Jan. 7, 1958 L. KATZ 2,818,579

MEANS FOR JOINING SINK TO DRAINBOARD

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Fig. 1

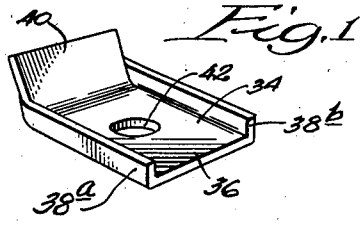


Fig. 2

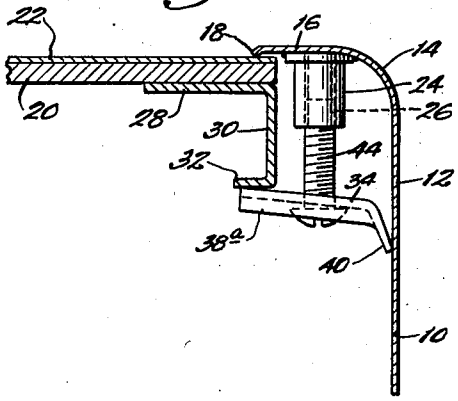
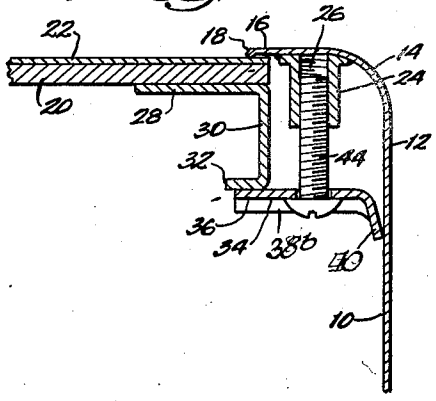


Fig. 3



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MEANS FOR JOINING SINK TO DRAINBOARD

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2 Claims. (Cl. 4—187)

This invention relates to a sink and drainboard structure and more particularly it relates to an improved means for joining the overlapping rim of a sink to the surrounding drainboard or top.

There have been many structures on the market in an effort to provide an effective water and particle proof seal between the overlapping edge of a sink and the surrounding drainboard. Although some of these structures have been successful in performing this function, they have only done so by employing expensive and complex means which, of course, detracts from the saleability of the item. In some prior structures, I have also found that the means provided for accomplishing this intended purpose has the tendency to become disengaged, thereby breaking the seal between the parts.

My invention overcomes these objections. The structure of the present invention consists primarily of three pieces; namely, a stud secured to the bottom of the sink edge, a flange having a downturned leg and a bolt adapted to be received in the stud to draw the flange against the bottom of the drainboard and against the side of the sink. I have also provided the sink with a biting edge to obtain a more effective seal.

A general object of my invention, therefore, is to provide a structure capable of providing an effective seal between the overlapping rim of a sink and the surrounding drainboard.

Another object of my invention is to provide means for securing the sink to the drainboard which are few in number, simple and inexpensive to construct and which can be readily installed.

Still another object of my invention is the provision of securing means which give a positive pressure against the sink wall to prevent loosening or disassembly of the parts.

This invention contains additional novel features which make it an inexpensive and practical structure. These and other objects and advantages of this invention will hereinafter appear, and for purposes of illustration, but not limitation, preferred embodiments of this invention are shown in the accompanying drawings in which:

Figure 1 is a perspective view of the flange forming a part of this invention;

Figure 2 is a cross-sectional view of my improved securing means before the parts are drawn together; and

Figure 3 is a cross-sectional view of my improved securing means after the sink is drawn against the drainboard to give an effective seal.

Referring now to the drawings in detail, the reference numeral **10** generally designates a sink of the usual type of metal construction. It may be of any convenient shape, proportion and dimension and includes the usual upright side wall **12**, curved portion **14** and terminating in an outwardly flared rim **16** having a slightly downturned biting edge **18**.

The rim **16** and edge **18** of the sink **10** overlay or overlap a conventional drainboard which is generally designated as **20**. The drainboard **20** is preferably formed

of metal which is top surfaced with linoleum, "Formica" or other suitable surfacing materials **22**. Of course, the drainboard may be constructed out of other materials without departing from the spirit of this invention.

Secured, as by welding or other suitable means to the bottom rim **16** of the sink are a plurality of studs **24** having internal threads **26**. The number of studs **24** to be disposed about the bottom of the rim **16** may vary according to the dimensions of the sink as well as the material being used.

A number of brackets **28**, corresponding in number and location of the studs **24**, are preferably joined by any means known in the art, to the bottom of the drainboard **20**. The brackets **28** include a downward depending wall **30** which terminate in a base portion **32** which is pointed in a direction away from the sink **10**. Of course, if a drainboard of a different construction, i. e., such as a top of plywood or veneer covered with linoleum, etc. is used wherever the overall thickness would be equal to the overall thickness of the bracket **28**, the brackets would not be necessary.

In order to help secure the sink **10** to the drainboard **20**, I have provided a flange **34** comprising a base plate **36** and channel ribs **38***a* and **38***b* which give additional strength and rigidity to the flange. One end of the flange has a leg **40** which is preferably downturned about 45° to less than 90° from the plane of the base plate **36** of the flange **34**. The leg **40** must have some degree of resiliency to permit bending as described hereinafter. The flange **34** and leg **40** are preferably constructed or stamped from one piece of metal. The base plate **38** is also provided with an opening **42** substantially midway thereof which is adapted to receive a bolt **44**.

The sink **10** is drawn against the drainboard **20** to form a water and particle proof seal in the following manner. The bolt **44** is inserted into the opening **42** of the flange **34** and then aligned with the stud **24** so that the threads of the bolt are received and mated with the female threads **26** of the stud. The bolt is then screwed into the stud which draws the base plate **36** against the base wall **32** of the bracket **28**. At the same time, the leg **40** of the flange is at an angle to the side wall **12** of the sink **10** (Figure 2) and is forced thereagainst as the bolt is tightened until the leg **40** is compressed and wedged against the side wall **12** of the sink **10** which results in a positive pressure fit. This vise-like or pull-down action tightly draws the edge **18** of the sink into the material **22** of the drainboard resulting in a water and particle proof seal. Additionally, the wedging of the leg **40** of the flange **34** against the sink **10** eliminates any possibility of the flange assembly from being disassembled or put out of alignment.

It is evident that many advantages are inherent in the structure of the drainboard clamp. A biting, gripping action is insured because the longitudinal axes of the flange **34** and the down-turned edge **18** of the sink converge at a point forward and mutually central of the application points of the clamping action. The angularity of the downturned leg **40** of the flange **34** insures a biting lock into the inside of the side wall **12** of the sink. In addition, this action not only slightly deforms the sink wall creating a mounting detent, but it also applies a lateral force and downward force to the bolt **44** further locking its threaded engagement with the mounting stud. The ribs **38***a*, **38***b* along the edge of the flange render it sufficiently strong to perform its function, and yet be susceptible of manufacture inexpensively.

It is obvious that I have shown new and novel securing means of structure to provide a water and particle proof seal between the overlapping edge of a sink and drainboard. My novel securing means permits the use

of positive pressure which insures proper alignment of parts at all times and prevents their disengagement.

Although I have shown and described a specific embodiment of my invention, I am fully aware that modifications are possible. My invention, therefore, is to be limited only by the spirit of the appended claims as equivalents, obviously, can be substituted within the skill of the mechanic without departing from the principles of the invention.

I claim:

1. A sink installation comprising a drain surface having an opening therein to receive a sink, a sink inserted into said opening having an outwardly extending horizontal rim with a downturned peripheral edge; a J-shaped bracket having a base, a main leg and a short leg, said J-shaped bracket being placed beneath said drainboard with its base flush with the opening and perpendicular with the drainboard, the legs extending horizontally away from the opening; a plurality of female threaded members secured in spaced relation at a mid-portion in the underside of the sink flange; a clamping flange having a rib reinforced body portion and an end bent at an acute angle, the body portion having a central opening; and a bolt passing through the clamping member with the bent end abutting the sink wall and the bend pointing downwardly, the other free end of the clamp body abutting the base of the J-shaped bracket whereby tightening the bolt jammingly engages the bent end of the clamp with the sink wall and simultaneously impresses the downturned peripheral edge of the sink rim into the drainboard top thereby effecting a water-tight seal.

2. A sink installation comprising a drain surface having an opening therein to receive a sink, a sink inserted into said opening having an outwardly extending horizontal rim with a downturned peripheral edge; a J-shaped mounting bracket having a base, a main leg and a second leg, said legs being parallel and mutually perpendicular with the base, said mounting bracket being placed beneath said drainboard with its base flush with the opening and perpendicular with the drainboard, the legs extending horizontally away from the opening; a plurality of female threaded members secured in spaced relation at a mid-portion in the underside of the sink flange; a clamping flange having a rib reinforced body portion and an end bent at an acute angle, the body portion having a central opening; and a bolt passing through the clamping member with the bent end abutting the sink wall and the bend pointing downwardly, the other free end of the clamp body abutting the base of the J-shaped bracket whereby tightening the bolt jammingly engages the bent end of the clamp with the sink wall and simultaneously impresses the downturned peripheral edge of the sink rim into the drainboard top thereby effecting a water-tight seal.

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