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SELF RIMMING SINK MOUNTING

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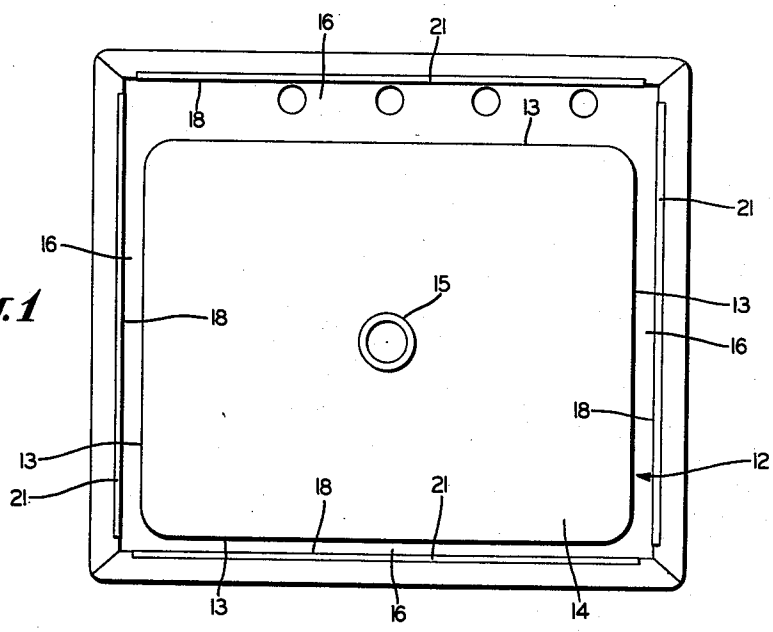



Fig. 1

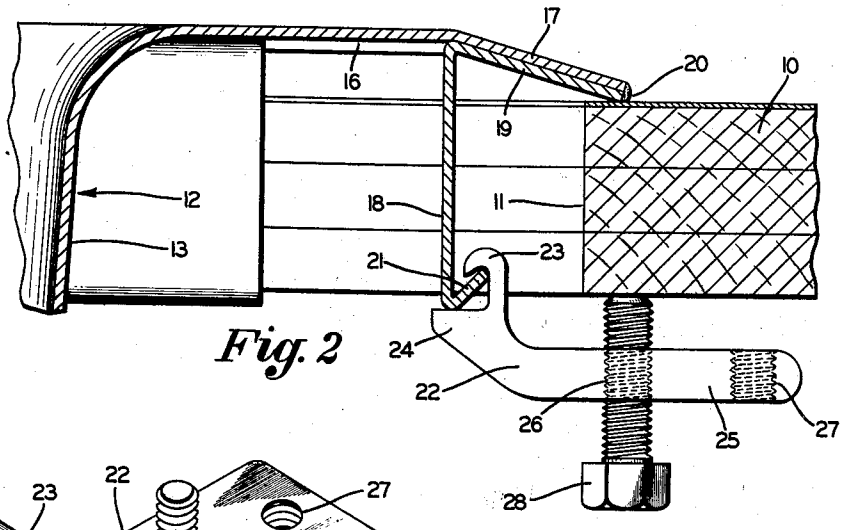



Fig. 2

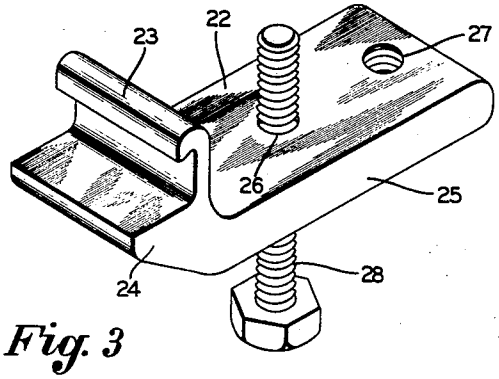



Fig. 3

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# SELF RIMMING SINK MOUNTING

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3 Claims. (Cl. 4—187)

The invention relates to sink structures, and more particulary to a self-rimming mounting for a sink bowl, and the present application is a continuation-in-part of my copending application, Serial No. 726,370, filed April 4, 1958.

Until quite recently, the majority of sink bowls have been made of enameled steel wherein the marginal flanges of the bowls have been of considerable thickness. It was, therefore, generally unsatisfactory to have the marginal flange of the bowl rest upon the sink deck due to the thickness of the flange. The general practice, therefore, has been to install such bowls below the top of the sink deck with the use of a separable molding or "Hudee" ring between the flange of the bowl and the surface of the deck.

In recent years stainless steel and similar sink bowls have come into wide use. Such sink bowls are drawn or pressed from sheets of stainless steel or alloy of relatively thin gauge. The bowl is formed with an outwardly projecting marginal flange of such relatively thin gauge that the flange of the sink may bear directly on the upper surface of the deck, thus eliminating the separable molding or "Hudee" ring, and providing a "self-rimming" sink.

In my copending application above referred to, sheet metal strips with upwardly hooked lower edges are attached to the marginal flange of the sink, spaced inwardly from the edges thereof, and clips are detachably connected to said hooked lower edges of the sheet metal strips and provided with clamping screws for engaging the underside of the deck for clamping the marginal flange of the sink against the upper surface of the deck.

These sheet metal strips are provided at their upper edges with inwardly disposed, substantially horizontal flanges which are spot-welded to the underside of the marginal flange of the sink. Because of the construction and arrangement of the parts in said copending application, spot-welding is about the only practical manner of attaching these inwardly disposed flanges of the strip to the marginal flange of the sink.

The spot-welding has been found objectionable in actual practice as it mars the top surface of the marginal flange of the sink at points adjacent to the sink bowl. An additional operation is also required to remove, as far as possible, the marks produced by the spot-welding and to smooth and finish the surface at these points.

The present application contemplates a construction which overcomes the above difficulties and disadvantages and provides means for attaching these sheet metal strips with hooked lower edges of the marginal flange of the sink in such manner that the top surface of the sink flange remains smooth and unmarred.

This is accomplished by providing these sheet metal strips with out-turned flanges at their upper ends, these flanges being inclined downwardly and outwardly at the same angle as the terminal portion of the marginal flange of the sink and extending to the terminal edge thereof.



This arrangement permits these top flanges of the sheet metal strips to be attached to the marginal flange of the sink by inert gas welding or seam-welding which does not mar, deface or distort the top surface of the sink.

In my copending application, clips provided with hooked portions engage the hooked lower edges of these sheet metal strips, each clip being provided with a single threaded aperture for receiving a clamping screw for engagement with the underside of the deck to clamp the rim flange of the sink against the upper surface of the deck.

In the present application each of these clips is provided with two spaced threaded apertures for optional engagement by the clamping screw, whereby as occasion may require, the clamping screws may engage the under surface of the deck adjacent to the opening therein through which the sink is mounted, or at points spaced therefrom.

It is therefore an object of the invention to provide a self-rimming sink mounting which overcomes the above-mentioned disadvantages and difficulties.

Another object of the invention is to provide such a sink mounting in which the sheet metal strips having hooked lower edges are attached to the under surface of the marginal flange of the sink by means of outwardly disposed upper flanges extending to the terminal edge of said marginal flange and attached thereto.

A further object of the invention is to provide a self-rimming sink mounting of the character referred to in which the upper flange of said sheet metal strip is connected to the marginal flange of the sink by inert gas welding or seam-welding.

It is also an object of the invention to provide a self-rimming sink mounting of this type in which each clip is provided with spaced threaded apertures for selective engagement by a clamping screw.

The above objects, together with others, which are apparent from the drawings and following description, or which may be later referred to, may be attained by constructing the improved self-rimming sink mounting in the manner hereinafter described in detail and illustrated in the accompanying drawings, in which;

Fig. 1 is a bottom plan view of a sink embodying the invention;

Fig. 2 is an enlarged fragmentary sectional view through the marginal flange of a sink showing the improved self-rimming mounting; and

Fig. 3 is a detached perspective view of one of the clamping clips.

Referring now more particularly to the construction illustrated in the drawings, in which similar numerals refer to similar parts throughout, a portion of a sink deck or drainboard is indicated at **10**, provided with a cut-out opening **11** for the reception and positioning of a sink bowl indicated generally at **12**.

The sink may be made as a single piece by drawing or pressing a sheet of corrosion-resistant alloy metal of relatively light gauge having side walls **13** and bottom wall **14** provided with the usual drain opening **15**. While a single bowl sink is shown, it should be understood that the invention is equally applicable to multiple bowl sinks.

The sink bowl is formed at its upper edge with a continuous, substantially horizontal, marginal flange **16** integral with the sink bowl, the terminal portion of said marginal flange being preferably inclined slightly downwardly and outwardly as indicated at **17**.

The marginal flange is of such dimensions that it will overlie the upper surface of the sink deck **10** at the framing of the opening **11** therein to provide support for the sink bowl and afford means for clamping of the bowl

for rigid installation upon the deck as disclosed in detail in my copending application.

Sheet metal strips **18** are attached to the underside of the marginal flange **16** of the sink. These strips may be attached to the marginal flange of the sink adjacent to all four sides of the sink as shown in Fig. 1, or if desired, they may be attached to only three edges of the marginal flange while a channel strip may be attached to the fourth edge thereof as illustrated and described in detail in my copending application.

For the purpose of attaching the sheet metal strips **18** to the marginal flange of the sink, each strip **18** is provided at its upper end with an outwardly disposed and slightly downwardly inclined flange **19** conforming to and coextensive with the inclined terminal edge portion **17** of the marginal flange of the sink and attached thereto by inert gas welding or seam-welding, as indicated at **20**.

This provides a rigid connection of the sheet metal strip to the marginal flange of the sink without marring, defacing or distorting the upper surface of said marginal flange. The lower edge of each of the sheet metal strips **18** is upwardly hooked, as indicated at **21**.

The strips **18** extend downwardly through the opening **11** in the sink deck, preferably to a point slightly below the lower surface of the deck as shown in the drawing, and the upwardly hooked lower edges **21** thereof are disposed outwardly from the sink bowl and toward the opening in the deck as best shown in Fig. 2.

Clamping clips **22** are provided for detachable connection to the sheet metal strips **18** for clamping the marginal flange of the sink upon the top of the deck **10** in the manner disclosed in detail in my copending application.

Each of the clamping clips has an upwardly disposed hook **23** for engaging the hooked lower edge **21** of the adjacent sheet metal strip **18**, an inwardly projecting portion **24** simultaneously contacting the lower edge of the strip **18** to prevent the clip from tipping out of substantially horizontal position, and an outwardly disposed, substantially horizontal portion **25** projecting beneath the sink deck **10** at the adjacent side of the opening **11** therein.

A spaced pair of threaded apertures **26** and **27** are provided in the portion **25** of the clip for selective engagement by a clamping screw **28** which is adapted to engage the under surface of the deck **10** as best shown in Fig. 2.

The clamping screw **28** may be located through the threaded aperture **26** so as to engage the under surface of the deck **10** at a point closely adjacent to the opening **11** therein, as shown in Fig. 2, or may be located through the threaded aperture **27** to engage the under surface of the deck at a point spaced from the opening **11** as may be desirable or necessary in the mounting of the sink.

To install the sink bowl, it is inserted downwardly through the opening **11** in the deck **10** and properly positioned within said opening with all edges of the marginal flange of the sink resting upon the top of the deck around the opening **11**.

The clamping clips **22** are then placed in position with the hook portions **23** thereof engaged over the upwardly hooked lower edges **21** of the sheet metal strips **18** and the clamping screws **28** are tightened against the under surface of the deck **10** drawing the marginal flange of the sink tightly down upon the top surface of the deck entirely around the opening **11** therein and clamping the sink bowl tightly upon the deck.

In the foregoing description, certain terms have been used for brevity, clearness and understanding, but no unnecessary limitations are to be implied therefrom, because such words are used for description purposes herein and are intended to be broadly construed.

Moreover, the embodiments of the improved construction illustrated and described herein are by way of example, and the scope of the present invention is not limited to the exact details of construction.

Having now described the invention or discovery, the construction, the operation, and use of preferred embodiments thereof, and the advantageous new and useful results obtained thereby; the new and useful construction, and reasonable mechanical equivalents thereof obvious to those skilled in the art, are set forth in the appended claims.

I claim:

1. A sink and drainboard assembly comprising a unitary sink bowl, the drainboard being provided with an opening conforming to and slightly larger than the body of the bowl to receive the bowl positioned within the opening, said bowl being formed with an integral continuous flange projecting outwardly and downwardly from its upper edge and overlying the marginal edge surface defining the drainboard opening, vertical sheet metal strips depending from said flange on the sink bowl at points spaced inwardly from the marginal edges thereof, an integral outwardly and downwardly disposed flange at the upper edge of each sheet metal strip located under and conforming to and coextensive with the marginal portions of the flange on the sink bowl and integrally attached throughout its length at its outer edge to the outer edge of the flange on the sink bowl, upturned hooks on the lower edges of said sheet metal strips, a plurality of clamping means detachably connected to each of said upturned hooks and located in clamped contact with the under surface of the drainboard adjacent the opening therein so as to clamp the entire marginal edges of the flange on the sink bowl tightly down against the top surface of the drainboard, and means on said clamping means preventing them from rotating around said hooks.

2. A sink and drainboard assembly comprising a unitary sink bowl, the drainboard being provided with an opening conforming to and slightly larger than the body of the bowl to receive the bowl positioned within the opening, said bowl being formed with an integral continuous flange projecting outwardly and downwardly from its upper edge and overlying the marginal edge surface defining the drainboard opening, vertical sheet metal strips depending from said flange on the sink bowl at points spaced inwardly from the marginal edges thereof, an integral outwardly and downwardly disposed flange at the upper edge of each sheet metal strip located under and conforming to and coextensive with the marginal portions of the flange on the sink bowl and integrally attached throughout its length at its outer edge to the outer edge of the flange on the sink bowl, upturned hooks on the lower edges of said sheet metal strips, a plurality of clip and screw clamping means detachably connected to said hooks and located in clamped contact with the under surface of the drainboard adjacent the opening therein so as to clamp the entire marginal edges of the flange on the sink bowl tightly down against the top surface of the drainboard, and means on said clips preventing them from rotating around said hooks.

3. A sink and drainboard assembly comprising a unitary sink bowl, the drainboard being provided with an opening conforming to and slightly larger than the body of the bowl to receive the bowl positioned within the opening, said bowl being formed with an integral continuous flange projecting outwardly and downwardly from its upper edge and overlying the marginal edge surface defining the drainboard opening, vertical sheet metal strips depending from said flange on the sink bowl at points spaced inwardly from the marginal edges thereof, an integral outwardly and downwardly disposed flange at the upper edge of each sheet metal strip located under and conforming to and coextensive with the marginal portions of the flange on the sink bowl and integrally attached throughout its length at its outer edge to the

outer edge of the flange on the sink bowl, upturned hooks on the lower edges of said sheet metal strips, a plurality of clips having downturned hooks detachably connected to the upturned hooks on the lower edges of said sheet metal strips, screws threaded through said clips and located in clamped contact with the underside of the drainboard adjacent the opening therein so as to clamp the entire marginal edges of the flange on the sink bowl tightly down against the top surface of the drainboard, and means on said clips contacting the undersides of said upturned hooks and preventing the clips from rotating around said hooks.



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