

Nov. 28, 1933.

W. F. SCHACHT

1,937,441

SINK STOPPLE

Filed June 26, 1933

Fig. 1.

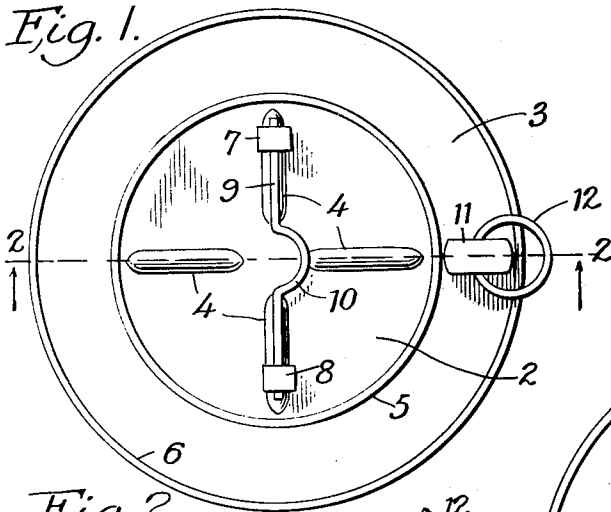


Fig. 3.

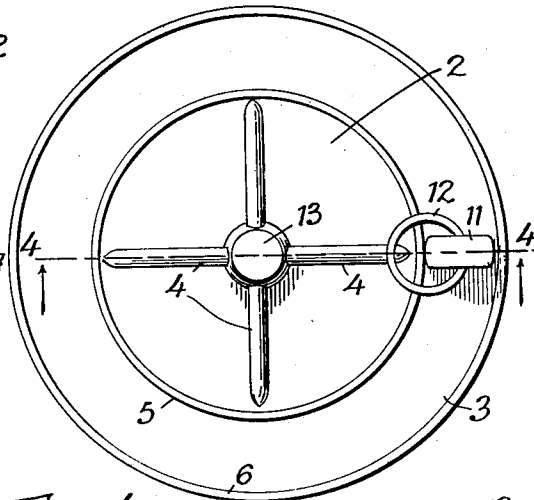


Fig. 2.

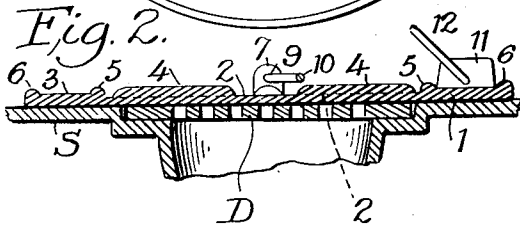


Fig. 4.

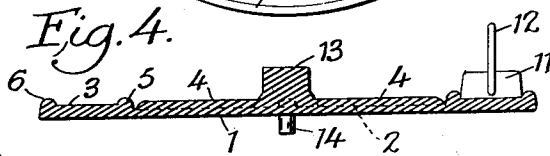


Fig. 5.

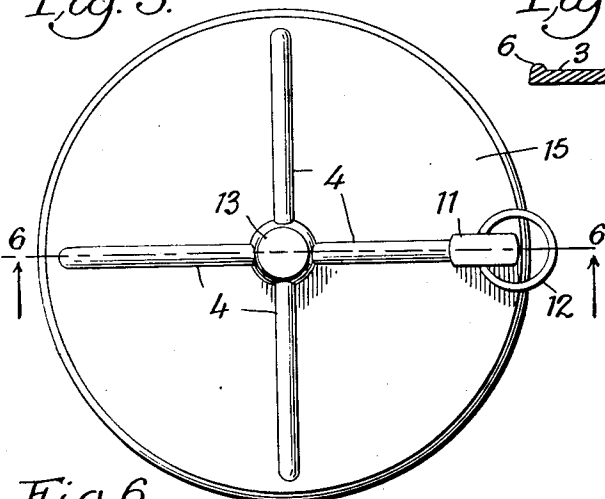
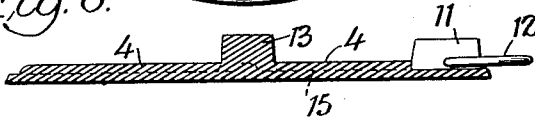


Fig. 6.



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SINK STOPPLE

William F. Schacht, Huntington, Ind.

Application June 26, 1933. Serial No. 677,698

10 Claims. (Cl. 4-293)

This invention is a novel improvement in sink stopples such as shown in my U.S. Letters Patent Nos. 1,646,112, dated October 18, 1927; and 1,912,312, dated May 30, 1933; and the present application is a continuation-in-part of my co-pending application Serial No. 656,322, filed February 11, 1933 (now Patent No. 1,925,008), said stopples being designed for use primarily in ordinary kitchen sinks or the like in which the sink drain has no means for closing the drain, same being provided merely with a strainer plate. The stopples in my said patents and application consist briefly of a flexible body of soft rubber, having a wide flat rim portion to prevent curling; and have a centrally disposed knob or handle, and a knob or ring upon the rim portion whereby the edge may be raised to break the suction under the stopple when it is desired to release the stopple.

The principal object of the present invention is to provide the upper face of the stopple with radially disposed thickened ribs, for assisting in keeping the body of the stopple from warping thereby maintaining the suction thereunder and preventing seepage of liquid past the stopple.

Other minor objects of the invention will be hereinafter set forth.

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 essential features of the invention, and novel combinations of parts, for which protection is desired.

In said drawing:—

Fig. 1 is a top plan view of one form of stopple.

Fig. 2 is a section on the line 2—2, Fig. 1.

Fig. 3 is a top plan view of a modified form of stopple.

Fig. 4 is a section on the line 4—4, Fig. 3.

Fig. 5 is a top plan view of further modified form of stopple.

Fig. 6 is a section on the line 6—6, Fig. 5.

The stopple illustrated in Figs. 1—2 briefly comprises a thin disk-like body portion of flexible material, preferably soft molded rubber, adapted to readily conform with the contour of the surface such as the drain strainer plate D of a sink S (Fig. 2) upon which the stopple is placed, the stopple being of such diameter as to completely cover the strainer plate D. The lower face 1 of the stopple is flat. In the upper face of the stopple is molded a central circular recess 2, whereby the central portion of the stopple is made thinner than the rim portion 3. A plurality of radially

disposed thickened ribs 4 are provided (four being shown) within the recess 2, said ribs being molded integral with the body 1 and adapted to prevent warping of the central portion of the stopple. The heavy rim portion 3 of the stopple prevents the edge from curling, thereby insuring that the stopples will effectively seal the drain. The thick rim portion 3 furthermore strengthens the periphery of the stopple, and may be provided with inner and outer annular beads 5 and 6, on its upper surface.

A pair of integral lugs 7 and 8 are molded upon diametrically opposed ribs 4 in the central recessed portion 2 of the stopple, and between the lugs 7 and 8 extends a stiff wire or rod 9 having a central semi-circular offset portion 10 forming a central handle for lifting stopple. If desired a chain or cord (not shown) may be attached to the offset portion 10 of the handle. The rim portion 3 has an integral lug 11 molded thereon and a ring 12 is passed therethrough by which the stopple may be hung up when not in use, and by which the rim of the stopple may be raised to break the suction thereunder. The molded lugs 7, 8 and 11 may be reinforced with fabric or the like.

In Figs. 3 and 4 a modified form of stopple is shown, substantially identical with that shown in Figs. 1 and 2, except that the lugs 7 and 8 and handle 9 shown in Figs. 1 and 2 are omitted, and a central lifting knob 13 is molded on the body at the center of recess 2 and connecting the inner ends of ribs 4. If desired a lug or projection 14 (Fig. 4) may be formed on the bottom of the stopple adapted to enter one of the holes of the sink strainer plate D to prevent the stopple from slipping.

In Figs. 5 and 6 a further modified form of stopple is illustrated in which the recess 2 (Figs. 1-4) in the upper face of the body is omitted, the stopple comprising a circular disk 15 of uniform thickness throughout, except for the radially disposed ribs 4, and for the central lifting knob 13, identical with that shown in Figs. 3 and 4. This stopple also has the lug 11 adjacent the rim and the ring 12, the lug 11 being molded at the outer end of one of the ribs 4, as shown. The recess 2 may hence be omitted as I have found that a flexible body of uniform thickness as above described with respect to Figs. 5 and 6 provides a good and efficient stopple; but by making the central portion 2 of the stopple thinner than the rim 3 as in Figs. 1 and 4, a somewhat greater suction is created under the stopple to hold the same in place upon the strainer plate D.

When the stopple is placed in the sink it cannot be pulled away by merely lifting the central knobs 10 or 13; but when it is desired to remove or release the stopple from the sink the rim may be readily raised by lifting the rings 12, thereby breaking the suction under the stopple. The stopple thus molded is effective, strong, and flexible, and will form a water tight closure over the sink strainer or drain.

10 I claim:—

1. A stopple comprising a flexible disk having a flat lower face, ribs on the upper face of the stopple adapted to prevent warping of said disk and a handle at the center of the disk.

15 2. In a stopple as set forth in claim 1, said handle comprising a pair of lugs on said ribs, and a rod extending between the lugs.

20 3. A stopple comprising a flexible disk having a flat lower face, radially disposed ribs on the upper face of the stopple adapted to prevent warping of said disk, and a handle at the center of the disk.

25 4. In a stopple as set forth in claim 3, said handle comprising a pair of lugs on said ribs, and a rod extending between the lugs.

5. In a stopple as set forth in claim 3, said

handle comprising a knob on the disk connecting the inner ends of the ribs.

6. A stopple comprising a rubber disk having a flat lower face, radially disposed rubber ribs on the upper face of the stopple adapted to prevent warping of said disk, a handle at the center of the disk; and means on the disk for raising the edge thereof to break the suction under the stopple when it is desired to release the stopple. 80

7. In a stopple as set forth in claim 6, said handle comprising a pair of lugs on said ribs, and a rod extending between the lugs. 85

8. In a stopple as set forth in claim 6, said handle comprising a knob on the disk connecting the inner ends of the ribs. 90

9. In a stopple as set forth in claim 6, said means comprising a lifting lug on the outer end of one of said ribs adjacent the periphery of the disk.

10. A stopper comprising a rubber disc of uniform thickness having a flat lower surface, a handle in the center of the disc, and means on the edge for raising same to break the suction under the stopper when it is desired to release the stopper. 100

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