Jan. 4, 1966 H. J. SCHNABEL 3,226,781

NAILING CLIP

Filed May 5, 1965

FIG. 1

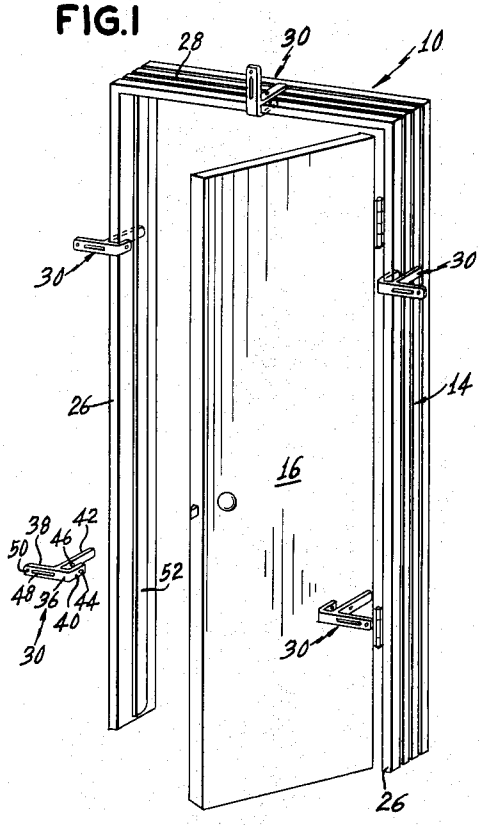


FIG. 2

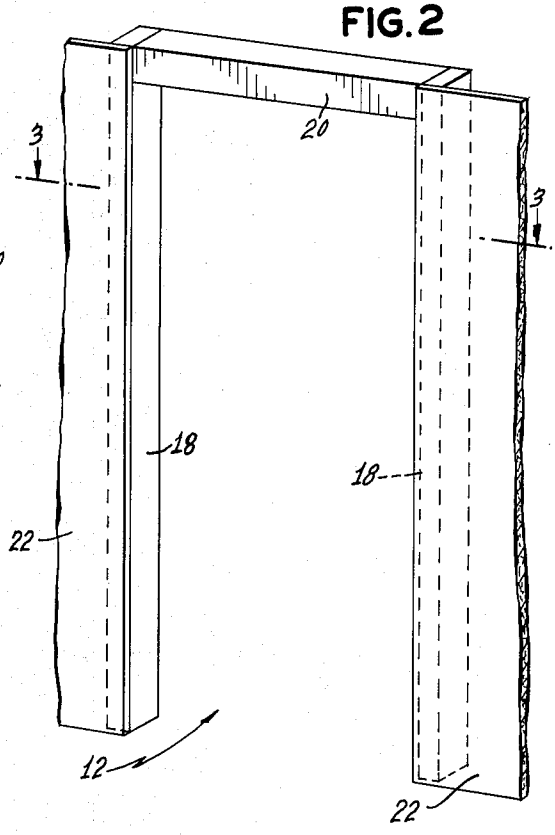


FIG. 3

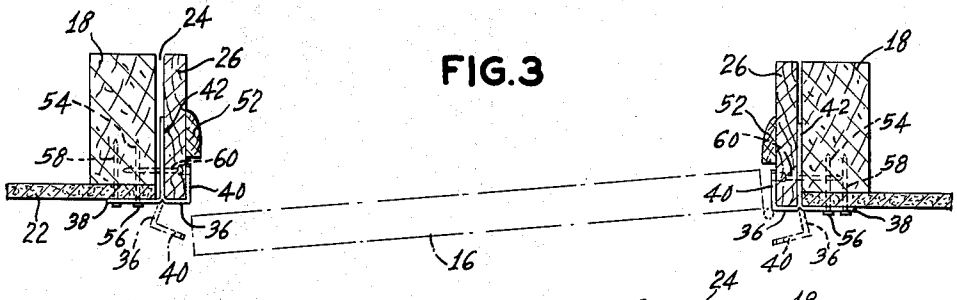


FIG. 4

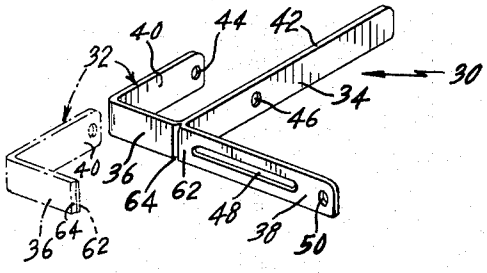
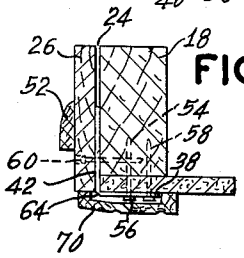


FIG. 5



INVENTOR.
Harry J. Schnabel

BY

ATTORNEY

United States Patent Office 3,226,781 Patented Jan. 4, 1966

3,226,781

NAILING CLIP

Harry J. Schnabel, Deer Park, N.Y.
(280 Rte. 109, Farmingdale, N.Y.)

Filed May 5, 1965, Ser. No. 453,342
8 Claims. (Cl. 20—92)

The present invention relates to the setting of frames in wall openings.

As is well known, during the construction of any edifice it becomes necessary to set frames in wall openings. For example, door jambs or window jambs may form frames of this type which are required to be set into wall openings of the edifice.

Of course, when the wall is initially constructed, it is composed of studs and the like which are only roughly set, and where a window or door is to be located the wall opening is defined by stationary wall members which, of course, are initially positioned so that they will define an opening somewhat larger than the window jamb or door jamb which is to be situated in the opening.

Thus, when this frame, whether it be a window jamb or a door jamb, is set into the wall opening, it can be moved freely about in the opening, and it becomes necessary to adjust the position of the frame in the wall opening. When the desired position is achieved the frame is fixed in this latter position.

At the present time, these operations call for a considerable amount of skill and require a considerable amount of labor resulting not only from the time which is required for the setting of the frame but also from the fact that the operations involved are relatively complex. For example, it is conventional for the person who is installing the frame to carefully adjust the position of the frame in the wall opening by the use of suitable shims which are wedged into the gap between the wall members and the frame. These shims, of course, are required to be situated at suitable locations all around the frame and to be taken out of one side of the frame and put in at the other side of the frame, etc., until the frame is situated properly with its vertical members extending in a precisely vertical direction and its horizontal members extending precisely horizontally.

While many attempts have been made to eliminate these tedious operations, up to the present time there has been no device which has satisfactorily solved this problem. At the present time, frames such as door or window jambs are still set into the wall openings by the use of shims which must be properly distributed in the gap between the wall members and the frame before the latter is fixed in position.

It is accordingly an object of the present invention to provide a clip which on the one hand will eliminate the necessity for a large number of shims which must be judiciously distributed in the manner described above and which on the other hand will greatly simplify the positioning of a frame in a wall opening.

A further object of the present invention is to provide a clip of this type which, in itself, is of an exceedingly simple and inexpensive construction.

An additional object of the present invention is to provide a frame-setting clip which is exceedingly simple to manipulate so that the setting operations can be carried out in a fraction of the time heretofore required.

In addition, the objects of the present invention include the provision of a frame-setting clip which, after it has been used to determine the position of the frame in the wall opening, will have no part which is in any way visible in the finished structure.

Furthermore, it is an object of the invention to provide a frame-setting clip of the above type which will be able to be used in the manner which will very reliably fix the

frame in the wall opening in a desired adjusted position therein.

Other and further objects of this invention reside in the structures and arrangements hereinafter more fully described with reference to the accompanying drawings in which:

FIG. 1 is a perspective illustration of a frame, which in the illustrated example is a door jamb together with a door, having associated therewith a plurality of the clips of the invention,

FIG. 2 is a perspective illustration of a wall opening in which the frame of FIG. 1 is to be set,

FIG. 3 is a sectional plan view taken along line 3—3 of FIG. 2 in the direction of the arrows and showing the frame of FIG. 1 positioned in the wall opening and held therein by the clips of the invention,

FIG. 4 is a perspective illustration of the clip of the invention shown on an enlarged scale as compared to FIGS. 1 to 3, FIG. 4 also showing in dot-dash lines a removable clip portion of the clip of the invention, and

FIG. 5 is a sectional plan view of that part of the structure of FIG. 3 which is shown at the right in FIG. 3, but this structure is shown in FIG. 5 after it has been completely finished.

Referring now to FIG. 1, there is shown therein a frame **10** that is to be positioned in the wall opening **12** shown in FIG. 2. In the illustrated example, the frame **10** is in the form of a door jamb **14**. The particular door jamb **14** shown is prehung, so that the door **16** is already hingedly mounted on the frame **14** before the latter is set into the wall opening **12**. The wall opening **12** is defined by a plurality of wall members **18** and **20**, the stationary wall members in the illustrated example being vertical studs while the member **20** is a horizontal header fixed to the studs **18** in a well known manner. The spaces between the vertical studs of the wall can be covered by any suitable wall board **22**, as is well known in the art, and this wall board may overlap the members **18**, **20**, as indicated in the drawings.

The opening **12** which is defined by the wall members **18**, **20** is of a size greater than the frame **10**, so that the latter can be easily introduced into the wall opening **12** where the wall members **18**, **20** will define with the frame **10**, a gap **24** indicated in FIG. 3. The door jamb **14** in the illustrated example includes the upright side jamb members **26** and the upper jamb member **28** which, of course, becomes situated beneath the header **20** to define therewith part of the gap **24** which extends all around the frame **10** in the opening **12**.

Once the frame **10** has been introduced into the wall opening **12**, the operator will distribute the clips of the invention around the frame **10** and then these clips will be manipulated in a manner described below so as to releasably fix the frame **10** in its adjusted position within the wall opening **12**. In practice, however, it is advisable that the clips **30** be distributed around the frame before it is inserted into the opening **12**.

Referring to FIG. 4, the frame-setting clip, generally identified by the numeral **30** of the present invention, includes a removable L-shaped clip portion **32** and a permanent L-shaped clip portion **34**. These clip portions **32** and **34** respectively have end-to-end connected legs **36** and **38** and unconnected spaced parallel legs **40** and **42** which extend perpendicularly from the connected legs **36** and **38**. As is apparent from FIG. 4, the pair of clip portions **32** and **34** are located in a common plane and have the same angular orientation with the legs **36** and **38** being integrally connected to each other at least approximately in the region where the leg **34** extends perpendicularly from the interconnected legs **36** and **38**. The parallel legs **40** and **42** are respectively formed with aligned openings **44** and **46** for a purpose described be-

low. In addition, the leg 38 is formed with a relatively large opening 48 in the form of an elongated slot as well as with an additional opening 50.

Referring now to FIGS. 1–3, when the frame 10, as in FIG. 1, is set in the opening 12, as in FIG. 2, in a haphazard position therein, a plurality of the clips 30 of the present invention are applied to the frame 10 in the manner indicated in FIG. 1, so that in the illustrated example there may be one or more clips 30 applied to each of the side frame members 26 and clip member 30 applied to the upper frame member 28. At this time, the door 16 may be swung to its open position if desired whereby it may be spaced from the door-stop strips 52, so that the door 16 will not interfere with the mounting of the clips 30 on the right frame member 26 to which the door 16 is hinged.

In accordance with the mounting method of the present invention, using the clips 30 of the present invention, each clip is positioned on the frame 10 so that a member 26 or 28 of the frame is received and snugly held or clipped between the parallel legs 40 and 42. The longer parallel leg 42 of the permanent clip portion 34 extends into the gap 24 to support its respective side of the member 26 or 28 while the parallel leg 40 is situated exposed at the inside of the frame 10. It will be noted that in this position of the clip 30, the leg 38 of the permanent clip portion 34 overlaps and is located to rest against or next to a wall member of the opening 12.

The clips 30 thus mounted on the members 26 and 28 of the frame 10 may be adjusted lengthwise along their respective members to space them evenly from each other. Each clip 30 is now nailed to that portion of the wall of the opening 12 against which its leg 38 rests. This is done by hammering or driving a fastener or headed nail 54 (FIG. 3) through the slotted opening 48, the wall 22 and into the stud 18. The head 56 of the nail 54 will be larger than the width of the slot 48 so the nail rests against the leg 38.

After each of the clips 30 is so nailed or fastened to the opening 12, the frame 10 is now held in position within the opening. Now, instead of requiring expensive time consuming shimming to level and evenly position the frame 10 in the opening 12, the members 26 and 28 may be slid between the clip legs 40 and 42 or the legs 38 of the clips may be tapped lightly with a hammer to cause them to slide beneath the nail heads 56 to shift the position of their respective members 26 and 28.

When once the frame 10 is properly positioned in the opening, an additional nail 58 can be driven through the opening 50 of the connected leg 38 of the permanent clip portion 34. This will provide further securement of the permanent clip portion 34, which will thus remain reliably fixed to the stationary wall member 18 in the adjusted position.

The clips 30 of the invention, now nailed to the wall, will, of course, hold the frame 10 in its adjusted position at this time while the removable clip portions 32 have their legs 36 and 40 overlapping the frame 10. In accordance with the present invention, at this time a fastener such as a headless or finish nail 60, is driven through the aligned openings 44 and 46 and well into the stud 18 or 20 behind its respective member 26 or 28. Then, with a suitable nail set, the head end of the finish nail 60 is driven not only completely through but also well beyond the opening 44 so its head end is embedded well in the body of the member 26 or 28 of the frame 10. Thus, it will be noted that in FIG. 3 the finish nails 60 are shown with their head ends situated inwardly beyond the legs 40 of the removable clip portions 32.

One of the further features of the present invention resides in providing a means for rendering the clip portion 32 easily removable, and in the illustrated example this means takes the form of a portion 62 of the clip which is formed with a weakened portion shown as an elongated V-notch 64. This V-notch 64 renders the removable clip portion 32 easily removable from the permanent clip portion 34 because of the weakness in the material of the interconnected integral clip portions provided by the V-groove 64. Any other type of weakening structure can be used such as a row of holes, for example, punched through the material. Even a series of indentations may suffice.

The clip 30 may be of any desired material that has sufficient rigidity, but which, once the fastener 60 has been driven beyond the opening 44, the carpenter or operator can, without difficulty, bend or tear the removable clip portion 32 with respect to the permanent clip portion 34 so as to be removed therefrom at the weakened portion 64. The removed clip portion 32 is shown in dot-dash lines in FIG. 4. Also, it will be noted that the clip portions 32 of FIG. 3 are shown in dot-dash lines bent away from the door jamb during their removal.

Thus, once these clip portions 32 have been removed, the finish nails 60 remain in their positions extending across the gap 24, into the stationary wall members 18 and 20 and through the openings 46 thus fixedly retaining the frame 10 in its adjusted position. The permanent clip portion 34 remains in its fastened position where the leg 42 is fastened by the nail 60 so it is held situated in the gap 24 while the leg 38 overlaps the wall member or the board 22. After the clip portion 32 is removed, there is no longer anything covering the now exposed surface of the frame 10. The holes made by the deeply driven nails 60 in the inner surface of the frame 10 can be closed or filled wtih a suitable wood putty or the like after which, upon painting of the frame 10, there will be no evidence of any of the above operations performed in connection with setting of the frame 10 in the wall opening 12.

Of course, it is not essential to situate the weakening means 64 precisely at the junction between the legs 36, 38 and 42. In practice, it has been found that as long as the door jamb of the frame exhibits no evidence of the clip structure used for fixing it in position, the clip of the invention has performed its job satisfactorily. Therefore, only that portion or fraction of the leg 36 need be removed that might later be exposed to view after a finish molding 70 is nailed into place. Hence, the weaking means 64 can be situated along the leg 36 at a location adjacent to, but spaced from the junction between the legs 38 and 42 of the permanent clip portion 34.

As may be seen from FIG. 5, the finishing operations will involve the placing of a suitable finish molding strip 70 along and about the frame 10 to cover the adjacent surface of the edge of the wall board 22. This mold 70 decoratively completes the framing and covers any portions of the clip 30 of the invention which might have remained visible before it was applied.

While there have been shown and described and pointed out the fundamental novel features of the invention as applied to a preferred embodiment thereof, it will be understood that various omissions and substitutions and changes in the form and details of the device illustrated and in its operation may be made by those skilled in the art, without departing from the spirit of the invention. It is the intention, therefore, to be limited only as indicated by the scope of the claims appended hereto.

I claim:

1. A clip for setting a frame into a wall opening defined by stationary wall members extending at least part of the way around the frame with a clearance providing a gap between the frame and wall members, comprising

permanent and removable substantially L-shaped clip portions located substantially in a common plane and having substantially the same angular orientation,

said clip portions respectively having end-to-end connected legs and unconnected substantially parallel legs respectively extending substantially perpendicularly from said connected legs,

the parallel leg of said removable clip portion being situated at one end of the connected legs and the parallel leg of said permanent clip portion extending substantially from the region where said connected legs are connected to each other, and said parallel legs respectively being formed with aligned means to receive a fastening means passing therethrough and being adapted to receive between themselves part of the frame, so that with said parallel leg of said permanent clip portion situated in said gap said clip portions can be moved to adjust the position of the frame in the wall opening,

said connected leg of said permanent clip portion being adapted to be fixed to one of the stationary wall members when the desired position of said frame in said wall opening is achieved, so that a suitable fastener can then be driven through said aligned means and beyond the opening of the parallel leg of said removable clip portion to fix said frame to a wall member while extending across said gap and through the aligned means of the parallel leg of the permanent clip portion,

and breakable means on said clip rendering said connected leg of said removable clip portion easily removable at least in part from the connected leg of said permanent clip portion, so that after the frame is thus joined to the wall member by the fastener the removable clip portion can be displaced from the frame and removed.

2. A clip as recited in claim **1**,

and wherein said connected leg of said permanent portion is formed with a relatively large opening through which a fastener is adapted to extend into one of said wall members for supporting both of the L-shaped clip portions while they are adjusted whereupon the latter fastener can be used to fix the clip portions in their adjusted position.

3. A clip as recited in claim **2**,

and wherein said relatively large opening is in the form of an elongated slot formed in said connected leg of said permanent clip portion.

4. A clip as recited in claim **3**,

and wherein said connected leg of said permanent clip portion has in addition to said slot an opening adapted to receive an additional fastener for further securement of said permanent clip portion.

5. A clip as recited in claim **1**,

and wherein said means for rendering said removable clip portion easily removable from said permanent clip portion includes a portion of the connected leg

of said removable clip portion which is formed with a cutout so as to be rendered relatively weak to facilitate the removal of said removable clip portion from said connected leg of said permanent clip portion, whereby at least said permanent clip portion will remain.

6. A clip as recited in claim **5**,

and wherein said cutout is in the form of an elongated V-notch extending across said connected leg of said removable clip portion.

7. A clip as recited in claim **6**,

and wherein said V-notch is situated substantially at the location where said parallel leg of said permanent clip portion extends from said connected legs.

8. A clip comprising

an elongated member,

a first leg extending substantially perpendicularly from one end of said elongated member and a second leg extending substantially perpendicularly from said elongated member intermediate the ends thereof and being parallel to said first leg,

said legs and elongated member thus forming a pair of substantially L-shaped clip portions respectively having in addition to said parallel legs a pair of connected legs connected to each other in end-to-end relation at the region where said second leg extends from said elongated member,

said elongated member at its portion which extends beyond said second leg away from said first leg being formed with an elongated slot and said elongated member being formed in the region of said second leg with a frangible connection rendering said first leg and a portion of said elongated member connected thereto easily removable,

and said parallel legs respectively being formed with aligned openings passing therethrough.

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FRANK L. ABBOTT, *Primary Examiner.*

R. A. STENZEL, *Assistant Examiner.*