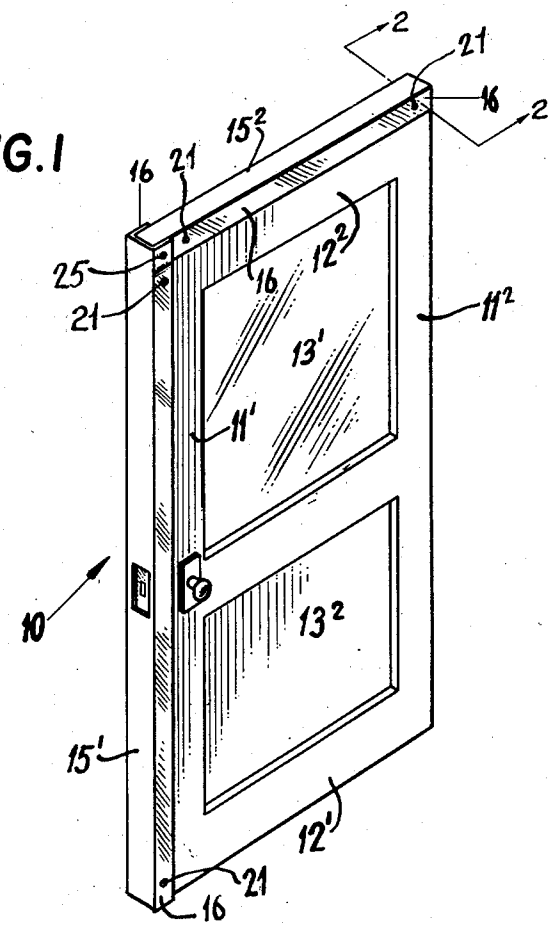
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ADJUSTABLE AND NONSLOTTED EXTENSION MEMBER FOR DOORS

Filed Nov. 20, 1947 2 SHEETS—SHEET 1

FIG. 1



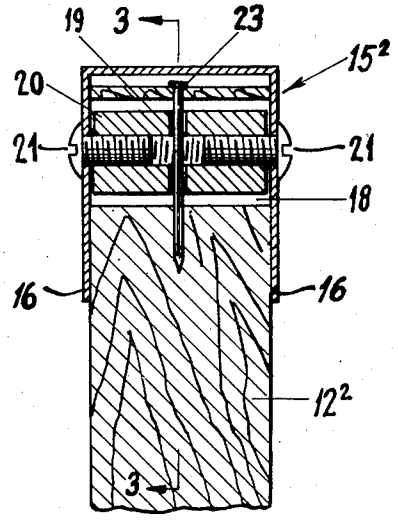


FIG. 2

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FIG. 3

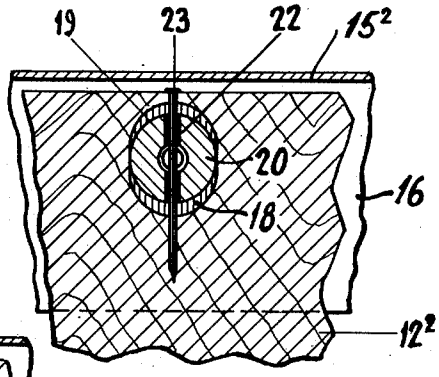
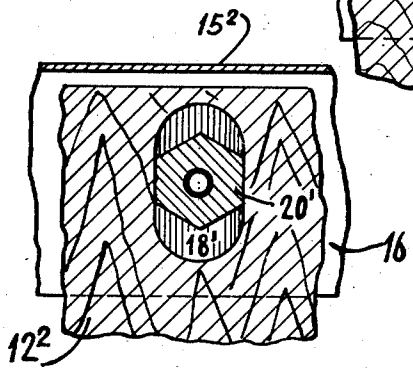


FIG. 5



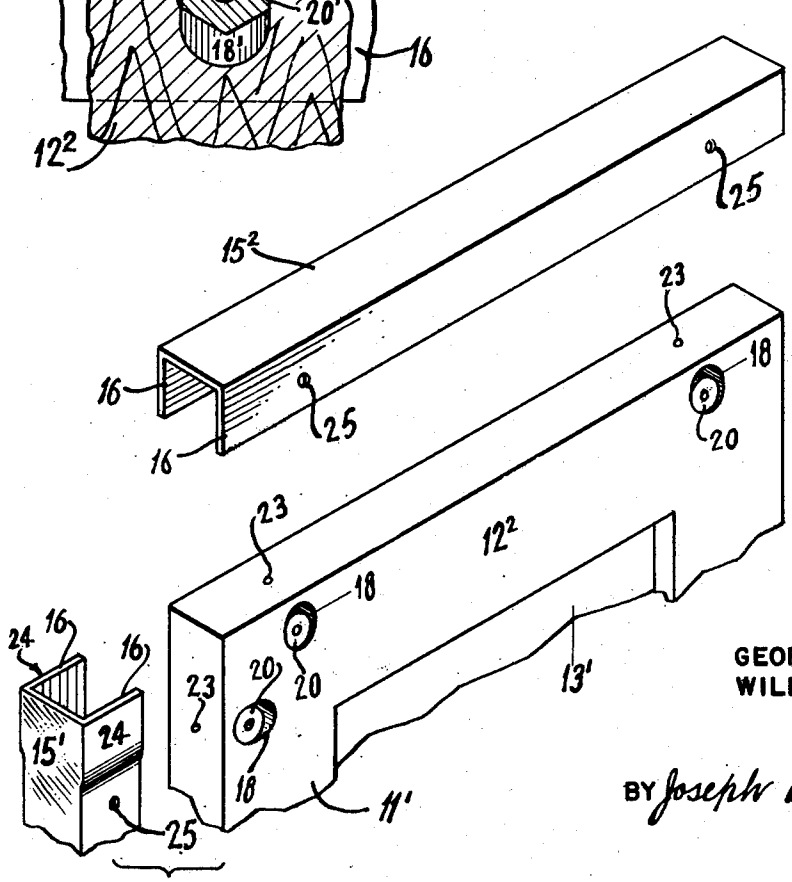


FIG. 4

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UNITED STATES PATENT OFFICE

2,579,861

ADJUSTABLE AND NONSLOTTED EXTENSION MEMBER FOR DOORS

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Application November 20, 1947, Serial No. 787,098

1 Claim. (Cl. 20—35)

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This invention relates to doors which are adjustable in height and width to various sizes of door frames.

An object of this invention is to provide an adjustable door which permits adjustment in width or height to be made rapidly and simply and merely with the use of a screw driver.

Another object of this invention is to provide a threaded securing device for a U-shaped door extension member, the securing device being at all times concealed within an opening in the door body and concealed between the legs of the extension member, while permitting adjustment of the U-shaped extension member to vary the size of the door.

Another object of this invention is to make the threaded securing device of slightly less length than the thickness of the door to permit the legs of the extension member to be drawn tightly into abutting relation with the sides of the securing device and thus provide a positive grip between the extension member and the door body.

With the above and other objects in view, the invention will be hereinafter more particularly described, and the combination and arrangement of parts will be shown in the accompanying drawings and pointed out in the claim which forms part of this specification.

Reference will now be had to the drawings, wherein like numerals of reference designate corresponding parts throughout the several views, in which:

Figure 1 is a perspective view of the adjustable door.

Figure 2 is a cross-sectional view, the section being taken as on line 2—2 in Figure 1.

Figure 3 is a cross-sectional view, the section being taken as on line 3—3 in Figure 2.

Figure 4 is an exploded perspective view of the elements of this invention.

Figure 5 is a cross-sectional view, similar to Figure 3, and shows a modified mechanism for securing the extension members.

In the illustrated embodiment of the invention, the numeral 10 indicates an adjustable door comprising upright side pieces or stiles 11', 11^2, and cross pieces consisting of a bottom rail 12' and a top rail 12^2 constituting the boundary of the body of the door.

The door body has its top and bottom rails enclosing upper and lower panels 13', 13^2. The upper panel 13' may be screen or glass and interchangeable to suit the season of the year. The lower panel 13^2 may be solid metal to prevent breakage.

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For the purpose of this invention, that of making the door fit within a warped door frame, there is provided a metal bar 15' of substantially U-shaped cross-section which is in slidable engagement with the forward stile 11'. The flanges 16, 16 of the metal extension member 15' closely embrace the forward stile 11' and may be disposed or adjusted beyond the edge of the door and form an extension which permits the width of the door to be varied.

There is also provided a metal extension member 15^2 of the same cross-sectional dimensions as the bar 15'. The bar 15^2 is in slidable engagement with the top rail 12^2. The flanges 16, 16 of the metal bar 15^2 closely embrace the top rail 12^2 and may be disposed or adjusted beyond the top edge of the door and form an extension which permits the height of the door to be varied.

To maintain the metal extension members 15' and 15^2 in various adjusted positions on the door 10, there is provided a plurality of spaced-apart through transverse openings 18 adjacent two of the external or boundary edges of the door 10. In practice, at least one stile covering extension bar and one rail covering extension bar is required.

Each opening 18 in the upper rail 12^2 is larger vertically than horizontally and contains a locking member 20 which is freely slidably mounted in a vertical direction. As shown in Figure 2, it will be seen that the length of each metal locking member 20 is slightly less than the distance between the flanges 16 of the U-shaped metal bar or channel. It is obvious that this arrangement permits only a limited compression of the flanges against the metal locking member 20 and controlled compression simultaneously against the sides of the door.

Each opening 18 in the stile 11' is larger horizontally than vertically and contains a locking member 20 which is freely slidably mounted in a horizontal direction.

Screws 21 are threaded in the threaded opening of the locking member 20 with the heads of the screws in contacting relation with the flanges 16. The screws provide means permitting adjustment of the extension members on the door.

The locking member 20 has a through clearance opening 22 for a nail 23. The nail is driven into the wooden inner body members of the door and passes through the opening 22 and permits the locking member 20 to move up or down in the opening 18 while preventing it from rotating when the screws 21 are threaded into position.

As shown at 24 in Figure 4, each end of the flanges 16 of the metal extension member 15' may be slightly pressed outwardly to enlarge the end portions widthwise. These enlargements make it possible to mount the upright metal extension member 15' so as to fully contact the door stile 11' and the outer surfaces of horizontal metal extension member 15^2.

Figure 5 shows a modified mechanism for securing the extension members. An elongated opening 18' is provided with parallel upright walls. A locking member 20' is used which is of non-circular cross-section and having parallel sides in slidable contacting relation with the parallel sides of the opening 18'. This design avoids the use of the nail 23 shown in Figure 3.

It is to be noted that clearance apertures 25 are provided in each of the flanges 16 through which the body of the screws 21 pass. As shown in Figures 2 and 4, each clearance aperture is of circular form and in close relation with the outer diameter or body of the screw 21. The apertures are not elongated or slotted.

In accordance with the patent statutes we have described and illustrated the preferred embodiment of our invention, but it will be understood that various changes and modifications can be made therein without departing from the spirit of the invention as defined by the appended claim.

We claim:

In combination with a door body having a plurality of spaced-apart through transverse slot-like openings adjacent an edge of said door, a

metal bar of substantially U-shaped cross-section having flanges embracing the sides of said door while covering said openings, elongated threaded metal locking members non-rotatably and slidably mounted in each of said openings, the length of said metal locking members being slightly less than the distance between the flanges of said U-shaped bar to permit only limited compression of said flanges against said locking members and controlled compression simultaneously against the sides of said door, and screws passing through each of said flanges and threaded respectively into said threaded metal locking members forcing said metal flanges against the sides of said door body, whereby said metal bar is securely connected to an external edge portion of said door body in sealing relation with the threaded portions of said screws and repeatedly adjustable on said door while covering said openings in said door body.

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