

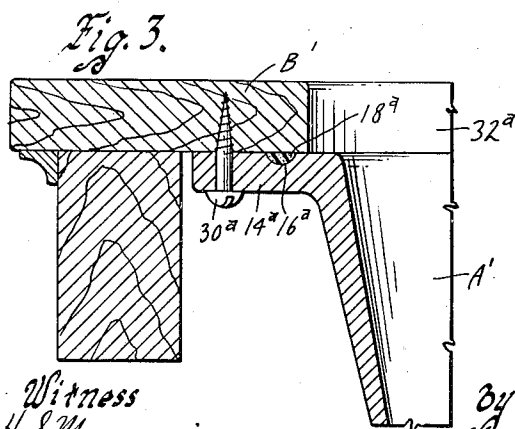
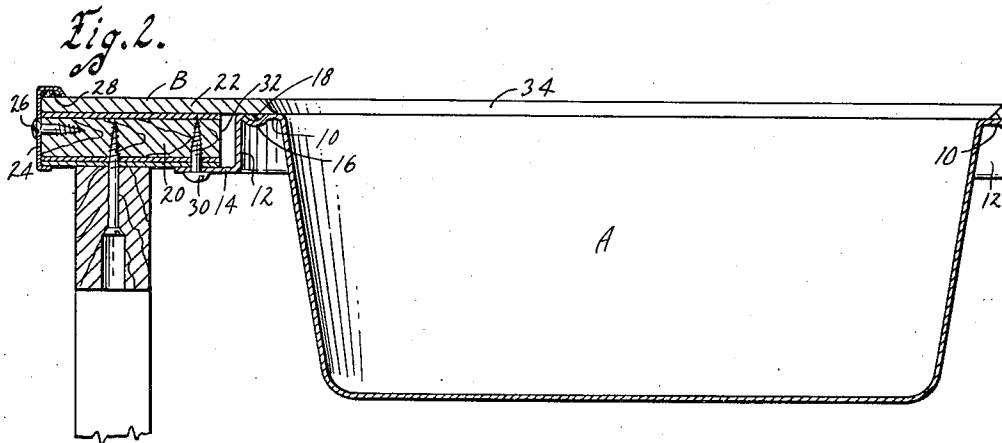
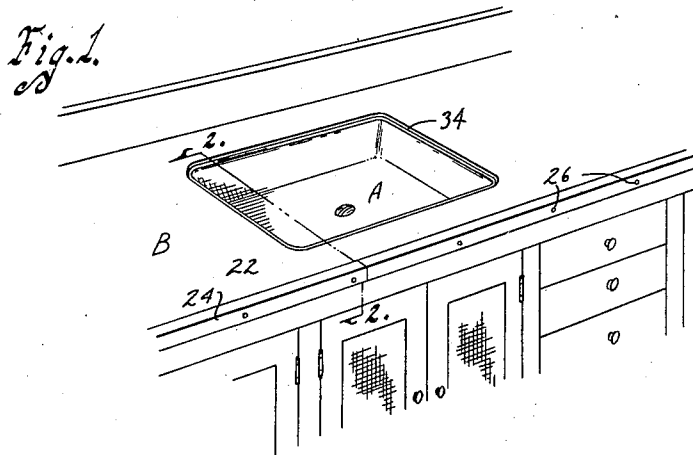
May 18, 1937.

S. MADSEN

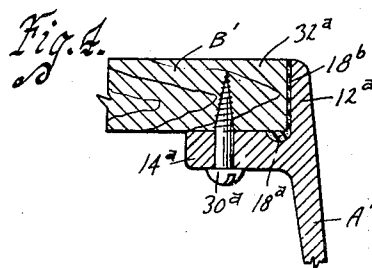
2,080,573

SINK AND COUNTER TOP CONSTRUCTION

Filed Nov. 16, 1935



Witness
H. S. Munzenmaier



Inventor
Sern Madsen
by Bair, Freeman & Sinclair
Attorneys

UNITED STATES PATENT OFFICE

2,080,573

SINK AND COUNTER TOP CONSTRUCTION

Sern Madsen, Clinton, Iowa, assignor to George L. Curtis, Eugene J. Curtis, and Charles A. Armstrong, all of Clinton, Iowa

Application November 16, 1935, Serial No. 50,147

9 Claims. (Cl. 4—187)

An object of my invention is to provide an improvement in combination counter top and sink constructions and to particularly provide an improved watertight joint between the two, which is of simple, durable and inexpensive construction.

A further object is to improve the appearance of a counter or table top having a sink countersunk therein by reducing the depth of the usual offset around the rim of the sink, which ordinarily is the thickness of the counter top, whereas in my construction it is possible to provide sufficient strength in the counter top and a practical support for the sink, yet provide an apparent offset between the counter top and sink rim, which is of but slight height.

A further object is to provide a joint between the sink rim and the edge of the counter top surrounding the opening therein, from which the sink depends, which can be effectively sealed against water and moisture leakage.

A further object is to provide a joint, which presents the maximum in sanitation, the joint being readily cleanable and being constantly maintained without any opening of the joint, which would permit grease and dirt to enter the joint.

A further object is to provide a construction in which a counter top made of wood and surfaced with a non-water absorbing material can be assembled, so that the wood parts thereof are kept entirely away from the sink and moisture.

Another object is to provide a sink which can be more easily attached to a counter top and which when attached is a better permanent installation than has heretofore been possible with the usual types of sink constructions.

Another object is to improve upon existing sink rim constructions by providing a means, which effectively seals the joint between a counter top and the sink rim against the entrance of moisture into the joint.

Still another object is to provide a sink rim construction, which includes a flange to protect the inner wall of the opening in the counter top against the entrance of moisture especially into the end grain of a counter top made of wood.

With these and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my sink and counter top construction, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of a counter top and sink construction embodying my invention.

Figure 2 is an enlarged, sectional view on the line 2—2 of Figure 1, showing the joint between the sink rim and the counter top.

Figure 3 is a sectional view similar to the left side of Figure 2, showing a modified construction; and

Figure 4 is a similar view showing still another modified construction.

On the accompanying drawing, I have used the reference character A to indicate generally a sink. The sink A is illustrated as being of enameled sheet metal and is characterized by a novel rim construction, comprising a horizontally extending raised portion 10, a drop portion 12 and an outer, horizontally extending attaching flange 14.

The portions 10, 12 and 14, of course, extend peripherally around the sink edge. The portion 10 is preferably provided with a groove 16 to receive sealing compound or material 18.

A counter or table top is indicated generally at B and in my preferred form of construction comprises a lower or supporting portion 20 and an upper overlay portion 22. The portion 20 may be formed of four-ply wood, such as bass wood, while the upper portion 22 is formed of a waterproof or non-moisture absorbent sheet, such as Presdwood or linoleum. The two are glued together and their edges may be trimmed with a metal molding 24, secured in position by screws 26.

A sealing strip or compound is illustrated at 28 to prevent moisture from entering between the molding 24 and the top portion 22.

The flange 14 is provided with spaced perforations adapted for the reception of screws 30, which extend up into the supporting member 20 for thereby supporting the sink A rigidly in position.

The member 20 is provided with an opening 32 somewhat greater in diameter than the flange 12, while the top member 22 is provided with an opening 34 smaller than the opening 32 and slightly larger than the interior diameter of the sink A at its upper edge. The drop portion 12 is of the same height as the thickness of the member 20, so that the lower surface of the top member 22 rests upon the flange 10 and is engaged by the sealing material 18.

The edge of the top member 22 surrounding the opening 34 is beveled as illustrated in Figure 2 to facilitate cleaning of the sink and counter

top at the point where one stops and the other begins.

In Figure 3, I show a sink A' formed of enameled cast iron or the like, having an attaching flange 14a. Screws 30a are illustrated for attaching the flange to a wood table top B having an opening 32a therein.

The flange 14a is provided with a groove 16a in which sealing material 18a is positioned.

This construction is an improvement on the usual sink, which does not have a groove adapted for the reception of sealing material, but rather has merely a flat attaching flange, which is sometimes covered with putty or white lead with the intention of thereby forming a watertight joint. When the wood warps, however, such a joint becomes loose, whereas in my construction by providing a sealing compound, such as mastic or a sealing material such as a strip of sponge rubber, warping of the board can occur without opening the sealed joint, because the mastic or sponge rubber expands when the joint is open and can expand to a considerable percentage of its compressed thickness, whereas when a groove is not provided and putty or white lead is used, there is no possibility of such expansion to maintain the joint closed.

In Figure 4, I show a further improvement over Figure 3, in which an additional flange 12a extends upwardly from the inner edge of the peripheral flange 14a to line the inner wall of the opening 32a. The sealing material extends upwardly from the groove 16a along the flange 12a, as indicated at 18b to prevent water getting into the joint between the flange 12a and wall 32a and compensate for any variation in distance between the flange and the inner wall of the opening.

This construction effectively prevents moisture from soaking horizontally into the edge of the top B' which is especially desirable where the end grain is exposed.

With respect to the seal at 18, this may be of any suitable yielding material, whether caulking, packing or sealing compound. When a groove is provided for this material, a much more effective seal results, which is impervious to the entrance of moisture to the joint beyond the sealing material.

Some changes may be made in the construction and arrangement of the various parts of my sink and counter top construction, without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents, which may be reasonably included within their scope.

I claim as my invention:

1. In a sink construction, an attaching rim at the upper edge of the sink wall, said rim comprising a horizontally outwardly extending portion having a groove formed in the upper surface thereof, and a downwardly extending portion terminating in another outwardly extending attaching portion.

2. In a counter top and sink rim joint construction, a counter top having an opening therein surrounded by an inwardly directed overhanging top portion and an undercut bottom portion, said sink rim having an upper flange and a lower flange spaced outwardly therefrom, said flanges extending outwardly from the sink and coacting respectively with said top and lower portions of said counter top.

3. In a counter top and sink rim joint construction, a counter top having an opening therein surrounded by an inwardly directed overhanging top portion and an undercut bottom portion, said sink rim having an upper flange and a lower flange spaced outwardly therefrom, said flanges extending outwardly from the sink and coacting respectively with said top and lower portions of said counter top, said upper flange having a groove and a sealing filler therein.

4. A sink rim construction, a sink rim comprising an inner portion and an outer portion, said outer portion being stepped down relative to said inner portion, said inner portion having a linear groove therein throughout its length, spaced outwardly from the wall of the sink and located in the upper surface of said inner portion.

5. A sink rim construction, a sink rim comprising an inner portion and an outer portion, both of said portions being located outside of the wall of said sink, said outer portion being stepped down relative to said inner portion, said outer portion being perforated for screws to extend therethrough for supporting the sink rim.

6. In a sink and counter top construction, a counter top comprising a supporting member and an overlay member, said supporting member having an opening therein to receive a sink, a sink having a peripheral flange attached to the bottom of said supporting member adjacent the edge of said opening, and a raised portion projecting upwardly into said opening and terminating at the top face of said supporting member, said overlay member covering said supporting member and having an opening of less diameter than the opening in said supporting member, the portion of said overlay member adjacent said opening therein overlying said raised portion of said sink, and means for sealing said overlay member to said raised portion.

7. In a sink and counter top construction, a counter top comprising a supporting member and an overlay member, said supporting member having an opening therein to receive a sink, a sink having a peripheral flange attached to the bottom of said supporting member adjacent the edge of said opening, and a raised portion projecting upwardly into said opening and terminating at the top face of said supporting member, said overlay member covering said supporting member and having an opening of less diameter than the opening in said supporting member, the portion of said overlay member adjacent said opening therein overlying said raised portion of said sink, said raised portion having a groove therein and sealing compound therein and engaging said overlay member.

8. In a sink and counter top construction, a counter top comprising a supporting member and an overlay member, said supporting member having an opening therein to receive a sink, a sink having a peripheral flange attached to the bottom of said supporting member adjacent the edge of said opening, and a raised portion projecting upwardly into said opening and terminating at the top face of said supporting member, said overlay member covering said supporting member and having an opening of less diameter than the opening in said supporting member, the portion of said overlay member adjacent said opening therein overlying said raised portion of said sink, and means for sealing said overlay member to said raised portion, the edge of said opening in said overlay member being

beveled downwardly and inwardly toward said sink.

9. In a counter top and sink rim construction, a counter top having an opening and an upper flange projecting into said opening, a sink having a horizontal rim for attachment under said

counter top, said rim having a raised portion adjacent said opening and under said upper flange, said raised portion being spaced from said flange to receive and retain a sealing agent between said raised portion and said flange.

SERN MADSEN.