May 22, 1951 J. DE SWART 2,553,960

SHELF SUPPORT

Filed April 11, 1946

Fig. 1

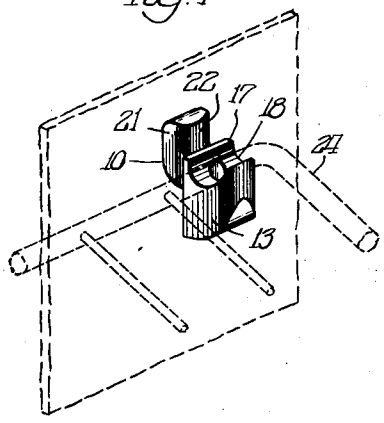


Fig. 2

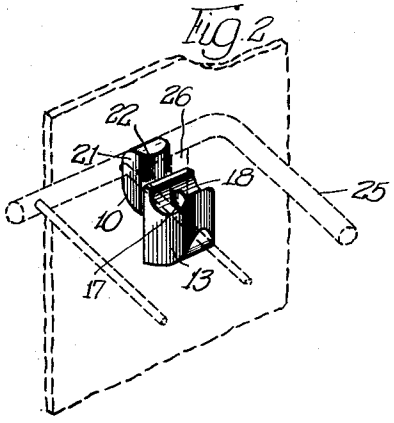


Fig. 3

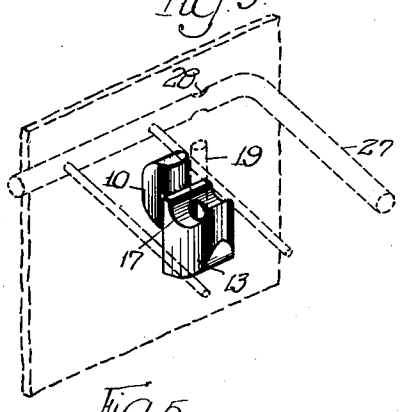


Fig. 4

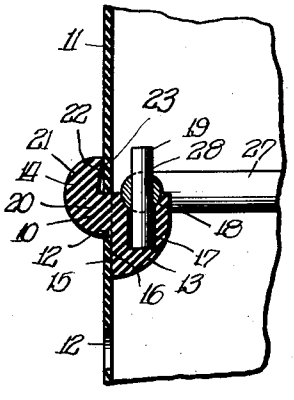
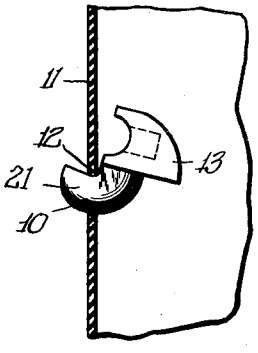


Fig. 5



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UNITED STATES PATENT OFFICE

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SHELF SUPPORT

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2 Claims. (Cl. 248—243)

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My invention is concerned with improvements in a shelf support or bracket.

In the manufacture of refrigerators or similar cabinets it has been customary to provide shelf supporting members or brackets which are securely fastened to the inner walls of the cabinet for supporting one or more shelves therein. These brackets usually consist of a supporting member and a bolt or similar fastening means for permanently securing the member in an aperture in the inner wall of the cabinet. This type of bracket requires access to both sides of the cabinet wall for its installation and results in a permanent non-adjustable support for the shelf.

It has long been desirable to provide a shelf support adapted to be used in refrigerator cabinets or the like which may be easily attached to a cabinet wall where only one side of the wall is accessible, which is readily detachable, and which may be adjustably positioned in any one of a series of apertures provided in the wall.

It is an object of my invention to provide a shelf support or bracket of the blind fastener type, which is particularly adapted for use with a relatively thin cabinet wall of metal, or any similar material, having apertures therein for receiving a portion of the shelf support for attaching the same to the wall.

It is another object of my invention to provide a bracket having an article supporting member and a hook-like attaching member which is adapted to be positioned in an aperture in a supporting member for the bracket to detachably mount the bracket in article-supporting position thereon.

It is a further object of my invention to provide a shelf bracket, adapted to be used with various types of shelves, which includes a vertical socket, a transverse socket and an adapter pin insertable in the vertical socket for converting the bracket to a pin type support.

It is another object of my invention to provide a shelf-supporting member which is simple, strong, easily installed in an aperture in a supporting wall and which is particularly adapted to be economically manufactured by molding of plastic materials.

These and other objects will be apparent from a description of the preferred form of my device which is shown by way of example in the accompanying drawing, wherein:

Fig. 1 is a perspective view of my shelf support illustrating its use to support a wire frame shelf;

Fig. 2 is a similar view illustrating the use of my device for supporting a shelf having a downwardly projecting pin thereon;

Fig. 3 is a similar view illustrating the use of my device for supporting a shelf having a socket therein to receive a pin member on the support;

Fig. 4 is a vertical section through the support and a wall in which it is installed; and

Fig. 5 is a view illustrating the positioning of the support in an aperture in a wall.

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As illustrated in the drawings, my shelf support or bracket 10 is particularly designed for attachment to a relatively thin wall 11 of a refrigerator cabinet or the like which is provided with one or more apertures 12 (Fig. 4) for receiving and supporting the same.

My bracket 10 comprises a member or portion 13 for supporting a shelf or the like and a laterally and vertically extending hook-like attaching member 14. The member 13 is provided with a vertical surface or face 15 which extends downwardly from the attaching member 14 and which provides an abutment surface for engagement with the surface 16 of wall 11 below the aperture 12. As illustrated, the member 13 is somewhat tubular in shape and is provided with a vertical bore or socket 17 and a transverse top groove or socket 18. The vertical socket 17 is provided with a removable pin 19 which when inserted in the socket 17 converts the bracket into a pin-type support. The hook-shaped attaching member 14 is provided with a relatively short horizontal tubular section 20 and an integral vertical section 21 having a vertical face 22 which is adapted to engage the surface 23 on the blind side of the wall 11 above the aperture 12. The tubular section 20 is slightly smaller than the aperture 12 and the vertical section 21 is small enough to pass through the aperture 12.

My device is adapted to be positioned as illustrated in Figs. 1 to 5. In Fig. 1 it is used to support a conventional wire frame type shelf 24 (shown in dotted line), the groove 18 receiving a portion of the frame of the shelf 24 in supporting relation. The weight of the shelf and its contents will tend to hold the bracket 10 in position in the aperture 12. While the transverse groove 18 is illustrated as relatively wide and shallow, it may be some other configuration, for example, a relatively narrow and deep slot.

In Fig. 2 the bracket 10 is used to support a shelf 25 having a downwardly directed pin member 26 which is received in the vertical socket 17 of the supporting portion 13. The weight of the shelf 25 and its contents tends to hold the support 10 in position in the aperture 12, while

the pin 26 and socket 17 cooperate to prevent disengagement of the shelf 25 and the bracket 10. The socket 17 may be any similar configuration, as for example, an open front vertical slot with either parallel or inwardly sloping walls.

In Fig. 3 the device is used to support a shelf 27 having a socket 28. In this arrangement the pin 19 is first inserted in the vertical socket 17 of the support 18 and the shelf is then positioned with the top of the pin 19 received in the socket 28 of the shelf 27. The shelf 27, the pin 19 and sockets 17 and 28 tend to hold the bracket 10 and the shelf 27 in position.

The bracket 10 is inserted in the aperture 12 of the wall or other support 11 by positioning the portion 21 in the aperture 12 (as shown in Fig. 5) and pivoting the bracket to bring surfaces 15, 16 and 22, 23 into abutting relation (as shown in Fig. 4).

While I have illustrated my device as particularly applicable for supporting a shelf in a refrigerator or the like, it will be apparent that it may be used to receive other articles wherever it is desired to position the same on a vertical surface. It is particularly adapted for use with a relatively thin supporting structure. The weight of the article tends to hold the device in the aperture and provides a secure hanger or support. The device is readily detached from its supporting member and is particularly useful where adjustable attachment is desired.

I claim:

1. A detachable bracket having a generally cylindrical supporting member provided with a relatively flat vertical abutment surface, said supporting member having means provided with an upwardly opening recess for positioning a member thereon, said bracket having an integrally connected generally cylindrical hook-like attaching member provided with a vertical abutment surface, said abutment surfaces being in vertically spaced and relatively close oppositely facing relation whereby when said attaching member is inserted in a circular aperture in a relatively thin supporting wall member said abutment surfaces are brought into engagement with opposite faces of said wall member.

2. A detachable bracket as recited in claim 1 wherein the upwardly opening recess in said supporting member comprises a vertical socket and a removable pin positioned in said socket.

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