July 23, 1968 I. G. DUTCHER 3,393,928

DISPOSER CHAMBER MOUNTING

Filed June 1, 1966

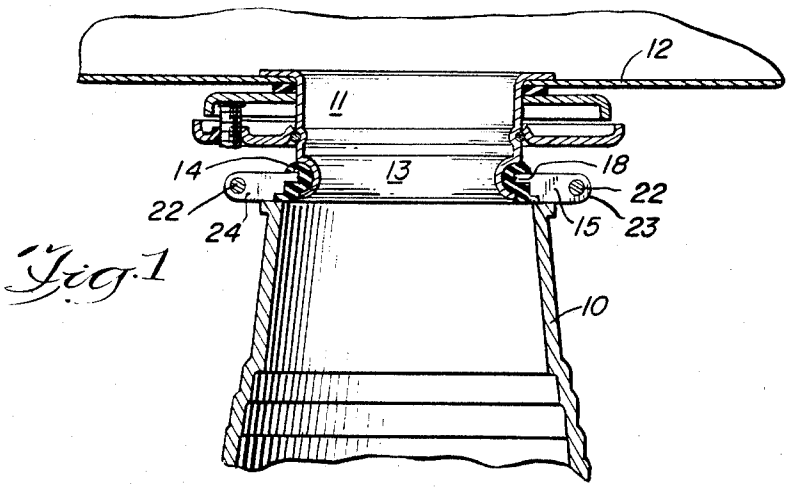


Fig. 1

Fig. 2

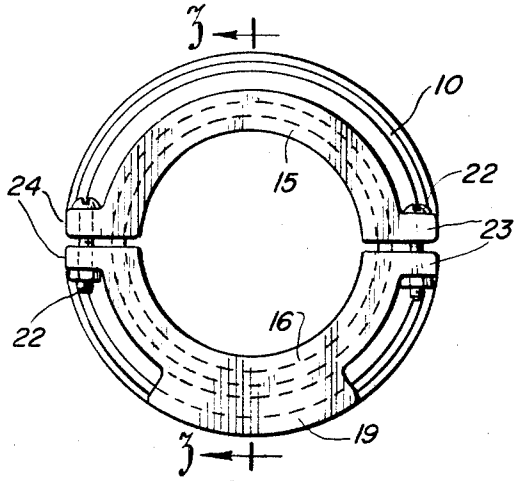
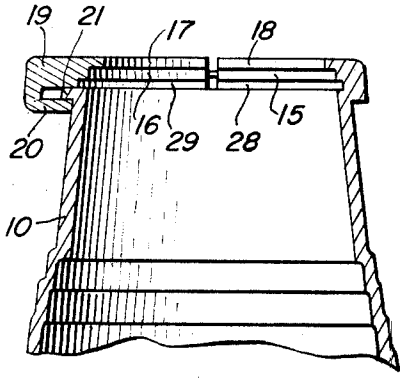


Fig. 3



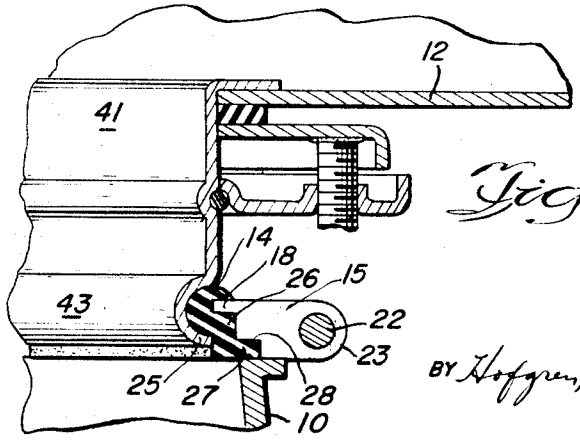


Fig. 4

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United States Patent Office 3,393,928 Patented July 23, 1968

3,393,928

DISPOSER CHAMBER MOUNTING

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Filed June 1, 1966, Ser. No. 554,464
5 Claims. (Cl. 285—49)

ABSTRACT OF THE DISCLOSURE

A mounting apparatus for a food waste disposer which includes fastening apparatus for mounting the sink flange permanently to the sink and fastening apparatus for mounting the disposer grinding chamber to the sink flange. The grinding chamber top portion has a split clamp ring for effecting the installation and removal of the disposer without disturbing the sink flange.

One of the features of this invention is to provide an apparatus for mounting a waste disposer on a sink drain conduit in which the apparatus comprises a resilient member extending around the conduit, mounting means for mounting the resilient member in this position on the conduit, engaging means on the disposer for engaging the resilient member on one side of the conduit, a clamp for engaging the resilient member and the disposer simultaneously on the side of the conduit opposite the engaging means and means for drawing the engaging means and clamp means toward each other with the drain conduit and resilient member therebetween so as to releasably retain the disposer on the conduit.

Other features and advantages of the invention will be apparent from the following description of one embodiment thereof taken in conjunction with the accompanying drawings. Of the drawings:

FIGURE 1 is a fragmentary sectional view through a portion of a sink drain and the top of a disposer chamber attached thereto.

FIGURE 2 is a plan view of the top of the disposer chamber and the mounting means.

FIGURE 3 is a fragmentary vertical sectional view taken substantially along the line 3—3 of FIGURE 2.

FIGURE 4 is an enlarged detail, fragmentary sectional view of a portion of FIGURE 1.

The waste disposer chamber **10** is mounted on a portion of the sink drain conduit, here shown as the generally cylindrical sink flange **11**, which extends downwardly from the bottom **12** of the kitchen sink. At the bottom of the flange **11** there is provided a circular groove **13** that opens outwardly and which serves as a mounting means for mounting a circular resilient member or gasket **14** which may be made of any rubbery material but is preferably neoprene.

The disposer chamber **10** is provided with engaging means here shown as a projecting flange **15** that engages and is embedded in the outer surface portion of the resilient member or gasket **14**. As is shown in FIGURE 2, the engaging flange **15** extends about 180° around the circular opening of the top of the disposer chamber **10**. Flange **15** is integral with the chamber. In addition, there is provided clamp means **16** that is separate from the disposer chamber **10** but which also extends about 180°. As can be seen in FIGURE 3, the engaging means **15** and clamp means **16** are similarly shaped in cross section. The clamp means **16** is provided with an inwardly projecting flange **17** that is shaped similarly to the flange **18** of the engaging means **15**. The flange **17** is adapted to be embedded in the outer surface portion of the gasket **14** in the same manner as is the flange **18**.

In addition, the clamp means **16** is provided at about its midpoint with a thickened portion **19** having an underlying inwardly projecting flange **20** that projects under and engages an outwardly extending flange **21** on the top of the disposer chamber **10**. In order to hold the clamp means **16** in assembled relationship with the disposer chamber **10**, there are provided means shown as oppositely diametrically located bolts **22** for drawing the engaging means and clamp means toward each other with the sink flange **11** and resilient member **14** therebetween. These bolts pass through outwardly projecting ears **23** and **24** on the engaging and clamp means **15** and **16**.

In order to aid in retaining the assembly in position and to insure continuance of the resilient mounting, a groove **13** with an outwardly projecting ledge portion **25** is formed on the bottom of sink flange **11** and underlies the bottom of the resilient member **14** as shown most clearly in FIGURE 4. As can also be seen from FIGURE 4, the bottom of the gasket **14** is provided with a pair of step portions **26** and **27** with the portion **26** underlying the flanges **17** and **18** and the step portion **27** being spaced outwardly from the portion **26** and located in a cavity **28** on the bottom of the engaging means **15** and a similar cavity **29** on the bottom of the clamp means **16**.

The above described mounting apparatus provides a secure yet resilient mounting for a waste disposer of the type used in the drain immediately beneath a kitchen sink. There are very few parts required and the disposer is very easily secured in place. Thus, with the provision of the sink flange **11** installation of the disposer merely requires that the gasket **14** be positioned in the groove **13**, the disposer then lifted up and moved into position with the engaging means **15** in proper relationship with the gasket **14**, the clamp means or C-clamp **16** then placed in position to engage the gasket **14** and the disposer housing flange **20**, as illustrated, and finally the bolts **22** attached to draw the engaging and clamp means **15** and **16** together to complete the assembly.

As can be seen, the disposer is isolated from the sink itself by the vibration absorbing resilient gasket member **14**. Furthermore, installation is simplified by permitting supporting the weight of the disposer from the sink flange **11** during installation. In addition, only two fasteners, the bolts **22**, are required to provide a secure mounting of the disposer on the bottom of the sink.

Having described my invention as related to the embodiment shown in the accompanying drawings, it is my intention that the invention be not limited by any of the details of description, unless otherwise specified, but rather be construed broadly within its spirit and scope as set out in the accompanying claims.

The embodiment of the invention in which an exclusive property or privilege is claimed is defined as follows:

1. Apparatus for mounting a waste disposer on a sink drain conduit, comprising: a continuous resilient member extending around said conduit, mounting means for mounting said resilient member on said conduit to extend therearound; arcuate engaging means on said disposer for surrounding and engaging said resilient member on one side of said conduit; arcuate clamp means for engaging said resilient member and said disposer on the opposite side of said conduit; and means for drawing said engaging means and clamp means radially toward each other with said drain conduit and resilient member therebetween.

2. The apparatus of claim **1** wherein said engaging and clamp means are each provided with an inwardly projecting flange engaging said resilient member.

3. The apparatus of claim **2** wherein said mounting means comprises a groove having a bottom ledge underlying the bottom of said resilient member, both said resilient member and said groove are circular, the groove

opens outwardly, and said engaging and clamp means contact said resilient member outwardly of said groove.

4. The apparatus of claim 3 wherein said disposer has a casing with a circular top, said engaging means that engages said resilient member extends substantially 180° therearound and is integral with said disposer at the top thereof, said clamp means extends substantially 180° around said circular top, and said top is provided with an outwardly projecting flange releasably engaged by said clamp means.

5. The apparatus of claim 1 wherein said disposer is provided with an outwardly projecting flange releasably engaged by said clamp means.

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