal outer casing 51. In this form the flange on the inner bushing covers the sharp upper edge of the metal casing 51.

In Fig. 8 the anti-splasher is substantially the same as that shown in Fig. 4, except that the outer bushing 61 is made of metal and is adapted to receive the tapered inner bushing 62 of molded rubber, said inner bushing having the flange 62*a* covering the upper edge of the metal outer casing.

In Fig. 9 a further modification is shown in which the outer casing 71 is made of metal and the internal annular flange 71*a* at its lower end extends further inwardly than in the preceding figures. The inner bushing 72 is provided with an inner wall 72*a* spaced from the outer wall and connected thereto at the upper end as at 72*b*. The upper end of the bore in the inner bushing is preferably tapered as at 72*c*, and the upper exterior flange 72*d* of the inner bushing covers the upper end of the metal outer casing. In this form of anti-splasher, when applying same to the faucets, the double walls 72—72*a* will permit the anti-splasher to more readily accommodate itself to different sizes of faucets.

In Fig. 10 a washer 80 is inserted between the screen 81 and the lower end of the rubber bushing 82, and the rubber bushing will fit over the plain ended faucet F as shown in Fig. 1. If however the faucet nozzle should be threaded, then the rubber bushing 82 can be removed (as in Fig. 11) and the metal outer casing 83 which is tapped may be applied directly to the threads of the nozzle, the washer 80 serving as a packing between the screen 81 and the end of the nozzle.

In Fig. 12 the anti-splasher is similar to that shown in Fig. 9, the rubber bushing 92 having an inner wall 92*a* connected at the top to the part 92, but the wall 92*a* does not extend downwardly as far as the part 92. The outer casing 91 is identical with that of Fig. 9, as is also the screen 93. As the inner wall 92*a* is much shorter than the outer wall, when the anti-splasher is mounted on the faucet, as in Fig. 1, and the water is flowing, the screen 93 will set up a back pressure or resistance, causing the water to back up into the space between the walls 92—92*a* and cause the rubber to make a perfect seal within the outer casing 91.

In my anti-splashers the inner bushing of pliable rubber is molded in one piece, and is provided with a bore for receiving the end of the faucet F, and has a flange fitting over the top of the outer casing. The flange, protruding over the rim of the outer casing not only covers the sharp edge of the metal, but also enhances the appearance of the anti-splasher, and being of rubber prevents dishes from striking the metal and being chipped.

The molded inner bushing can be made plain, or same can be threaded or corrugated on its outer side to prevent the bushing from coming out of the outer casing. It also may have corrugations, threads, or beads formed in its bore to prevent same from coming off the faucet F.

The rubber inner bushing may be made in different sizes to fit different sizes of faucets, and should be smaller than the faucet in order that the resiliency of the rubber will hold same on the faucet. The flange at the upper end of the rubber bushing could be made flat, or could be made slightly rounded.

I claim:

1. An anti-splasher for faucet nozzles, comprising a cylindrical bushing of molded rubber adapted to fit over the end of the nozzle, and having an external flange at its upper end; a casing around the bushing having an internal flange at its lower end; and screens interposed between the lower end of the bushing and the flange of the casing, the

flange on said bushing extending beyond the outer sides of the casing.

2. In an anti-splasher as set forth in claim 1, the flange of the bushing having an annular recess in its under side receiving the upper end of the casing.

3. In an anti-splasher as set forth in claim 1, the upper end of the casing being flanged outwardly and the flange of the bushing being bent around and under the flange of the casing.

4. In an anti-splasher as set forth in claim 1, an inner wall within the bushing spaced from the sides thereof and connected thereto at its upper end.

5. In an anti-splasher as set forth in claim 1, an inner wall within the bushing spaced from the sides thereof and connected thereto at its upper end, the inner wall terminating above the lower end of the bushing.

CLIFFORD A. SCHACHT.