

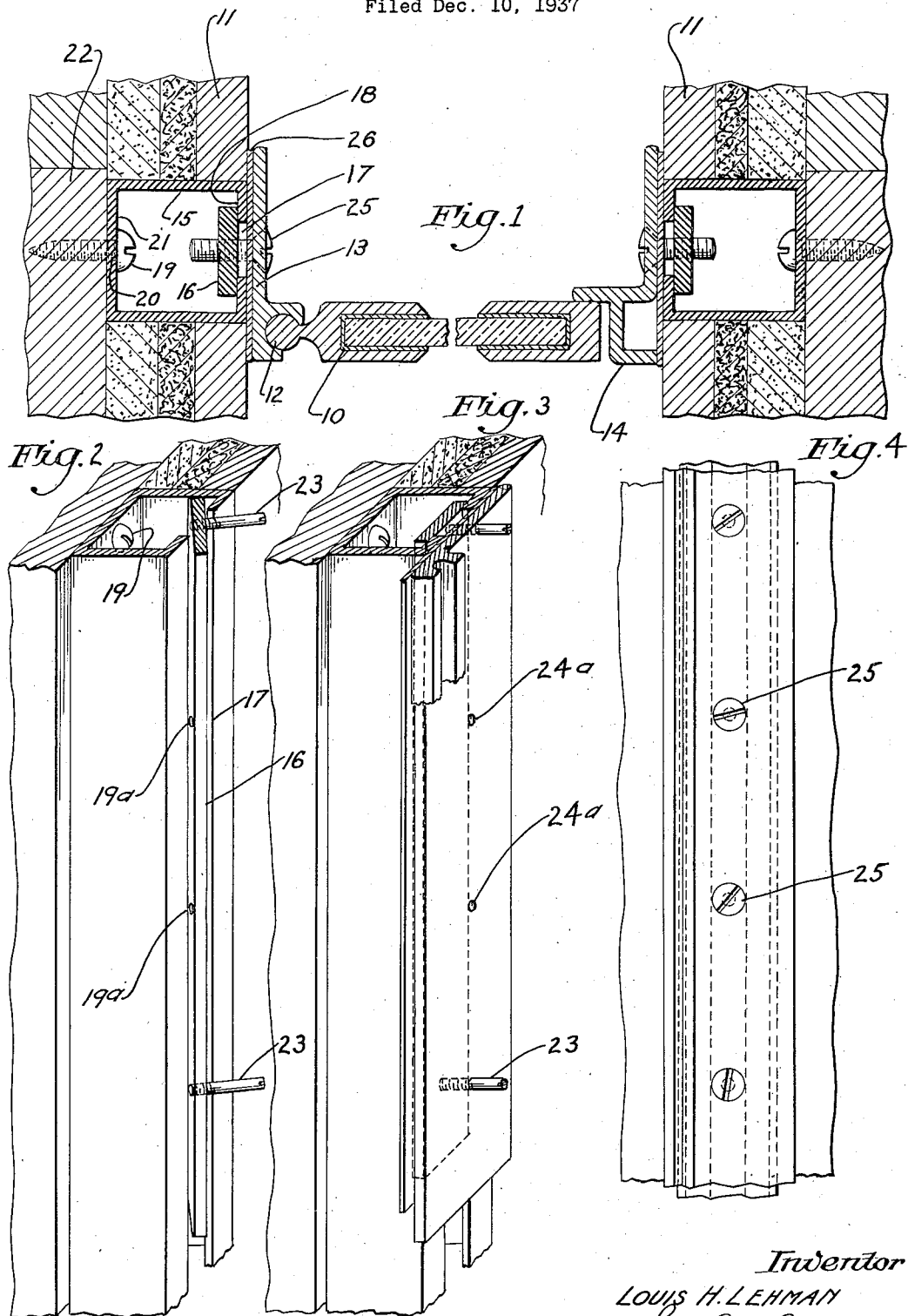
Jan. 9, 1940.

L. H. LEHMAN

2,186,458

DOOR FRAME AND THE LIKE

Filed Dec. 10, 1937



Inventor
LOUIS H. LEHMAN
By *Lea Edelson*
Attorney.

UNITED STATES PATENT OFFICE

2,186,458

DOOR FRAME AND THE LIKE

Louis H. Lehman, Philadelphia, Pa.

Application December 10, 1937, Serial No. 179,053

5 Claims. (Cl. 189—46)

This invention relates generally to frames for doors, windows and other swinging or sliding closures and more particularly to an improved construction having provision for adjustably securing the jambs in position.

While the present invention is applicable generally to closures of any type, it is particularly adapted to shower stall door installations wherein the door is usually fitted within a door opening, the opposite sides of which are lined with tile, brick, structural glass or other such frangible material.

Among the principal objects of the present invention is to provide a jamb assembly for shower stall doors and the like which is adapted to be installed during or after the construction of the shower stall; which obviates the necessity of anchoring the jamb to the tiled surface of the door opening thereby relieving the tile of all strain and stress; which permits vertical and lateral adjustment of the jamb as well as limited angular adjustment thereof with respect to the vertical plane of the door opening; which insures firm and rigid securement of the opposed jambs in accurately aligned relation directly to the wall studing rather than to the tile, brick or other such lining for the door opening; and which is adapted to be installed inexpensively and with a minimum of time and labor.

A further object of the invention is to provide a jamb assembly for shower stall doors adapted to be hung in openings lined with tile, structural glass, brick or other such frangible material which is of such character that it may be installed in accurately adjusted position without danger of injuring the tiled surface in the immediate vicinity of the jamb and without requiring that the tile surface be perfectly true, the assembly being of such construction as to permit the jamb to be positionally adjusted vertically, laterally and angularly in a vertical plane without regard to and in spite of any irregularities which may exist in the tiled or other such lining of the door opening.

A further object of the present invention is to provide a means for securing a shower stall door to a tile or other bathroom wall surface whereby the frame can be quickly and easily installed in or removed from the wall opening and where the connection between the door frame and the tile or other type of wall surface is impervious to water.

More generally, it is an object of the present invention to provide a mounting assembly for securing firmly and more or less permanently in

position upon a wall structural frame elements which serve either as trim members or as support members for other structural parts, the assembly being of such construction and adapted for installation in such manner as not only to reduce to a minimum the cost of mounting such frame elements in accurately adjusted position, but also to eliminate to great extent the possibility of damaging the finished surface of the wall upon which the frame element is mounted.

Other objects and advantages of the invention will appear more fully herein.

The invention consists substantially in the combination, construction, location and relative arrangement of parts, all as will appear more fully hereinafter, as shown in the accompanying drawing and as finally pointed out in the appended claims.

In the accompanying drawing, wherein have been illustrated a preferred embodiment of the present invention;

Figure 1 is a horizontal sectional view taken through a door and jamb assembly wherein the jambs have been mounted in accordance with the principles of my invention;

Figure 2 is a fragmentary perspective view showing one of the jamb mountings partially installed in position;

Figure 3 is a fragmentary perspective view similar to Figure 2 showing the jamb temporarily supported by its mounting; and

Figure 4 is an elevational view of the left-hand jamb assembly as shown in Figure 1.

Referring now to the drawing and more particularly to Figure 1 thereof, it will be observed that the present invention has been shown as applied to a shower stall door installation in which a shower stall door 10 is fitted within a door opening, the opposite vertical sides of which are lined with tile, brick, structural glass or other such frangible material, designated generally by the reference numeral 11. This door 10 is of the construction more particularly described in my prior Patent No. 1,672,418, granted June 5, 1928, one vertical edge thereof being hinged, as at 12, to a jamb member 13, while the opposite vertical edge of the door is adapted to abut against a suitably vertically extending stop formed on the jamb member 14. The present invention relates more particularly to the means for securing said jambs 13 and 14 in their proper aligned position and such means will now be described.

In accordance with the present invention, the door jambs 13 and 14 are each secured in position by jamb mountings of identical construction,

Because of their similarity, only that one of said mountings which supports the jamb 13 will be described herein. The jamb mounting generally comprises a vertically extending member 15 of substantially box-like cross-section with which is operatively associated an interiorly disposed vertically extending flat bar 16. Provided in one face of the box-like member 15 and extending throughout the vertical extent thereof is a slot 17 of a width just sufficient to permit the flat bar 16 to be projected therethrough edgewise in the manner best shown in Figure 2. The bar 16 is of a width greater than that of the slot but less than the internal width of the box-like member 15, so that when the bar is positioned within the latter member (as shown in Figures 1 and 3) it may be shifted laterally of at the same time that it may be angularly inclined with respect to the slot 17. In addition, the bar 16 may be vertically adjusted relatively to the slot 17 in the member 15, it being observed that the shifting of the bar relatively to the slot 17 either laterally, angularly or vertically is at all times effected in the plane of the bar and while the latter is in substantial flatwise engagement with the inner surface of the slotted face 18 of the member 15. The bar 16 is provided with a plurality of vertically spaced threaded apertures 19a for a purpose which will be apparent hereinafter.

In the installation of the jamb mounting, the box-like member 15 is secured in position within the vertical side 11 of the door opening by means of screws 12 which project through suitable apertures 20 provided in the base wall 21 of the said member directly into the wall studding 22, the member 15 being so positioned that the slotted face 18 thereof presents outwardly and lies in a plane substantially flush with that of the tiled surface. It will be understood that access to the heads of the securing screws 19 is readily had through the slot 17 of the box member 15. It is after the member 15 has been secured firmly and permanently in position that the flat bar 16 is inserted therein, this latter step being readily effected by means of elongated handling studs 23 temporarily threaded into any two or more of the threaded apertures 19 of the bar.

In addition to affording a means for positioning the bar 16 within the interior of the box member 15, the studs 23 serve also to locate the jamb 12 in position against the outer face of the member 15 (see Figure 3) the studs being projected through registering apertures 24a provided in the jamb 12. The number and spacing of these jamb apertures 24a correspond, of course, with the number and spacing of the threaded apertures 19a in the bar 16. With the parts assembled as shown in Figure 3, it becomes a simple matter to project intermediate securing screws 25 through the registering apertures 19a and 24a to temporarily clamp the bar 16 and jamb 12 together with the vertical edges of the slot 17 interposed therebetween. This temporary clamping of the parts is of such order as to maintain them in approximately final position, the jamb 12 and the bar 16 being then shiftable bodily as a unit into the exact final position desired for the jamb, whereupon the temporarily inserted intermediate screws 25 are driven tightly in position and the studs 23 are replaced by additional permanent clamping screws 25.

To avoid marring or cracking the surface of the wall 11 when the jamb 12 is securely fastened to the walls 11 through the screws 25, I have provided between the wall 11 and the frame mem-

ber 12 a filler pad or gasket 26, which may be of rubber or other such resilient material, which extends the full length of the jamb 13 and is of a width substantially equal to the width of the jamb 13. The pad 26 assures an impervious connection between the jamb 13 and the wall 11 and compensates for any slight inaccuracies of wall surface or tile installation.

With my invention there is no necessity for using skilled labor to accurately place or align the door jamb securing members as the said members do not have to be accurately aligned or placed. The novel construction and arrangement of parts permits the door jambs to be adjusted and aligned after the jamb securing members are in place. Any necessary vertical, lateral or angular adjustment of the door and jambs after they have been erected can be easily accomplished by loosening the screws 25 and moving the entire jamb and door assembly into the desired position. In view of the disclosures it will be seen that I have provided an improved door jamb assembly for mounting a door jamb on a wall whereby it is not necessary to register with the jamb securing member any frame elements. It is, therefore, apparent that the entire door assembly can be installed by unskilled labor.

From the figures it will be observed that the tile or other wall surfacing material need not be accurately cut or fitted around the jamb securing members as the joint between the wall and the said member is completely covered by the door jamb. Similarly, the jamb members are not anchored or secured to the tiled or other such surface, thereby relieving the tile of all stress and strain. Since no strain is set up on the tile, it is not necessary to let the tile dry in place and the jamb and door can be inserted and secured in place as soon as the jamb securing member is secured within the wall and the tile or other such surfacing has been erected.

It will be apparent that the mounting assembly comprising generally the members 15 and 16 is adapted to secure in position other types of structural elements than the vertically extending door jambs 13 and 14 shown in the accompanying drawing and accordingly it will be understood that the present invention is not intended to be limited in its application to the particular type of door installation disclosed herein. Also, it will be understood, of course, that the invention is susceptible of various changes from time to time without departing from the real spirit or general principles thereof and it is accordingly intended to claim the same broadly, as well as specifically, as indicated by the appended claims.

What is claimed as new and useful is:

1. In combination, a vertically extending member adapted to be secured in one wall of a door opening, said member having a slotted face disposed substantially flush with the finished surface of said wall, a door jamb member adapted to be secured flatwise against the slotted face of said member, an elongated anchoring member adapted for flatwise engagement against the inner side of said slotted face and in straddling relation with respect to the slot therein, and securing means projecting through said slot for clamping said jamb and anchoring members together, said jamb and anchoring members being bodily shiftable as a unit, when said securing means are loosened, to adjust the position of the jamb member as desired.

2. In combination, a metal buck having a pair of inwardly directed flanges defining therebe-

tween an elongated slot, said buck being adapted for securement in position with the flanges thereof substantially flush with the finished surface of a surrounding wall, a jamb member positioned against said flanges and covering the slot defined therebetween, an elongated anchoring member disposed interiorly of said flanges and also covering said slot, and securing means interconnecting said members for drawing the same together in clamping relation against opposite faces of said flanges.

3. In combination, a metal buck having a pair of inwardly directed flanges defining therebetween an elongated slot, said buck being adapted for securement in position with the flanges thereof substantially flush with the finished surface of a surrounding wall, a door jamb member positioned against said flanges and covering the slot defined therebetween, an elongated anchoring member disposed interiorly of said flanges and also covering said slot, and securing means interconnecting said members for drawing the same together in clamping relation against opposite faces of said flanges, said securing means being of such dimension relatively to the width of the slot and said anchoring member being of such width relatively to the overall width of said buck as to permit the jamb member to be positionally adjusted within the limits of said slot when said securing means are loosened.

4. In combination, a mounting member for a structural frame element including a pair of inwardly directed flanges defining therebetween a longitudinally extending slot, said mounting member being secured in position within a wall with the flanges thereof substantially flush with the finished surface of said wall, a longitudinally

extending anchoring bar disposed interiorly of said flanges and extending across the slot defined therebetween, a longitudinally extending frame member disposed exteriorly of said flanges and covering said slot, and temporary studs threaded into said bar and projecting exteriorly of said slot through openings provided in said jamb member, said studs serving as handles for positioning the bar interiorly of said flanges and to locate the frame member in desired registry with said bar.

5. In combination, a mounting member for a structural frame element including a pair of inwardly directed flanges defining therebetween a longitudinally extending slot, said mounting member being secured in position within a wall with the flanges thereof substantially flush with the finished surface of said wall, a longitudinally extending anchoring bar disposed interiorly of said flanges and extending across the slot defined therebetween, a longitudinally extending structural frame member disposed interiorly of said flanges and covering said slot, and temporary studs threaded into said bar and projecting exteriorly of said slot through openings provided in said frame member, said studs serving as handles for positioning the bar interiorly of said flanges and to locate the frame member in desired registry with said bar, said bar and frame member being respectively provided with a plurality of vertically spaced threaded apertures and holes which, when in registry, receive securing screws for drawing said bar and frame member together in clamping relation against opposite surfaces of said flanges.

LOUIS H. LEHMAN.