

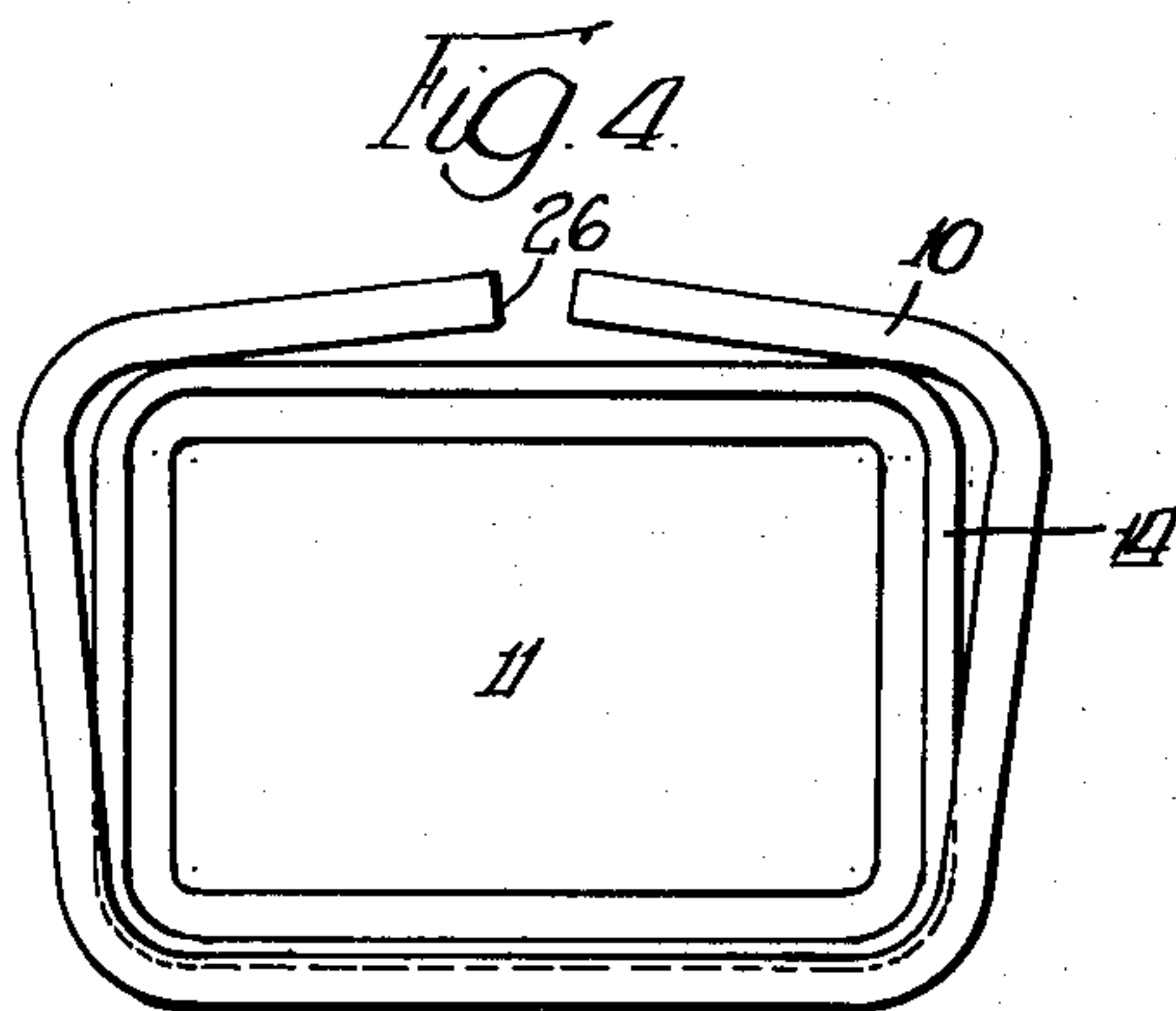
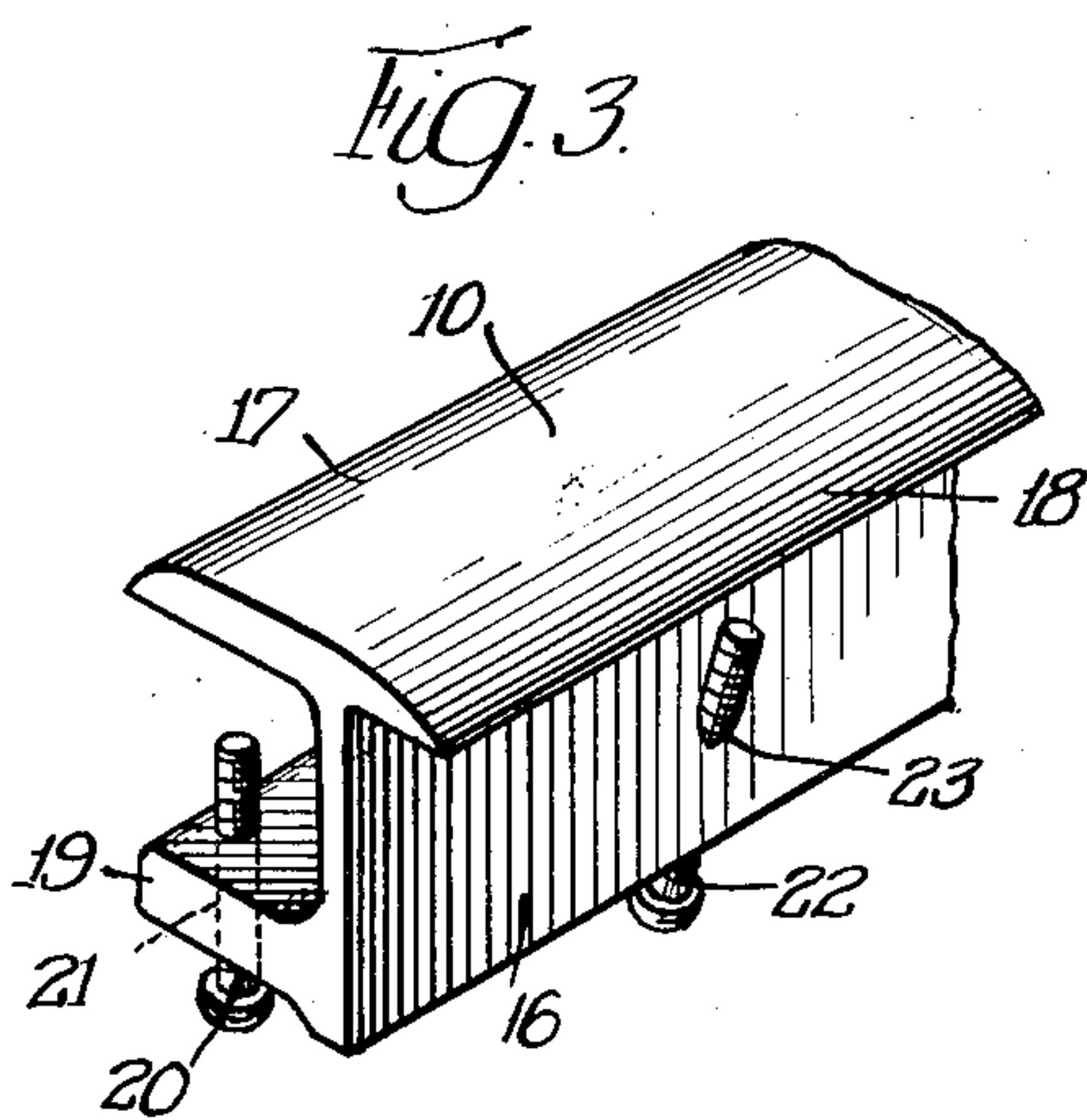
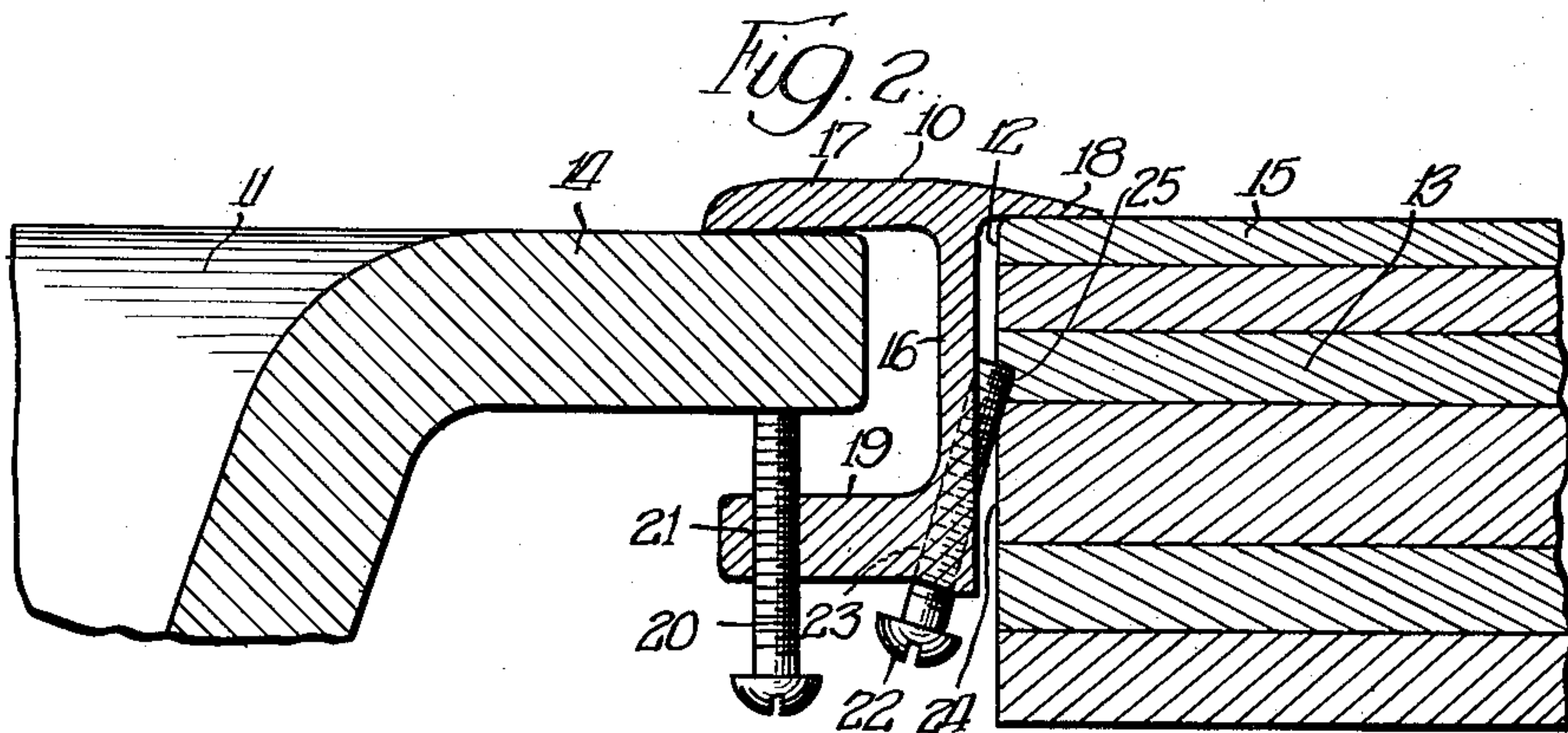
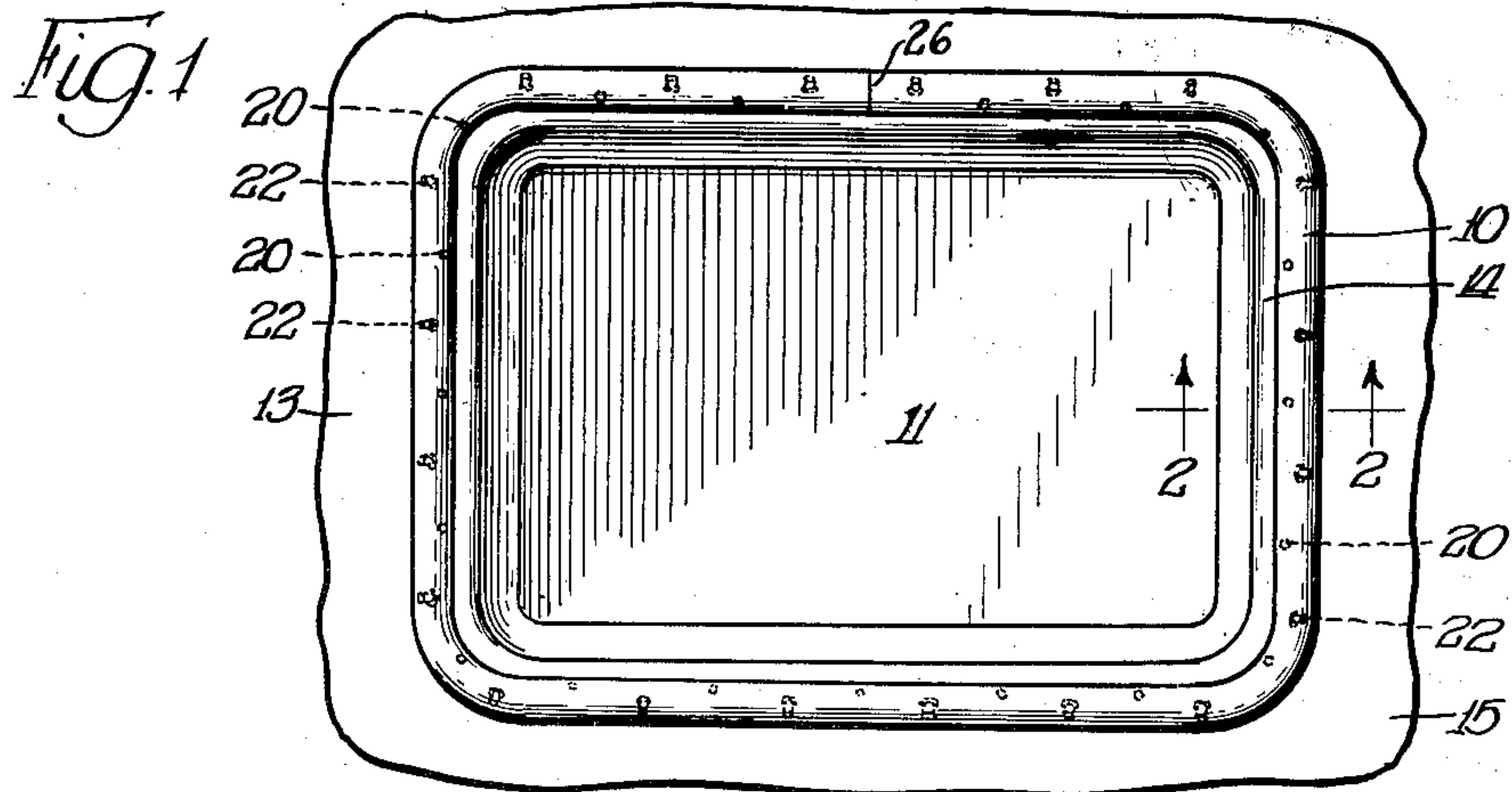
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SINK MOUNTING

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SINK MOUNTING

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This 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 the invention to provide improved mounting means particularly adapted for rigidly securing a sink of the flat flange type in an opening in a linoleum covered plywood drainboard or the like and providing a watertight seal between the sink and the drainboard.

It is a more specific object of the invention to provide a sink mounting fixture for the purpose described which comprises a sealing member having a top portion which covers the space between the edge of the sink and the drainboard and having a downwardly extending web portion which is positioned between the edge of the sink and the drainboard and which is provided with spaced clamping means for clamping engagement with the sink rim on one side thereof and for clamping engagement with the drainboard on the other side thereof.

It is a further object of the invention to provide a simple mounting fixture for a flat flange type sink which is so constructed that it may be first secured in position on the sink rim and then secured to the drainboard after positioning in the opening provided therein.

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

Fig. 1 is a top plan of the sink installed in a drainboard with a mounting means embodying the principles of the invention;

Fig. 2 is a section on the line 2—2 of Fig. 1, to an enlarged scale;

Fig. 3 is a perspective view of a portion of the mounting fixture; and

Fig. 4 is a plan view of a sink with the mounting fixture partially positioned thereon.

In the preferred form of the invention which is illustrated in the drawings, there is provided a mounting and sealing ring member 10 for securing a sink 11 in position in an aperture 12 which is provided in the drainboard 13. The sink 11 is a standard type having an outwardly directed top rim or flange 14 and the drainboard is a conventional plywood structure having a linoleum top 15. The drainboard 13 may be of any depth since the fixture is particularly designed to be used in drainboards of varying thicknesses. The aperture 12 is larger than the periphery of the sink 11 to provide space for the ring member 10.

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The sink mounting fixture 10 is preferably constructed of an extruded section of metal such as aluminum or similar material having sufficient resiliency to permit bending in order to install the same on the flange 14 of the sink. The member 10 is formed into a split ring to surround the four sides of the sink. In cross section the member 10, as illustrated in Fig. 2 comprises a vertically positioned web portion 16 terminating at the top in an inwardly extending flange 17 which is positioned over the edge of the sink rim 14 and an outwardly extending flange 18 which is positioned over the linoleum top 15 of the drainboard 13. The edges of the flanges 17 and 18 may be rounded or feathered as desired to insure a relatively smooth surface between the sink 11 and the drainboard 13. The vertical web portion 16 of the mounting member 10 terminates at the bottom in an inwardly directed flange 19. The bottom flange 19 cooperates with the top flange 17 to form a channel or recess for receiving the edge of the sink rim 14. A plurality of bolts 20 are arranged in threaded engagement in apertures 21 extending in spaced relation around the peripheral edge of the sink. The bolts 20 are of sufficient length to clamp between the flanges 17 and 19 sink rims of varying thicknesses.

The web portion 16 of the fixture 10 is provided with a plurality of upwardly and outwardly extending bolts 22 which are received in threaded engagement in spaced apertures 23. The bolts 22 are of such a length that their ends project outwardly and upwardly of the outer surface of the web 16 and engage or bite into the adjacent wall 24 of the drainboard 13 as at the point 25 in Fig. 2. The bolts 22 are placed at such an angle and are of sufficient length to insure substantial engagement of the ends with the wall surface 24 to rigidly clamp the fixture to the drainboard 13 with the flange 18 in clamping engagement with the linoleum top 15. The clamping bolts 22 and 20 are preferably arranged in alternate spaced relation around the periphery of the sink.

In installing a sink with the fixture 10 the fixture may be first placed at the desired location on the drainboard 13 and the base of the web portion 16 may be used to mark out the necessary aperture 12 to be cut in the drainboard. After the aperture 12 has been cut the fixture 10 is sprung apart sufficiently (Fig. 4) to position it on the sink 11 with the sink rim 14 extending into the channel or recess provided between the portions 17 and 19 of the fixture. The clamping bolts 20 are then inserted and taken up to clamp

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the fixture in position on the sink after which the sink, with the fixture 10 secured on the rim, is placed in the aperture 12 and the bolts 22 are taken up to engage their ends in the surface 24 of the drainboard 13. The ends of the bolts 22 bite into the surface 24 and clamp the fixture 10 in position in the aperture 12. Bolts 22 also urge the fixture toward the sink rim 14 and any gap which may occur at the point 26 where the ends of the fixture meet may be closed by merely loosening the clamping bolts 20 and drawing up bolts 22 after which bolts 20 may again be drawn up into clamping engagement.

While specific details of construction and materials have been referred to in describing the preferred form of the invention, it will be understood that other details of construction and other materials may be resorted to within the spirit of the invention.

I claim:

1. A sink and drainboard assembly comprising an apertured drainboard, a flat rim type sink positioned within the aperture in said drainboard, and a mounting fixture positioned between said sink and said drainboard for securing said sink in position in said aperture, said mounting fixture extending around the periphery of said sink and having inwardly extending vertically spaced integral flange formations for receiving the sink rim therebetween, adjustable means extending between said flange formations for clamping the sink rim in position between the same, said fixture having an integral outwardly extending flange formation engageable over the adjoining top surface of the drainboard, and clamping means for securing said fixture to said drainboard.

2. A sink and drainboard assembly comprising an apertured drainboard, a flat rim type sink positioned within the aperture in said drainboard, and a mounting fixture positioned between said sink and said drainboard for securing said sink in position in said aperture, said mounting fixture extending around the periphery of said sink and having integral inwardly extending vertically spaced flange formations for receiving the sink rim therebetween, adjustable clamping screws in the lower one of said spaced flange formations for clamping the sink rim in abutting relation with the upper one of said spaced flange formations, and adjustable outwardly and upwardly directed clamping elements for clamping said mounting fixture to said drainboard.

3. In a sink and drainboard assembly, a fixture for mounting a flat flange type sink in an aperture provided in the drainboard, said fixture comprising a sealing ring member adapted to be positioned between the edge of the sink and the edge of the drainboard, said fixture having top flange portions adapted to engage top surfaces of the sink and the drainboard, inwardly extending screw receiving flange formations rigidly attached to the bottom of said ring member, adjustable clamping screws in said formations adapted to engage in clamping relation the bottom surface of the sink flange, and adjustable clamping screws extending outwardly and projecting upwardly from the bottom of said ring member adapted to engage in clamping relation with the drainboard.

4. In a sink and drainboard assembly wherein a flat flange type sink is mounted in an aperture in a drainboard, a sealing ring having laterally extending flange portions engageable over the sink rim and adjoining top surface of the drain-

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board, said sealing ring having an integral web portion extending downwardly between the edge of the sink and the edge of the drainboard, an inwardly directed bottom flange on said web portion, spaced clamping screws in said bottom flange for clamping said sealing ring to the sink flange, and spaced clamping screws in said web portion extending upwardly and outwardly into engagement with the adjacent wall of said drainboard to clamp said sealing ring to said drainboard.

5. In a sink and drainboard assembly, a fixture for mounting a flange type sink in an aperture provided in the drainboard, said fixture comprising a ring member adapted to be positioned between the edge of the sink and the edge of the drainboard, said fixture having top flange portions adapted to engage top surfaces of the sink and the drainboard, said fixture having a vertical web portion and inwardly extending clamping means on the bottom of said web portion, said clamping means including adjustable elements adapted to engage the bottom surface of the sink flange and clamp said fixture to said sink flange, and said web portion having adjustable clamping elements extending outwardly and upwardly and adapted to engage with the drainboard to clamp said fixture to said drainboard.

6. In a sink and drainboard assembly wherein a flange type sink is mounted in an aperture in a drainboard, a sealing ring having laterally extending flange portions engageable over the sink rim and adjoining top surface of the drainboard, said sealing ring having an integral web portion extending downwardly between the edge of the sink and the edge of the drainboard, inwardly directed clamping means integral with the bottom of said web portion, spaced clamping screws in said clamping means for engagement with the sink flange, and spaced clamping screws in said web portion extending upwardly and outwardly into engagement with the adjacent wall of said drainboard to clamp said sealing ring to said drainboard.

7. Means for mounting a flat marginal flange type sink in an opening in the top of a cabinet comprising a mounting rim including a vertical web and spaced top and bottom flanges integral with the web and defining therewith a sink flange receiving channel, the top flange being engageable with said cabinet top and the web being disposable in said opening.

8. The structure according to claim 7, wherein said mounting rim is of one-piece construction having normally engaging free ends, said ends providing for expansion of the rim for receiving said sink flange in said channel.

9. Means for mounting a flat marginal flange type sink in an opening in the top of a cabinet comprising a one-piece mounting rim having a sink flange receiving channel therein, said rim including a top horizontal flange engageable with said cabinet top and a vertical web receivable in said opening whereby the sink with the rim mounted thereon may be dropped into and retained in said opening.

10. In combination with a flat rim type sink adapted to be mounted within an opening in a supporting structure, a molding frame of generally T-shaped cross section having a top portion adapted to overlie the sink rim and said structure and a vertical portion extending therebetween, means for securing the sink rim to the molding frame to permit installation thereof as a unit in said opening, and means for securing

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the molding frame to said supporting structure.

11. In combination with a flat rim type sink adapted to be mounted within an opening in a supporting structure, a molding frame of generally T-shaped cross section having a top portion adapted to overlie the sink rim and said structure and a vertical portion extending therebetween, adjustable means carried by the molding frame for securing the sink rim to the molding frame to permit installation thereof as a unit in said opening, and means for securing the molding frame to said supporting structure.

12. In combination with a flat rim type sink adapted to be mounted within an opening in a supporting structure, a molding frame having a top portion adapted to overlie the sink rim and said structure and a vertical portion extending therebetween, means for securing the sink rim to the molding frame to permit installation thereof as a unit in said opening, and means for securing the molding frame to said supporting structure.

13. In combination with a flat rim type sink adapted to be mounted within an opening in a supporting structure, a molding frame having a top portion adapted to overlie both the sink rim and said structure and having a portion extending downwardly therebetween, means carried by the last mentioned portion of the molding frame for securing the sink rim against the underside of the first mentioned portion of the molding frame to permit installation of the molding frame and sink as a unit in said opening, and means for securing the molding frame to said supporting structure.

14. Means for mounting a flat rim type sink in an opening in the top of a cabinet comprising a molding frame having a vertical web portion, inwardly and outwardly projecting top flange portions, and an inwardly projecting bottom flange portion, said vertical web portion defining with the inwardly projecting top and bottom flange portions an inwardly opening channel in which the rim of a sink is adapted to be positioned, and said outwardly projecting top flange portion being adapted to rest on the top of a cabinet about the opening when the molding frame with the sink positioned therein is lowered into the opening in the top of the cabinet, said molding frame being of one-piece construction and having normally engaging but separable free ends to permit insertion of the rim of the sink into the channel, a plurality of adjustable clamping elements carried by the molding frame for engagement with the underside of the sink rim to hold the latter against the underside of the inwardly projecting top flange portion, and a plurality of other adjustable clamping elements carried by the molding frame for engagement with the supporting structure to draw the outwardly projecting top flange portion of the molding frame down upon said structure.

15. Means for mounting a flat rim type sink within an opening in the top of a supporting structure, comprising a molding frame having a top portion which is adapted to overlie both the sink rim and said structure and a portion which extends downwardly from said top portion and is adapted to be positioned between the sink and said structure, a plurality of adjustable clamping elements carried by the downwardly extending portion of the molding frame below said top portion in vertically spaced relation to the latter for engagement with the underside of the sink

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rim to hold the sink rim against the underside of the top portion of the molding frame to permit installation of the molding frame and sink as an assembled unit in said opening from above the opening, and a plurality of other adjustable clamping elements carried by the downwardly extending portion of the molding frame, also below and in vertically spaced relation to said top portion, for securing the molding frame to said supporting structure, said second mentioned clamping elements being accessible only from below the opening in the supporting structure after the molding frame and sink have been lowered as a unit into said opening.

16. Means for mounting a sink of the type having an outwardly projecting rim in an opening in a drainboard comprising a molding frame in which a sink of the type described is adapted to be positioned, said molding frame being characterized by a generally upright web portion, inwardly and outwardly projecting top flange portions, and an inwardly projecting bottom flange portion; said inwardly projecting top flange portion of the frame being provided with a bottom surface against which the top surface of the rim of the sink is adapted to be clamped, and said outwardly projecting top flange portion of the frame being provided with a bottom surface which is adapted to be clamped against the top surface of the drainboard about the opening; a clamping member co-operable with the inwardly projecting bottom flange portion of the frame beneath and in vertically spaced relation to the inwardly projecting top flange portion of the frame, which clamping member is supported against downward movement by said inwardly projecting bottom flange portion and is adapted to act upwardly against the rim of the sink when the latter is positioned against the bottom surface of the inwardly projecting top flange portion of the frame, said clamping member being adjustable relative to the inwardly projecting bottom flange portion of the frame whereby to clamp the rim of the sink against the inwardly projecting top flange portion of the frame, and means for adjustably clamping the outwardly projecting top flange portion of the frame down against the top surface of the drainboard.

17. Means for mounting a sink of the type having an outwardly projecting rim in an opening in a drainboard comprising a molding frame in which a sink of the type described is adapted to be positioned, said molding frame being characterized by a generally upright web portion, inwardly and outwardly projecting top flange portions, and an inwardly projecting bottom flange portion; said inwardly projecting top flange portion of the frame being provided with a bottom surface against which the top surface of the rim of the sink is adapted to be clamped, and said outwardly projecting top flange portion of the frame being provided with a bottom surface which is adapted to be clamped against the top surface of the drainboard about the opening; a clamping member co-operable with the inwardly projecting bottom flange portion of the frame beneath and in vertically spaced relation to the inwardly projecting top flange portion of the frame, which clamping member is supported against downward movement by said inwardly projecting bottom flange portion and is adapted to act upwardly against the rim of the sink when the latter is positioned against the bottom surface of the inwardly projecting top flange portion of the frame, said clamping member being

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adjustable relative to the inwardly projecting bottom flange portion of the frame whereby to clamp the rim of the sink against the inwardly projecting top flange portion of the frame, and means for adjustably clamping the outwardly projecting top flange portion of the frame down against the top surface of the drainboard, said last mentioned means being operable independently of said clamping member, whereby to permit the frame with the sink already positioned therein to be installed as a unit in the opening in the drainboard before said last mentioned means are utilized to clamp the unit in position in the opening.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
435,715	Silvester	Sept. 2, 1890
1,170,277	Kluge	Feb. 1, 1916
2,157,786	Coordes	May 9, 1939
2,193,680	Weissert	Mar. 12, 1940
2,198,696	Drain	Apr. 30, 1940
2,440,741	Drain	May 4, 1948