

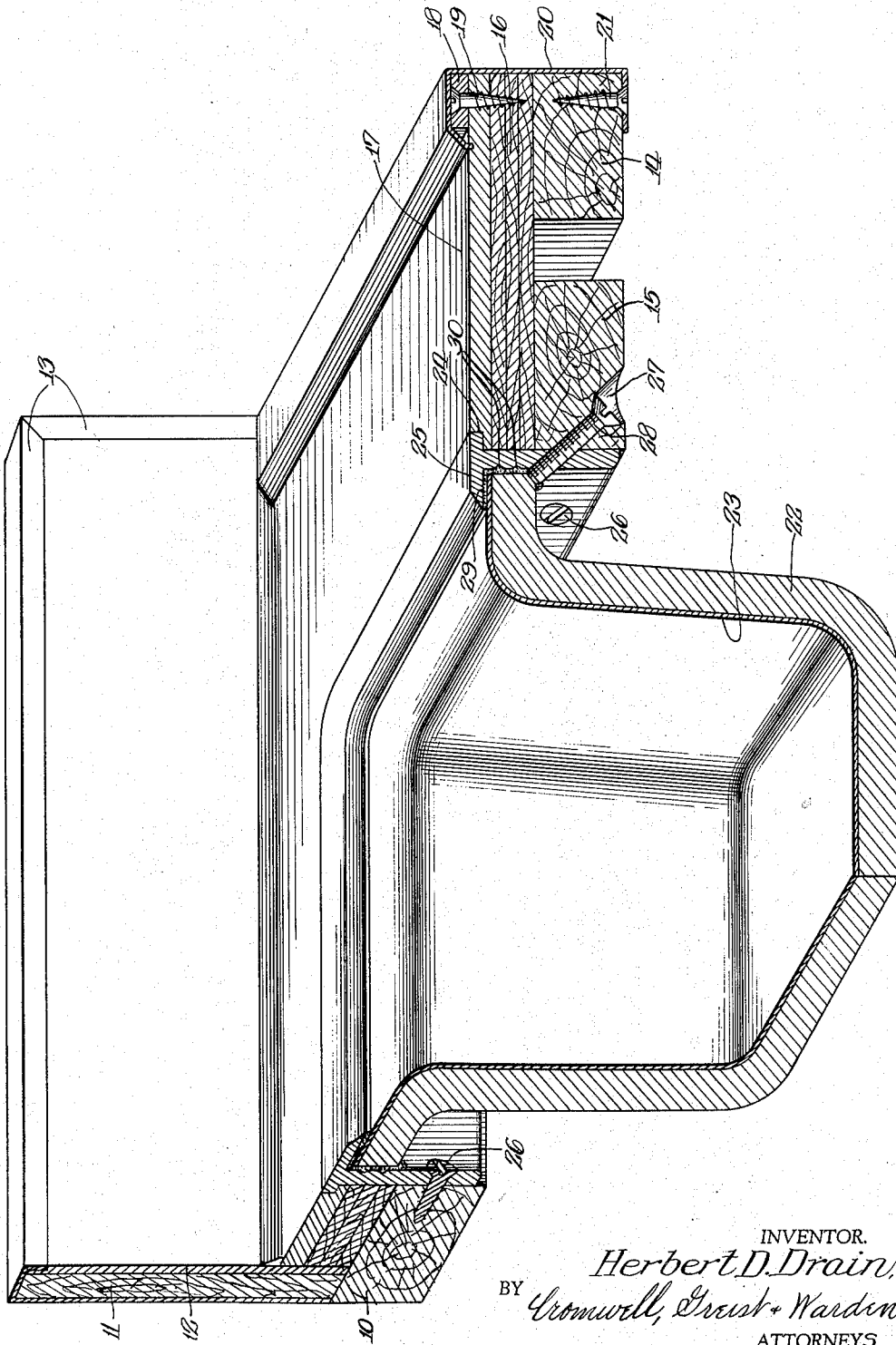
April 30, 1940.

H. D. DRAIN

2,198,696

SINK AND DRAINBOARD CONSTRUCTION

Original Filed March 10, 1938



INVENTOR.
Herbert D. Drain,
BY *Cromwell, Crist & Warden*
ATTORNEYS.

UNITED STATES PATENT OFFICE

2,198,696

SINK AND DRAINBOARD CONSTRUCTION

Herbert D. Drain, Chicago, Ill., assignor, by direct and mesne assignments, to Chicago Drainboard Co., Inc., Chicago, Ill., a corporation of Illinois

Application March 10, 1938, Serial No. 194,996
Renewed December 13, 1939

4 Claims. (Cl. 4-189)

The present invention relates to an improved type of sink and drainboard construction which provides for a firm and secure support of a sink within an opening in a drainboard preferably covered with linoleum or the like, and has particular reference to a construction of this type in which a single, easily assembled and watertight securing or supporting means is provided between the sink and the drainboard.

A principal object of the invention is the provision of a sink to a drainboard mounting having an extruded aluminum supporting and sealing member between and overlapping the sink and the drainboard.

An additional object of the invention is the provision of a construction of the type described in which a linoleum covered or similar drainboard is provided with a plywood base or supporting board and a metallic sealing member positioned in an opening in the drainboard for support of a sink.

A further object of the invention is to provide a drainboard and sink mounting in which a metallic T-shaped supporting member is mounted in overlapped relation with respect to the sink and drainboard and adjustable take-up members are provided for compressing the sink and drainboard member against the overlapping portions of the supporting member.

Still another object of the invention is the provision of a sink and drainboard mounting in which a linoleum covered drainboard having an opening therein is provided with a metallic supporting ring of general T-shaped cross-section extending in overlapped relation with respect to a sink and the drainboard and take-up screws pass angularly through the lower portion of the drainboard construction, then through the metallic supporting ring, and in abutting relation with respect to the sink member, whereby tightening of said screws causes compression of the overlapping portions of the supporting member against the drainboard and sink, there being provided a lead foil or other type of sealing medium between the sink and the supporting member or ring to insure a watertight connection.

These and other objects will be evident upon a consideration of the following specification and by reference to the accompanying drawing, in which the single figure shows a sink and drainboard mounting constructed in accordance with the invention and cut away to show two sides of the mounting in section.

In the construction shown in the drawing there is provided a rear bed plate 10 which may be

composed of a relatively heavy wooden timber. From the rear portion of the bed plate 10 there rises a vertical backboard 11 having a face portion 12 composed of linoleum or some similar covering material. A metallic edge binder 13 extends about the outer portion of the backboard 11 and over the edges of the linoleum covering.

Extending from the rear bed plate 10 is an outer supporting timber 14 and an inner supporting timber 15. Mounted on the top of the timbers 14, 15 and 10 is a plywood drainboard platform 16. The plywood platform forms the drainboard and over the plywood is mounted a covering layer 17 of linoleum.

The linoleum is cemented to the top section of the plywood to produce a permanent seal therebetween. The cover may be of any waterproof resilient material such as cork, rubber, Masonite or the like. Stainless steel pressed into the desired shape likewise forms a satisfactory drainboard surface material.

A raised strip 18 is mounted adjacent the outer edge of the drainboard to prevent water from spilling over the drainboard. Screws 19 extend through this strip and the linoleum and are anchored in the plywood, thereby forming a rigid connection between the parts. Surrounding the outer edges of the timber 14, the plywood section 16, the linoleum strip 17 and the strip 18 is a metallic molding strip 20. The lower leg of the molding strip is secured to the timber 14 by means of screws 21.

The central portion of the drainboard is cut away to provide an opening into which a flanged sink 22 is fitted. This sink is of conventional construction and if of cast iron it may be provided with an inner enamel coating 23. Where a stainless steel sink is employed its thickness is somewhat less than cast iron sinks and the enameled coating is not necessary.

The structure by which the sink 22 is mounted to the drainboard has many advantages over sink mountings known heretofore. The linoleum 17 is rabbeted about the opening into which the sink is fitted as shown at 24. There is mounted in the sink opening a generally T-shaped extruded aluminum sink supporting and sealing ring 25, the vertical leg of which fits closely against the lower inner timber 15 and the inner edge of the plywood platform 16. The outward horizontal extension of the T-shaped ring 25 fits into the rabbeted portion 24 of the linoleum 17 and the inward horizontal extension of the T-section forms an overhanging ledge which extends into the opening into which the sink is

fitted. The lower or vertical section of the supporting ring 25 is secured to the inner timber 15 and to the rear section 10 by means of screws 26.

5 In assembling the sink construction the support ring 25 is placed in the position shown in the drawing with respect to the drainboard, and the flange of sink 22 is placed beneath the inner extension of the supporting ring. Thereafter the
10 timber 15 is drilled to form a series of openings, one of which is shown at 27, and the vertical leg of the rim member is tapped to receive a series of machine screws, one of which is shown at 28. It will be noted that the machine screw 28 extends angularly through the timber 15 and the sink supporting ring 25. The inner end of the machine screws bear against the under side of the flange of sink 22 and holds the sink in assembled relation with respect to the supporting ring.
20 In drilling the opening for screws 28 the drill may contact the under edge of the sink flange sufficiently to provide a seat for the screws 28, as indicated in the drawing.

Before the sink is assembled with the supporting ring a plurality of lead foil strips are folded about the top and edge of the sink flange and these layers of foil are inserted between the inner edge of the sink flange and the supporting ring when the assembly is complete. Usually the foil
30 layers extend alongside the vertical leg of the supporting ring somewhat beyond the sink flange to provide extra material for sealing purposes. After placement of the machine screws 28 the assembly may be inverted and a sufficient amount
35 of heat is applied to the foil extensions to cause the foil to melt and fill in the space between the vertical portion of the supporting ring and sink to form a seal 29. The supporting ring 25 preferably is provided with grooves as shown at 30,
40 into which the molten metal may flow to form an interlock. It is not necessary that the entire body of the foil layers be melted, since the multi-layer nature of the foil assembly provides a watertight seal between the top of the sink flange and the supporting ring when the assembly is
45 compressed together.

An important feature of the sink mounting described is that the tightening of machine screws 28 causes the entire assembly of elements to be
50 drawn together. On the drainboard side of the supporting ring 25 tightening the screws 28 causes the timber 15 to be pressed upwardly, and this pressure is transmitted through the plywood platform 16 and the linoleum 17 to the over-
55 hanging ledge of the supporting member 25. This effectively binds the elements together and prevents any possibility of water leaking from the drainboard into or through the joint between the supporting ring and the drainboard. Also, tight-
60 ening the screws 28 causes the sink member 22 to be pressed upwardly with respect to the inner overhanging ledge of the supporting member, thereby producing a rigid suspension of the sink. The molten foil flows into irregularities between
65 the metallic sink flange and the vertical leg of the metallic supporting ring and there is provided an effective seal that prevents water from leaking into or through the joint between the sink and the supporting ring 25.

70 The dimensions of the drainboard and sink

assembly described may vary considerably. In one satisfactory embodiment of the invention the plywood platform 16 is of the order of $\frac{3}{4}$ inch thickness and the linoleum layer 17 constituting the top of the drainboard may be approxi-
5 mately one-half of this thickness. The timbers 14 and 15 are in the nature of reinforcing strips and may be of any suitable dimension.

It is preferred that the supporting ring 25 be of extruded aluminum, it being possible by the ex-
10 trusion of this type of metal to produce turns without broken joints. In this manner the entire ring may be produced of one piece of material which has a single joint.

It will be recognized that many changes may
15 be made in the structure which is described herein for purposes of explanation without departing from the scope of the invention, and such changes are intended to be included in the appended
20 claims.

I claim:

1. A sink and drainboard assembly, comprising a drainboard, a sink with an outwardly turned flange, a substantially T-shaped supporting ring
25 provided with a downward extension positioned between said drainboard and sink and outward extensions over said drainboard and said sink flange, and means for pressing said sink flange and drainboard upwardly beneath said ring ex-
30 tensions.

2. In a sink and drainboard assembly, a drainboard structure, a linoleum cover for said structure, said linoleum and said structure having a sink receiving opening, a substantially T-shaped
35 supporting ring having an overhanging portion rabbeted into said linoleum, a sink having a flange positioned beneath an opposite overhanging portion of said ring, and means for maintaining said sink and drainboard construction in compressed relation with respect to the overhang-
40 ing portions of said support.

3. In a sink and drainboard assembly, a drainboard having a lower reinforcing member and a sink receiving opening, a supporting ring of substantially T-shaped cross-section fitted into said
45 opening and having inner and outer overhanging portions and a downwardly extending portion, a sink positioned beneath the inner overhanging portion of said ring, and a screw member passing angularly upwardly through said reinforcing strip
50 and the vertical portion of said ring, and bearing on its end against the under portion of said sink flange.

4. A sink and drainboard assembly, comprising a drainboard, a sink provided with an outwardly
55 turned flange, a substantially T-shaped supporting member provided with a downward extension positioned between said drainboard and sink and provided with outward extensions over said drainboard and sink flange, means for securing the downward extension of the supporting member to the edge of the drainboard with one of the outward extensions of the supporting member
60 overlying the drainboard in engagement with the latter, and adjustable clamping means extending from the drainboard to a point beneath the sink flange for pressing the latter upwardly into clamped engagement with the other outward extension of the supporting member.

HERBERT D. DRAIN.