May 4, 1948. H. D. DRAIN 2,440,741

SINK MOUNTING

Filed Nov. 26, 1945 2 Sheets-Sheet 1

Fig. 1

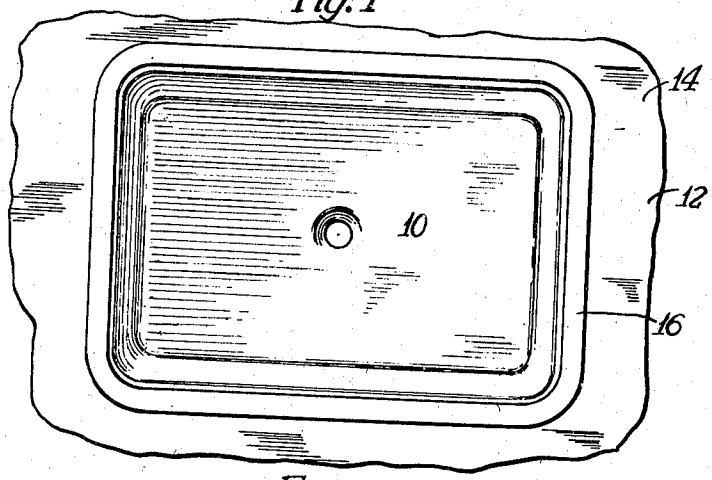


Fig. 2

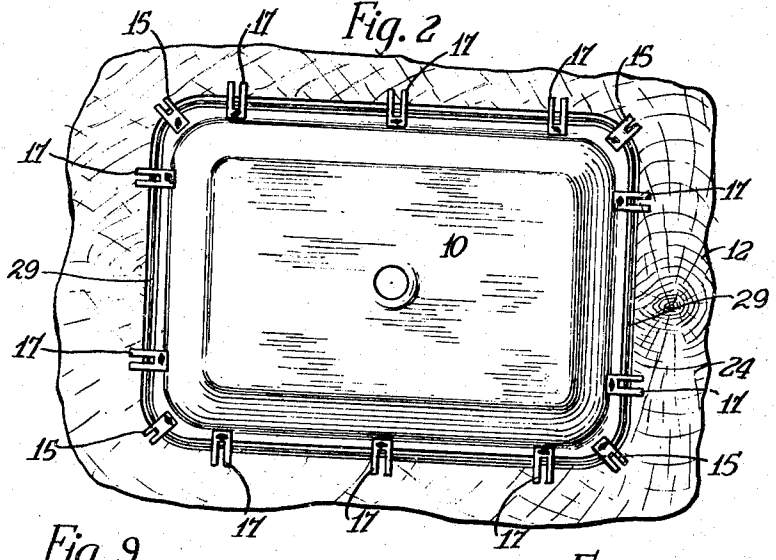


Fig. 9

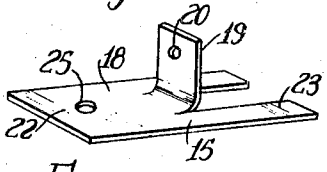


Fig. 11

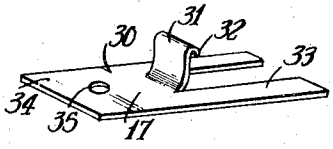
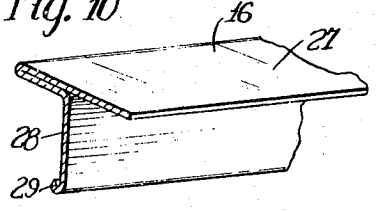


Fig. 10



INVENTOR.
Herbert D. Drain
BY
Cromwell, Geist & Warden

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Fig. 3

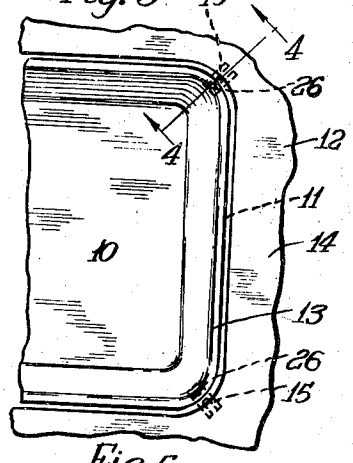


Fig. 4

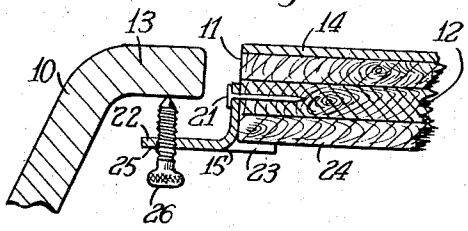


Fig. 5

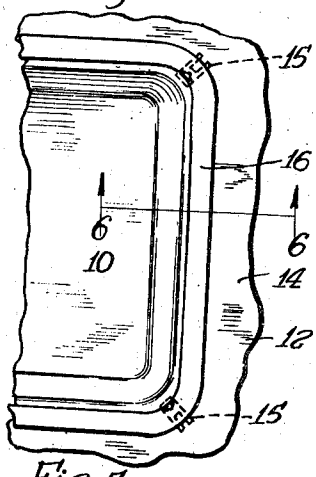


Fig. 6

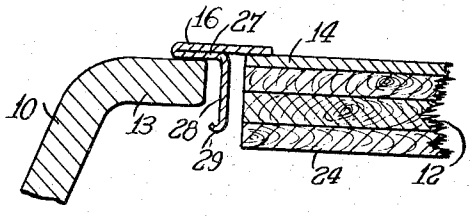


Fig. 7

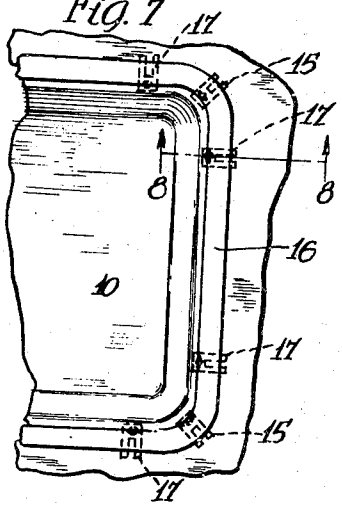
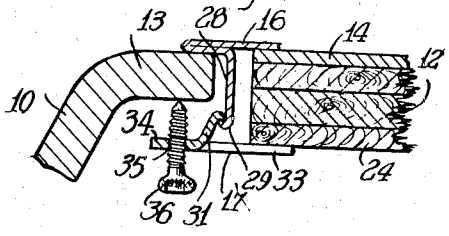


Fig. 8



INVENTOR.
Herbert D. Drain
BY
Cromwell, Greist & Warden
ATTORNEYS

Patented May 4, 1948

2,440,741

UNITED STATES PATENT OFFICE

2,440,741

SINK MOUNTING

Herbert D. Drain, Chicago, Ill., assignor, by direct and mesne assignments, to Walter E. Selck and Co., Chicago, Ill., a corporation of Illinois

Application November 26, 1945, Serial No. 630,742

12 Claims. (Cl. 4—187)

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My invention relates to improvements in sink mountings for installing a standard flat flange type sink in an opening in a drainboard or the like.

It is an object of my invention to provide improved mounting means particularly adapted for rigidly securing a cast iron sink of the flat flange type in an opening in a linoleum covered plywood drainboard and providing a watertight seal between the sink and the drainboard.

It is another object of my invention to provide a sink mounting means, for the purpose described, comprising a few relatively simple parts, or fixtures, by means of which the sink may be readily installed from the top of the drainboard in a simple and easy manner by a relatively unskilled person.

It is another object of my invention to provide a sink mounting means whereby a standard sink may be readily installed in an opening in a drainboard without the use of any special tools or equipment.

It is another object of my invention to provide a sink mounting means for installing a sink in an opening in a drainboard wherein the only tool required is a conventional hammer.

It is another object of my invention to provide a sink mounting means comprising relatively few parts which may be marketed as a kit for use in installing a standard type sink in a conventional drainboard opening.

It is a further object of my invention to provide a sink and drainboard mounting in which a T-shaped sealing member is positioned in overlapped relation with respect to the sink and drainboard and adjustable clamping members are positioned beneath the sink and drainboard to rigidly secure the sealing member in such relation to provide a watertight seal between the sink and the drainboard.

A further object of my invention is to provide a method of installing a sink in an opening in a drainboard comprising: securing in the walls of the opening brackets having adjustable supporting means extending into the opening; positioning the sink on said adjustable supporting means and adjusting the sink to the proper height relative to the drainboard; positioning, between the sink and the drainboard and in encircling relation to the sink, an integral sealing ring having a downwardly extending continuous flange; pivotally connecting to the flange of the sealing ring intermediate their ends a plurality of bottom clamp members with one end thereof in engagement beneath the drainboard and the other end

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thereof positioned beneath the sink and provided with adjustable means engaging the sink; and adjusting the sink-engaging means to clamp the sealing ring, the sink and the drainboard rigidly in position.

These and other objects will be apparent from the description of the preferred form of my invention which is shown, by way of illustration, in the accompanying drawings, wherein:

Fig. 1 is a top plan of a sink installed in a drainboard with my mounting;

Fig. 2 is a bottom view of Fig. 1;

Fig. 3 is a partial top view showing the sink in adjusted position in the drainboard opening just prior to the installation of the sealing ring;

Fig. 4 is a section on the line 4—4 of Fig. 3 to an enlarged scale;

Fig. 5 is a view similar to Fig. 3 with the sealing ring in position;

Fig. 6 is a section on the line 6—6 of Fig. 5 to an enlarged scale;

Fig. 7 is a view similar to Fig. 3 with the sealing ring and its clamping members in position;

Fig. 8 is a section on the line 8—8 of Fig. 7 to an enlarged scale;

Fig. 9 is a perspective view of one of the supporting lugs;

Fig. 10 is a perspective view of a portion of the sealing ring; and

Fig. 11 is a perspective view of a clamping member.

In the preferred form of my sink mounting, as illustrated in the drawings, I have provided mounting members, or fixtures, for securing a sink 10 in position in an aperture, or opening, 11 which is provided in a drainboard 12. The sink 10 is a standard type having an outwardly directed top flange 13 while the drainboard is a conventional plyboard structure having a linoleum top 14.

My sink mounting members comprise supporting lugs 15 (Fig. 9), an integral sealing ring 16 (Figs. 1 and 10) and clamping, or fastening, members 17 (Fig. 11). The supporting lugs, or brackets, 15 may be stamped from a plate member, or otherwise formed, to provide a plate-like base 18, and an upstanding flange or leg 19 which is provided with an aperture 20 adapted to receive a nail 21 by means of which the flange is secured to the wall of the drainboard aperture 11, as illustrated in Fig. 4. The base 18 of lug 15 comprises portions 22 and 23 extending laterally on each side of the leg 19. The portion 23 is adapted to be placed in engagement with the bottom surface 24 of the drainboard 12 while the portion 22

extends into opening 11 and is provided with a threaded aperture 25 and a thumb screw 26 which adjustably supports the flange 13 of the sink 10 when the latter is in position in the opening 11.

The sealing ring 16 is substantially T-shaped in cross section as shown in Fig. 10 to provide a top portion 27 and a downwardly extending leg 28. The leg 28 is provided with a continuous turned-back or hooked end 29. As shown in Fig. 10 the sealing ring 16 is shaped from flat metal. However, it may be constructed of other materials and in any other manner which will provide a top member such as 27 having laterally extending under surfaces and a downwardly extending leg member such as 28 having a hook such as 29 on the end of the same. The sealing ring is positioned as shown in Figs. 1, 2, 5 and 6 in encircling relation to the sink with the downwardly extending leg 28 between the sink flange 13 and the drainboard 12 with the under surfaces of the top member 27 in engagement with the top of the flange 13 and with the linoleum 14 on the top of the drainboard 12.

The clamping or fastening members 17 comprise a plate-like base 30 as shown in Fig. 11 having an upstanding member 31 provided with a hooked end 32. The base member 30 comprises portions 33 and 34 extending laterally of the upstanding member 31. The hooked end 32 of the upstanding member 31 is adapted to be engaged with the hook member 29 of the downwardly extending leg 28 of the sealing ring 16, as shown in Fig. 8. The base portion 33 is adapted to be positioned in engagement with the under surface 24 of the drainboard 12 while the portion 34 of the base member 30 extends beneath the sink 10 and is provided with a threaded aperture 35 and a thumb screw 36 which is engaged with the under surface of the flange 13 of the sink 10. While the fastening member 17 is illustrated as stamped from a metal plate, this member may be constructed of any other material and in any other manner which will provide the laterally extending portions 33, 34 and the upstanding hook member 31, 32.

The sealing ring 16 and the clamping members 17 are illustrated as provided with interengageable hook members 29 and 32 to obtain a separable pivotal connection between the same. It will be understood that this construction is merely illustrative and other separable pivotal constructions may be used to provide the separable connections between these members.

The method of installing a sink in an opening in a drainboard using my mountings is illustrated in Figs. 3 to 8 inclusive. A supporting lug 15 is secured to the drainboard 12 at each of the four corners of the opening 11 in the same. The only tool required for the installation of the members 15 is a conventional hammer for driving the nail 21. The sink 10 is then positioned with the lower surface of the flange 13 resting on the thumb screws 26. The thumb screws 26 are adjusted to bring the sink to the proper level relative to the top of the drainboard 12. The sealing ring 16 is then positioned as illustrated in Figs. 5 and 6. A plurality of fastening members 17 are then positioned with their hooks 32 in engagement with the hook 29 of the sealing ring 16 as illustrated in Figs. 7 and 8 and with the base portion 33 in abutting relation with the bottom surface 24 of the drainboard 12. The thumb screws 36 are then taken up until they draw the sealing ring 16 down into watertight engagement with the sink 10 and drainboard 12, thus clamping the sealing ring 16 and the sink 10 securely to the drainboard 12.

While I prefer to construct my sink mounting members of metal in the manner set out, it is contemplated that the mounting members may be made of other material and other forms thereof may be resorted to within the spirit of my invention.

I claim:

1. Means for mounting a flat flange type sink in an opening in a drainboard comprising a frame of generally T-shaped cross section which is adapted to be positioned with its vertical leg between the edge of the drainboard and the edge of the sink and with its top overlying the adjacent edges of the drainboard and the sink, said frame having adjacent the lower edge of said vertical leg lug attaching formations, and lugs provided with attaching formations for latching engagement with said frame, said lugs having portions extending beneath the drainboard and the sink flange, one of said lug portions having adjustable means adapted to clamp said frame in position relative to the drainboard and the sink.

2. Means for mounting a flat flange type sink in an opening in a drainboard comprising a frame of generally T-shaped cross section which is adapted to be positioned with its vertical leg between the edge of the drainboard and the edge of the sink and with its top overlying the adjacent edges of the drainboard and the sink, said frame having adjacent the lower edge of said vertical leg lug attaching formations, lugs provided with attaching formations for latching engagement with said frame and having portions extending beneath the drainboard and the sink flange, one of said lug portions having adjustable means adapted to clamp said frame in position relative to the drainboard and the sink, and brackets adapted to be attached to said drainboard and having laterally extending adjustable means adapted to temporarily support the sink in the drainboard opening.

3. In a sink and drainboard assembly, a plurality of elements having portions attached to the drainboard and adjustable sink supporting means extending therefrom, a flat flange type sink adjustably supported thereon, a sealing ring positioned in abutting engagement with the top edge of the sink and the drainboard and extending downwardly between the same, a plurality of spaced clamping members having separable connection with said sealing ring and provided with laterally directed portions extending beneath the drainboard and the sink, and adjustable clamping means in one of said extending portions.

4. In a sink and drainboard assembly, a plurality of supporting lugs secured in spaced relation around an aperture in a drainboard each having a flange extending into the aperture and provided with a vertical adjusting screw, a sink in said aperture having a flat outer flange supported on said adjusting screws, a generally T-shaped sealing ring having head portions in engagement with the top of the sink flange and the drainboard and a leg portion extending downwardly between the sink and the drainboard, a plurality of spaced clamping members in separable pivotal connection with the leg portion of the sealing ring and provided with laterally directed portions extending beneath the drainboard and the sink flange, and adjustable clamping screws in one of said extending portions.

5. In a sink and drainboard assembly, brackets

secured to the drainboard surrounding the opening therein and having supporting flanges provided with adjustable supporting means extending into said opening adapted to receive thereon the flange of a sink positioned in the opening, a sealing ring having top portions overlapping the edge of the drainboard and the sink flange, and provided with a downwardly extending member positioned between the sink and the drainboard, clamping members separably and pivotally connected to the downwardly extending sealing ring member having one end extending in abutting relation beneath the drainboard and the other end extending beneath the sink flange, and adjustable means on the latter end engaging the sink flange whereby all the members may be clamped in rigid position.

6. In a sink and drainboard assembly, brackets secured to the drainboard surrounding the opening therein and having supporting flanges provided with adjustable supporting means extending into said opening adapted to receive thereon the flange of a sink positioned in the opening, a sealing ring having top portions overlapping the edge of the drainboard and the sink flange and provided with a downwardly extending member positioned between the sink and the drainboard, clamping members pivotally connected to the downwardly extending sealing ring member having one end extending beneath the drainboard and the other end extending beneath the sink flange, and adjustable means on one end of said clamping members whereby the sealing ring and the sink may be securely and rigidly clamped in position in the drainboard opening.

7. A sink and drainboard assembly, comprising an apertured drainboard, a flat flange type sink positioned in the aperture in said drainboard, inverted substantially T-shaped supporting lugs having the legs thereof secured to the edge of the drainboard around the aperture, one portion of the top of said lugs extending in abutting relation beneath the drainboard and the other portion extending beneath the sink flange, thumb screws threaded in said lugs adjustably supporting said sink, a substantially T-shaped sealing ring having a downwardly directed portion positioned between the sink and the drainboard, and inverted substantially T-shaped fastening lugs having laterally directed top portions extending beneath the drainboard and upwardly extending leg portions in separable engagement with the downwardly directed portion of said sealing ring, said fastening lugs having a laterally directed top portion extending beneath the sink flange and provided with thumb screws which engage the sink flange and clamp the sealing ring and sink in position.

8. A set of fixtures for use in mounting a flat flange type sink in an apertured drainboard, comprising a plurality of substantially T-shaped supporting lugs having an apertured leg and a head provided with a threaded adjusting screw positioned laterally of said leg, a substantially T-shaped sealing ring having separable fastening means on the leg thereof, and a plurality of substantially T-shaped fastening elements each having separable fastening means on the leg thereof adapted to cooperate with the fastening means on the leg of the sealing ring, and a head provided with a threaded clamping screw positioned laterally of the leg.

9. A set of fixtures for use in mounting a flat flange type sink in an aperture in a drainboard, comprising a plurality of supporting elements

having means for attaching the same to the drainboard around the aperture and adjustable sink supporting means adapted to extend into the aperture when said elements are attached to said drainboard, an integral sealing ring having portions adapted to be positioned in engagement with the edge of the sink and the edge of the drainboard and another portion adapted to extend downwardly between the sink and the drainboard when the ring is positioned thereon, a plurality of clamping elements having end portions adapted to be positioned beneath the sink and the drainboard, one of which is provided with adjustable clamping means, and upwardly extending intermediate portions provided with interengaging means for separably attaching the same to the downwardly extending portion of said sealing ring.

10. Means for mounting a flat flange type sink in an opening in a drainboard, comprising a frame of generally T-shaped cross section which is adapted to be positioned with its vertical leg between the edge of the drainboard and the edge of the sink and with its top overlying the adjacent edges of the drainboard and the sink, said frame having adjacent the lower edge of said vertical leg lug attaching formations, and lugs provided with hook-like attaching formations for interengagement with the attaching formations on said frame, said lugs having rigid integral portions adapted to extend in opposite directions beneath the drainboard and the sink flange, one of said lug portions having an adjustable clamping screw adapted to clamp said frame in position relative to the drainboard and the sink.

11. Means for mounting a flat flange type sink in an opening in a drainboard, comprising a frame of generally T-shaped cross section which is adapted to be positioned in encircling relation around the sink with its vertical leg between the edge of the drainboard and the edge of the sink and with its top projecting laterally and overlying the adjacent edges of the drainboard and the sink, said frame having adjacent the lower edge of said vertical leg a continuously extending upwardly directed hook formation, and lugs provided with hook-like attaching formations for interengagement with the hook formation on said frame, said lugs being adapted to be arranged in any desired spaced relation around the frame, said lugs each having integral portions adapted to extend in opposite directions beneath the drainboard and the sink flange and having adjustable clamping screws in one of the oppositely extending portions which are adapted to clamp said frame in position relative to the drainboard sink.

12. A frame member for use in supporting a sink bowl within a correspondingly shaped opening in a drainboard, said frame member being of generally rectangularly extending formation and of T-shaped cross section throughout its lineal extent and being adapted for insertion between the sink bowl and the drainboard with its top laterally extending flanges overlying the sink bowl and drainboard and with its vertical flange extending outwardly between the sink bowl and drainboard, the lower edge of the vertical flange being provided continuously throughout its lineal extent with a locking formation having a laterally extending portion of considerably less width than the top flange above the same, said locking formation being adapted for interengagement with structurally separate

clamping members and being adapted to be engaged by the clamping members at any desired spaced points along the same.

HERBERT D. DRAIN.

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