April 11, 1950 A. C. KERBY 2,503,910

SINK ASSEMBLY

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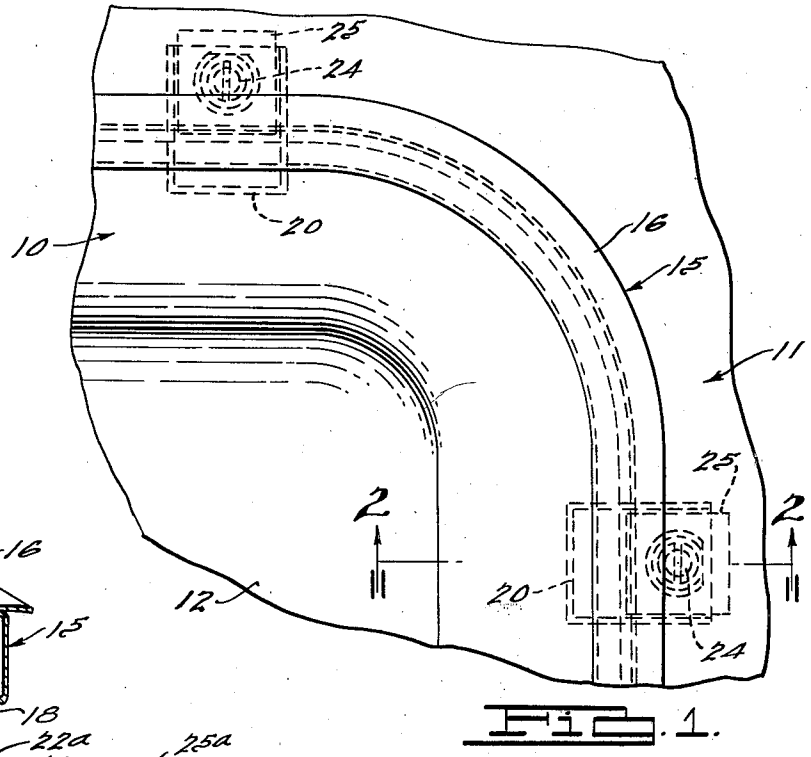


Fig. 1.

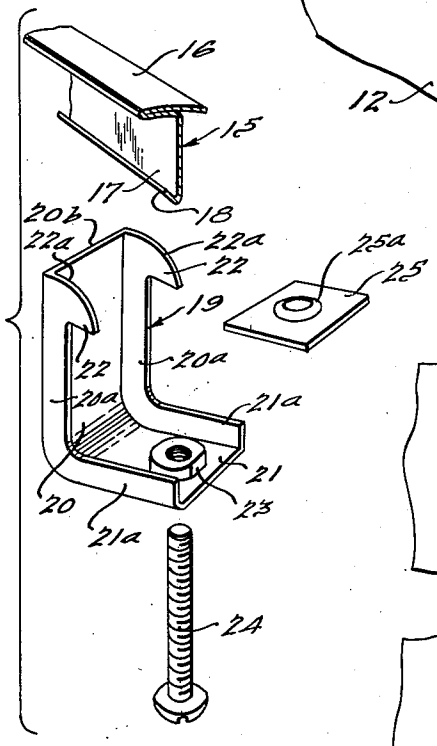


Fig. 3.

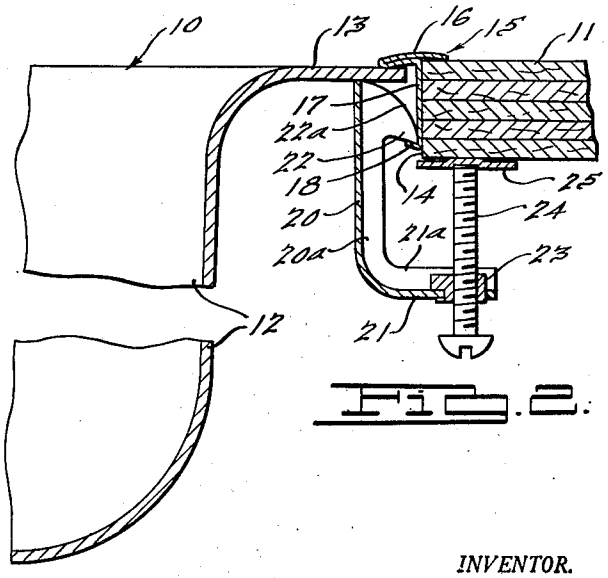


Fig. 2.

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SINK ASSEMBLY

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12 Claims. (Cl. 4—187)

1

This invention relates generally to sink assemblies and more particularly to improved means for mounting and clamping a sink of the flat rim type within an opening in a drainboard, table or counter top or other supporting structure.

It is customary when mounting a sink of the flat rim type to cut an opening in the counter top, drainboard or the like to receive the bowl and rim of the sink, the rim being supported within the opening so as to lie substantially flush with the top of the drainboard or counter top. The gap between the edge of the rim and the edge of the opening is closed by a suitable molding which overlaps and is drawn down tightly against the marginal edges of the sink rim and opening to form a seal therebetween.

An object of the invention is to provide improved means for mounting and clamping a flat rim sink within an opening in a drainboard, counter or table top or the like, which means is relatively simple, efficient, inexpensive and reliable in construction, easily manipulated during installation of the sink and constructed to accommodate various thicknesses of drainboards or supporting tops, thereby eliminating the necessity of providing different size clamping devices for drainboards or the like of different thicknesses.

A further object of the invention is to provide a mounting and clamping device which is not only improved in construction but also more effective in operation so as to ensure a tight engagement between the molding and the adjacent edges of the sink rim and drainboard or supporting top at the corners of the sink as well as along the sides and ends thereof.

More specifically an object of the invention is to provide a mounting and clamping device embodying a generally T-shaped molding having its top adapted to overlie the adjacent edges of the sink rim and supporting structure and its vertical leg extending downwardly therebetween, the clamp for drawing down the molding comprising an angle member having its vertical side engageable with the underside of the sink rim and its horizontal side extending below the drainboard or supporting structure to accommodate an adjusting bolt engageable at its upper end with the underside of the drainboard. The angle clamp and vertical leg of the molding are preferably formed with cooperating hook portions, so that when the bolt is tightened the molding will be drawn down and the sink rim forced upwardly thereby ensuring a tight seal.

Other objects of this invention will appear in

2

the following description and appended claims, reference being had to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

Fig. 1 is a fragmentary plan view showing a portion of a flat rim sink installed in a supporting structure through the medium of mounting and clamping devices embodying the present invention.

Fig. 2 is a fragmentary vertical section taken substantially through lines 2—2 of Fig. 1 looking in the direction of the arrows.

Fig. 3 is an exploded perspective view illustrating the component parts of the mounting and clamping device.

Before explaining in detail the present invention it is to be understood that the invention is not limited in its application to the details of construction and arrangement of parts illustrated in the accompanying drawings, since the invention is capable of other embodiments and of being practiced or carried out in various ways. Also it is to be understood that the phraseology or terminology employed herein is for the purpose of description and not of limitation.

In the drawings there is illustrated a flat rim sink 10 installed within an opening in a drainboard, counter or table top or other supporting structure designated generally by the numeral 11. The sink 10 may be of any conventional type having the usual basin or bowl 12 terminating around the upper edge thereof in a continuous outwardly extending horizontal flange or rim 13. The drainboard or supporting top 11 may comprise any customary supporting structure as, for example, a laminated material such as plywood suitably covered with a water resistant layer or sheeting, such as linoleum.

For the purpose of installing the sink 10 a generally rectangularly shaped opening 14 is cut in the drainboard or supporting top 11, this opening being somewhat larger than the area of the sink so as to permit the sink to be inserted freely into the opening with suitable clearance between the marginal edges of the rim 13 and opening 14 to accommodate a molding 15 by means of which the sink is supported within the opening in the drainboard or supporting structure.

The molding 15, which is usually plated to present a finished border around the marginal edges of the sink, comprises a generally rectangular frame which is generally T-shaped in construction. Thus, the molding frame, which may be made of sheet metal, is provided with a top

or head 16 which is preferably crowned and of suitable width so as to overlie the adjacent edges of the sink rim 13 and drainboard. The molding 15 is also formed with a vertical leg 17 terminating at its lower edge in an inclined flange 18 forming a hook portion. Thus, when the molding is installed, as illustrated in Fig. 2, the vertical leg 17 projects downwardly between the edge of the sink rim and the edge of the opening 14 in the drainboard or supporting structure 11, and the crowned head or top 16 of the molding overlies the upper surfaces of these edges.

The clamping means in the present embodiment of the invention includes an angle member, designated as a whole at 19, which is generally L-shaped in construction to provide a vertical leg 20 terminating at its lower edge in a horizontal leg 21. The angular clamping member 19 is preferably in the form of a channel in cross-section with the vertical leg 20 terminating in vertical flange portions 20*a* which merge into flange portions 21*a* projecting from the edges of the horizontal leg 21. The flanges 20*a* have widened portions at their upper ends forming hooks 22, the upper edges 22*a* of these hook-like portions being curved and inclined to form in effect cam edges. The bottom horizontal leg 21 of the clamp 19 is pierced to provide a hole to receive a clinch nut 23 which is rigidly anchored in position. A bolt 24 is threaded through the nut 23 and engages at its upper end a metal retainer piece 25. The latter is embossed at 25*a* to form a recess at the underside thereof to receive and position the upper end of the bolt 24.

The sink 10 is assembled within the opening 14 in the drainboard or supporting structure 11 with the molding frame 15 installed in place in the manner illustrated in Fig. 2. Any suitable number of clamping devices to cooperate with the molding 15 are positioned around the sides and ends of the sink so as to adequately support the sink within the opening in the drainboard. The hooks 22 of each L-shaped clamping member 19 are hooked over the hook-like flange portion 18 of the molding and the bolt 24 of each clamping device is drawn up so as to engage beneath the drainboard 11 with the retainer piece 25 interposed between the upper end of the bolt and the bottom of the drainboard. Thus, the rim 13 of the sink will have supporting engagement with the upper ends of the clamps 19 and the sink will be supported within the opening in the drainboard by the engagement of the hooks 22 on each clamping member with the hook-like flange 18 extending along the lower edge of the vertical leg 17 of the molding frame. With the rim 13 of the sink resting at various locations on the upper ends of the clamps 19 the bolts 24 are tightened thereby drawing down the horizontal legs 21 of the clamps. This action exerts a downward pressure on the leg 17 of the molding frame on account of the engagement of the hooks 22 with the hook-like flange 18 on the molding frame. Hence, as the bolts 24 are tightened the upper edges 20*b* of the clamps will be forced upwardly and outwardly a small amount so as to force the rim of the sink tightly against the overlying portion of the top 16 of the molding frame. Due to the engagement of the hooks 22 with the molding flange 18 at points located below the upper edge 20*b* of the clamp, the effect of tightening the bolt 24 and forcing the leg 21 downwardly is to rock or turn the clamp slightly about a horizontal line extending through the points of engagement of the hooks 22 and hook-like flange 18. This slight rotative motion of the clamp is in a clockwise direction, as viewed in Fig. 2, and results in forcing the upper edge 20*b* of the clamp outwardly and upwardly a sufficient amount to draw the sink rim and molding top 16 very tightly together. With the usual sealing compound interposed between the top 16 of the molding frame and the edge portions of the sink rim and drainboard, the operation of tightening the clamps in the manner shown in Fig. 2 will produce a tight, permanent seal between the top of the molding and the sink rim and drainboard.

I claim:

1. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure, an angle member having a vertical portion underlying and engageable at its upper end with the sink rim and a horizontal portion adapted to extend beneath the supporting structure, a connection between said vertical portion and said molding, and means engageable with said horizontal portion and the underside of the supporting structure for clamping the molding, sink rim and supporting structure together.

2. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure, an angle member having a vertical portion underlying and engageable at its upper end with the sink rim and a horizontal portion adapted to extend beneath the supporting structure, a detachable hook-like connection between said vertical portion and said molding, and means engageable with said horizontal portion and the underside of the supporting structure for clamping the molding, sink rim and supporting structure together.

3. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure, an angle member having a vertical portion underlying and engageable at its upper end with the sink rim and a horizontal portion adapted to extend beneath the supporting structure, a connection between said vertical portion and said molding, and a bolt threaded through said horizontal portion and operatively engageable with the underside of the supporting structure for clamping the molding, sink rim and supporting structure together.

4. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure, an angle member having a vertical portion underlying and engageable at its upper end with the sink rim and a horizontal portion adapted to extend beneath the supporting structure, a connection between said vertical portion and said molding, a bolt threaded through said horizontal portion, and a retainer member interposed between the upper end of the bolt and the underside of the supporting structure, said bolt being adjustable to clamp the molding, sink rim and supporting structure together.

5. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure and also having a vertical

leg adapted to extend between said edges, said leg having a lateral flange portion, a clamping member having a portion adapted to engage over said flange, a second portion engageable with the underside of the sink rim and a third portion adapted to extend below the supporting structure, and adjustable means cooperating with said third portion and supporting structure for clamping the molding, sink rim and supporting structure together.

6. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure and also having a vertical leg adapted to extend between said edges, said leg having a lateral flange portion, a clamping member having a pair of hook-like portions adapted to engage over said flange, a second portion engageable with the underside of the sink rim and a third portion adapted to extend below the supporting structure, and adjustable means cooperating with said third portion and supporting structure for clamping the molding, sink rim and supporting structure together.

7. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure and also having a vertical leg adapted to extend between said edges, said leg having a lateral flange portion, a clamping member having a portion adapted to engage over said flange, a second portion engageable with the underside of the sink rim and a third portion adapted to extend below the supporting structure, and a bolt threaded through said third portion and operatively engageable with the underside of the supporting structure for clamping the molding, sink rim and supporting structure together.

8. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure and also having a vertical leg adapted to extend between said edges, said leg having a lateral flange portion, a generally L-shaped clamping member having a vertical leg engageable beneath the sink rim, said vertical leg having a portion engageable over said flange portion and said member having a horizontal portion extending below the supporting structure, and adjustable means cooperable with said horizontal portion and supporting structure for clamping the molding, sink rim and supporting structure together.

9. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a generally T-shaped molding having a top adapted to overlie adjacent edges of the sink rim and supporting structure and also having a vertical leg adapted to extend between said edges, said leg having a lateral flange portion, a generally

L-shaped clamping member having a vertical leg engageable at its upper end beneath the sink rim, said vertical leg having a hook-like portion engageable over said flange portion at a point spaced below said upper end and said member having a horizontal portion extending below the supporting structure, and adjustable means cooperable with said horizontal portion and supporting structure for clamping the molding, sink rim and supporting structure together.

10. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a molding adapted to overlie at its top adjacent edges of the sink rim and supporting structure and having a depending portion extending between said edges, a clamping member engageable beneath the sink rim and connected to said depending portion, said clamping member having a portion extending below the supporting structure, and adjustable means cooperating with said last named portion and the underside of the supporting structure for clamping the latter and said sink rim and molding together.

11. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a molding adapted to overlie at its top adjacent edges of the sink rim and supporting structure and having a depending portion extending between said edges, a clamping member engageable beneath the sink rim and having a part adapted to hook over a projection on said depending portion, said clamping member having a portion extending below the supporting structure, and adjustable means cooperating with said last named portion and the underside of the supporting structure for clamping the latter and said sink rim and molding together.

12. Means for mounting a flat rim sink in an opening in a supporting structure, comprising a molding adapted to overlie at its top adjacent edges of the sink rim and supporting structure and having a depending portion extending between said edges, a clamping member engageable beneath the sink rim and connected to said depending portion, said clamping member having a portion extending below the supporting structure, and an adjustable bolt extending through said last named portion of the clamping member and operatively engageable with the underside of the supporting structure for clamping the latter and said sink rim and molding together.

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