May 31, 1960 M. L. STONE 2,938,218

SINK INSTALLATIONS

Filed Aug. 22, 1957

Fig. 1.

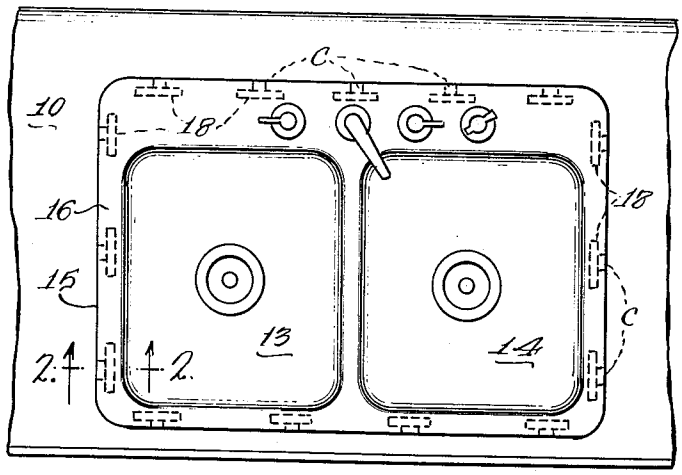


Fig. 2.

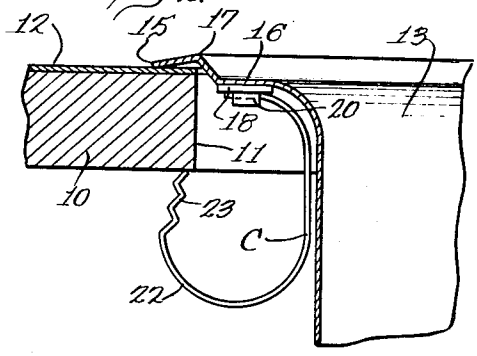


Fig. 3.

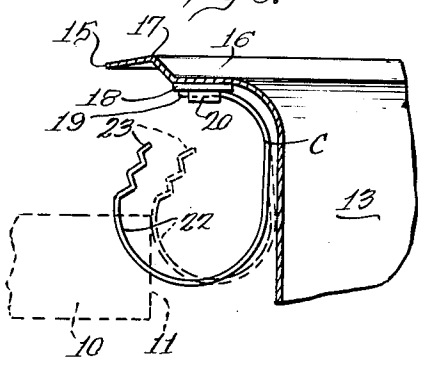


Fig. 4.

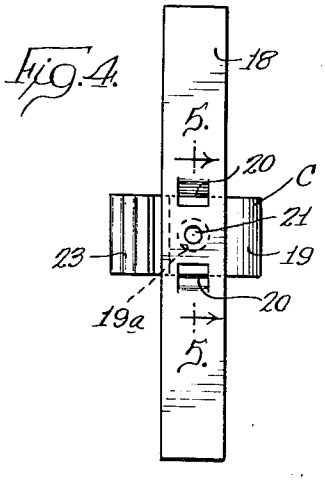
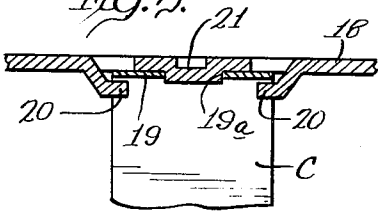


Fig. 5.



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United States Patent Office 2,938,218 Patented May 31, 1960

2,938,218

SINK INSTALLATIONS

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Filed Aug. 22, 1957, Ser. No. 679,638

4 Claims. (Cl. 4—187)

This invention relates to a sink installation featuring the use of novel clamping means for establishing a tight joint between the upper surface of a counter or drain board surrounding the sink receiving opening in said counter and a peripheral outwardly extending flange on the sink bowl overlapping said upper surface of the counter.

More specifically, this invention is concerned with a series of attaching spring clamps fastened to the undersurface of the sink bowl flange and arranged in spaced apart relation along the margin of the sink bowl flange adjoining the wall of the bowl, each clamp having an upwardly and outwardly projecting, free end normally stressed into a position at a distance below the surface of the sink flange to which it is fastened so as to be engageable with the under surface of the counter or drain board to urge said sink flange downwardly into tight engagement with the surface of the counter thereunder.

One of the objects of this invention is to provide a sink mounting arrangement which is of simple construction, relatively inexpensive to produce and is durable.

Another object of this invention is to provide a device of the type noted above which is effective to simplify and expedite the installation and mounting of sinks in sink receiving openings of counter-type cabinets.

Other objects and advantages will hereinafter be more particularly pointed out and for a more complete understanding of the characteristic features of this invention, reference may now be had to the following description when taken together with the accompanying drawing, in which:

Fig. 1 is a fragmentary top plan view of a sink installation featuring the use of mounting clamps in accordance with this invention.

Fig. 2 is an enlarged fragmentary vertical section taken on line 2—2 of Fig. 1 with parts in elevation to show the manner in which the mounting clamp cooperates with the sink and the sink supporting counter or drainboard when in operative position.

Fig. 3 is a similar view to show the mounting clamp prior to operative installation of the sink.

Fig. 4 is an enlarged top plan view of the mounting clamp and a bracket through which the clamp is fastened to the flange of the sink.

Fig. 5 is a fragmentary section taken on line 5—5 of Fig. 4.

In the drawing, a sink installation incorporating the features of this invention is shown as including a counter top 10 having a suitable sink receiving opening defined by an edge portion 11. Reference numeral 12 represents a layer of conventional covering material such as formica bonded or otherwise secured to the upper face of the counter top 10. As shown in Fig. 1, a sink provided with a pair of basins 13 and 14 has downward engagement with the upper surface of the counter top covering 12 along a line defined by the edge portion 15 at the outer limits of a flange 16 extending laterally outwardly

from and about the upper edge of the sink basins 13 and 14. Although the sink shown for illustration purposes is of standard weight stainless steel construction, it will be understood that it may also be of other suitable material such as enameled iron. The flange 16 is preferably offset upwardly as at 17 to define a line parallel to the edge portion 15 about which the marginal portion of the flange between said offset 17 and edge portion 15 may flex to accommodate any slight irregularities in the surface of the counter top covering 12 opposite said edge portion 15 and thereby avoid a faulty joint therebetween due to said irregularities.

The portion of the flange 16 inwardly of said offset 17 preferably presents a flat undersurface to which brackets or strips 18 are suitably joined, as by welding or the like, said strips 18 being arranged in spaced apart relation about the area of the flange 16 bordering the outer side walls of the basins 13 and 14. It will be observed that the area of the flange so provided with strips 18 lies inwardly of the edge 11 of the sink receiving opening in the counter top 10 and thereby a clear space is available therebelow for a clamping member C fastened to and depending from each of said strips 18.

In accordance with the present invention, each of such clamping members comprises an elongated substantially rectangular strip of resilient material such as spring steel. This strip terminates at one of its ends in a quarter turn bend to provide an arm 19 having its longitudinal edge portions trapped between opposed tongues 20 sheared and bent downwardly from the strip 18 to position said edge portions of the arm 19 at right angles to the edge portion 15 of the flange 16 and the transverse edge of the arm facing edge 11 of the sink receiving opening. The arm 19 is secured against movement relative to the strip 18 in directions lengthwise of its longitudinal edge portions by a downwardly offset deformation 21 in the strip 18 engaged in an opening formed in the portion of the arm 19 opposite thereto. The opposite end of the strip is arcuately bent upon itself about an axis parallel to the bend at the inner end of the arm 19 to provide an upwardly extending arm 22 presenting a transverse edge portion in a vertical plane outwardly of the edge 11 of the sink opening and at a distance below the flange 16 less than the vertical dimension of the counter top 10 and covering 12 in said plane. The portion of the spring strip C extending downwardly from the arm 19 is spaced slightly clear of the side wall of the basin opposite thereto so as to permit said downwardly extending portion to move toward and away from the side wall of the basin in response to flexing of the strip about the bend at the inner end of the arm 19 which is fastened to the sink flange 16 as hereinbefore described. The bend joining the lower end of the arm 22 to the downwardly extending portion of the spring strip C provides an axis about which the arm 22 may be flexed for movement toward and away from a position inwardly of a vertical plane coincident with the edge portion 11 of the sink receiving opening in the counter top 10. Thus as the sink is lowered into the opening in the counter top 10 preparatory to final installation, the bend at the lower end of the arm 22 is initially engaged by the edge portion 11 of the counter top 10 and force is thereby applied against the outer surface of said bend to crowd the arm 22 inwardly and thereby allow the sink to be lowered into a position wherein the edge 15 of the sink flange 16 meets the covering 12 on the counter top 10. The arm 22 is thereupon engageable by a suitable pulling implement and drawn downwardly a distance sufficient to position the upwardly facing transverse edge of the arm 22 below the lower surface of the counter top 10, whereby the normal stresses of the strip at the bend

of the arm **22** will cause the arm **22** to assume the position shown in Fig. 2 and consequently exert an upward pressure against the lower surface of the counter top **10**. In response to such upward pressure along the line of engagement between the transverse edge of the arm **22** and the lower surface of the counter top **10**, the edge **15** of the sink flange **16** will be urged downwardly to form a tight joint with the surface of the counter top covering **12**.

The end portion of the arm **22** extending inwardly from the transverse edge thereof is preferably corrugated as at **23** along lines parallel to said edge for the purpose of adding rigidity and increased resistance to flexure of the arm at said end portion.

The spring clamps, as described herein, accordingly provide simple and expedient means for establishing a tight joint between the counter top or other sink supporting surface and the flange of the sink overlapping said supporting surface.

It is to be understood that various modifications of the foregoing embodiment of this invention may be apparent to those skilled in the art without departing from the spirit and scope of this invention, and, therefore, the same is only to be limited by the scope of the appended claims.

What is claimed is:

1. In a fixture installation including a supporting member having first and second opposed surfaces intersected by a fixture receiving opening, and a fixture having a portion confined within said opening and an integral flange extending outwardly from said confined portion overlapping said first surface of the support at the edge of said opening, and means for establishing a tight joint between said flange and the support surface overlapped thereby, said means including a spring clamp having a first end engaging the second surface of the support and a second end, said ends being joined by an integral, intermediate, resilient portion rebent upon itself with said second end extending into the space between said fixture and said opening in the support, and connecting means joining the second end of the clamp to said flange in inwardly spaced relation to the edge of said opening in the support, whereby said fixture with said clamp connected thereto may be installed within said opening.

2. In a fixture installation according to claim 1, wherein means connecting said clamp to said flange includes a bracket fixed to the flange, said bracket being provided with integral tongues between which opposite edge portions of the second end of the clamp are trapped.

3. In a fixture installation according to claim 2, wherein an offset area is formed in the bracket and a recess is formed in the second end of the clamp, and said offset area and said recess in the clamp have interfitting connection operative to limit movement of the clamp relative to the bracket in a path lengthwise of the edges of the clamp trapped by said tongues.

4. In a fixture installation according to claim 1, wherein means connecting said clamp to said flange includes a bracket fixed to the flange, said bracket being provided with integral tongues between which opposite edge portions of the second end of the clamp are trapped, and interlocking means on said second end of the clamp and the portion of the bracket engaged thereby to limit movement of the clamp relative to the flange lengthwise of the edges of the clamp trapped by said tongues.

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