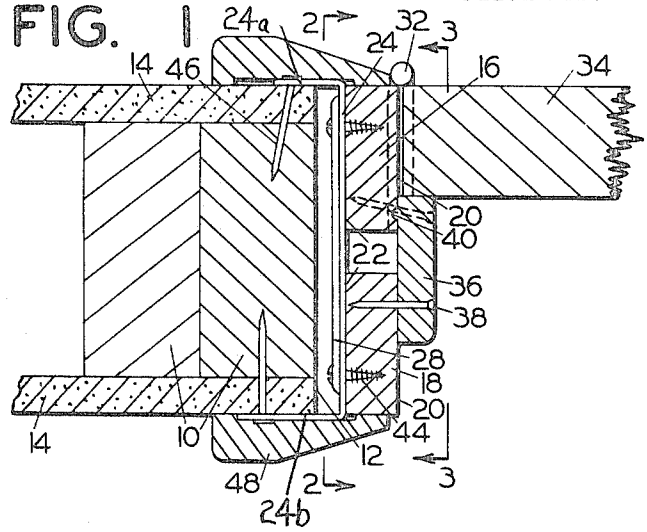
Oct. 26, 1971 R. L. DONNELLY ET AL 3,614,846

DOOR JAMB ASSEMBLY

Filed Feb. 13, 1967

FIG. 1



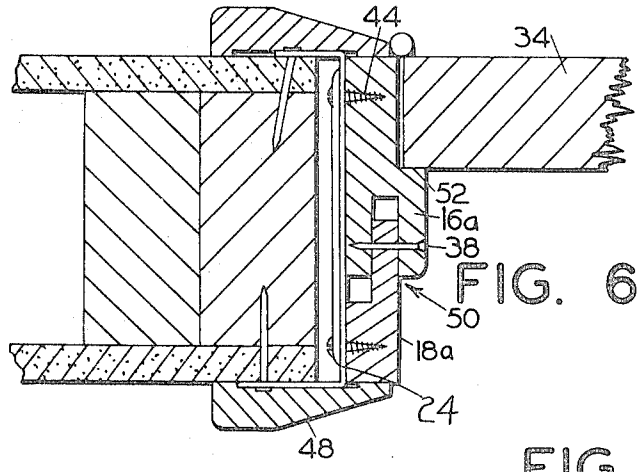
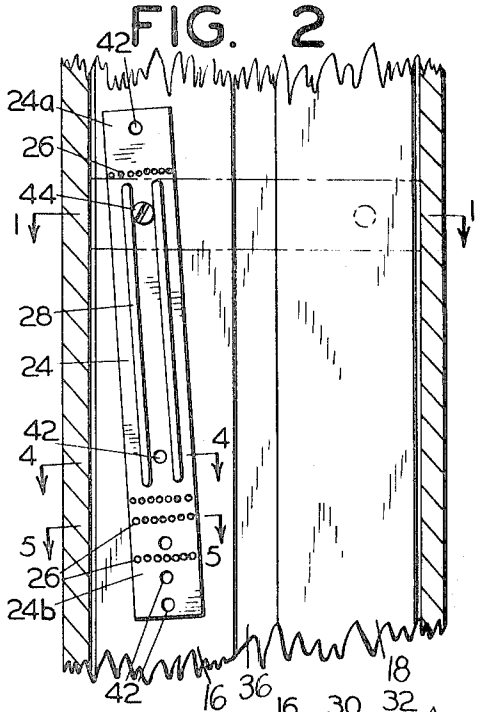


FIG. 6

FIG. 2



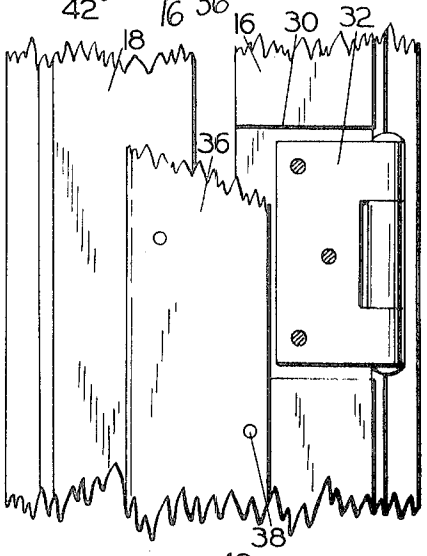


FIG. 3

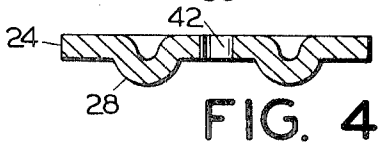


FIG. 4



FIG. 5

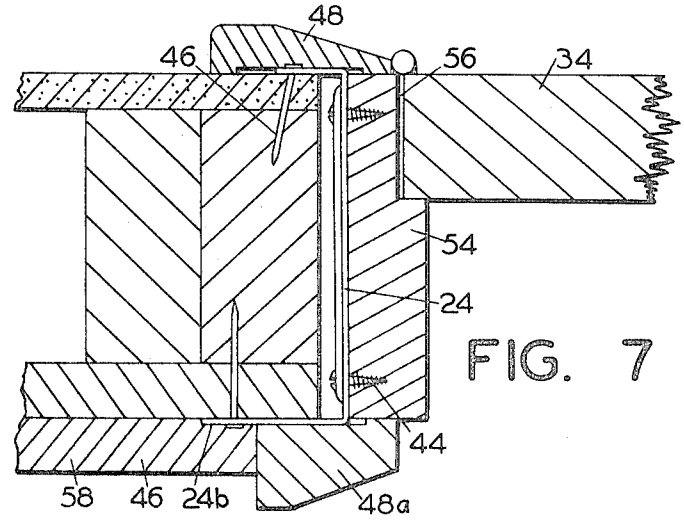


FIG. 7

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DOOR JAMB ASSEMBLY

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U.S. Cl. 52—213 1 Claim

ABSTRACT OF THE DISCLOSURE

A door jamb assembly made of multiple parts so as to be shipped and stored in knocked-down condition. A strap member is included as one of the parts and is designed to assist in securing the jamb to a support as well as to adjust the width of the jamb for fitting walls of different thickness.

This invention relates to new and useful improvements in door jamb assemblies.

A primary objective of the present invention is to provide a door jamb assembly which is formed of novel structural parts facilitating a knocked-down condition for shipment and storage and also facilitating easy and fast mounting thereof in door openings.

More particular objects of the present invention are to provide a door jamb assembly which utilizes a pair of longitudinal frame strips and at least two strap members secured transversely across the frame strips and being of a length greater than the combined width of said strips whereby the projecting ends of the strap members are arranged to be bent angularly to secure the latter and connected frame strips to supporting wall structure; to provide a door jamb assembly of the type described wherein the strap members which connect the longitudinal frame strips together have a plurality of transversely extending bend lines which facilitate bending the projecting ends of the strap members to connect the assembly to wall structures of different thickness; and to provide a door jamb assembly of the type described which employs a longitudinal connecting strip engageable with the two frame strips and having a tongue and groove connection with one of said frame strips whereby to be positioned in a selected lateral position on one of said frame strips regardless of the lateral adjusted position with the other frame strip.

Still another object is to provide a door jamb assembly of the type described wherein one of a pair of frame strips has an edge groove and the other of said frame strips has a lateral tongue engaged in the groove whereby the two frame strips are expandable laterally to a selected width and capable of attachment to walls of different thicknesses.

Yet another object is to provide in a door jamb assembly of the type described a novel strap member capable of securing a pair of longitudinal frame strips together in selectively spaced relation and also arranged such that projecting end portions thereof are capable of being bent angularly for the purpose of securing the strap members and connected frame strips to a supporting wall structure.

Additional objects and advantages will become apparent from the following description taken in connection with the accompanying drawings which illustrate preferred forms of the device.

In the drawings:

FIG. 1 is a horizontal sectional view taken through one form of the present jamb assembly, this view being taken on the line 1—1 of FIG. 2 through a phantom line position of a strap member;

FIG. 2 is a fragmentary, vertical sectional view taken on the line 2—2 of FIG. 1;

FIG. 3 is a fragmentary elevational view taken on the line 3—3 of FIG. 1, the door structure shown in FIG. 1 being removed in FIG. 3 for clarity;

FIGS. 4 and 5 are enlarged cross sectional views of a strap member which forms a part of the present invention, taken respectively on the line 4—4 and 5—5 of FIG. 2;

FIG. 6 is a horizontal sectional view similar to FIG. 1 but showing a modified form of jamb structure; and

FIG. 7 is also a horizontal sectional view similar to FIG. 1 but showing still another form of jamb structure.

With particular reference to the drawings and first to FIGS. 1 through 5, there is shown a jamb assembly employing a first embodiment of the invention. Reference is first made to FIG. 1, however, which shows supporting structure for the jamb assembly comprising framing studs **10** forming a door opening **12**. Wall covering **14** is secured to the studs **10** on one or both sides thereof, such wall covering comprising the usual sheet rock, plaster, plywood paneling or the like.

The door jamb assembly of FIGS. 1–5 comprises a pair of frame strips **16** and **18** substantially rectangular in cross section and each having a front face surface **20** and a rear face surface **22**. The combined width of the two strips **16** and **18** is less than the thickness of the wall formed by the studs **10** and wall covering **14**, and as will be more apparent hereinafter the frame strips when secured to the wall generally have a space therebetween.

Also forming a part of the present jamb assembly are strap members **24** comprising a flat, narrow strip of metal. The strap members have sufficient rigidity to hold the frame strips **16** and **18** together in a strong integrated structure but nevertheless can be bent on weakening lines **26** thereof. The strap members have longitudinal ribs **28** depressed therein for increasing the rigidity thereof.

The bend lines **26** may comprise a plurality of minute apertures provided in alignment transversely of the strap members, as shown, or of course may comprise other forms of weakening such as transverse recesses. The overall length of the strap members is greater than any wall thickness on which the jamb assembly may be mounted, and the bend lines **26** are provided selectively in the strap members such that they facilitate bending of projecting portions of the strap members for securement to wall structures of different thicknesses. One end **24***a* of the strap members has a single bend line and the other end **24***b* has a plurality of bend lines which are spaced such that by bending the strap members on selected ones of the said lines, a jamb assembly can be constructed to fit the wall. It is to be understood that although the one end **24***a* is shown as having only a single bend line and a plurality of bend lines are provided at the opposite end, other arrangements of bend lines at the respective ends can be provided for fitting different wall thicknesses.

The frame strip **16** comprises the machined strip of the jamb assembly in that it has cut-out portions or recesses **30**, FIG. 3, for receiving hinges **32** which support the door structure **34** on the jamb.

Also associated with the jamb assembly is a face or connecting strip **36** which is secured to the face surfaces of the strips **16** and **18**, as by nails **38**, and covers the space between the said two frame strips. In a preferred construction, the face strip **36** has a tongue and groove connection **40** with the frame strip **16** in order that it will be positioned the same distance from the one longitudinal edge of the frame strip **16** regardless of the overall width formed by the two frame strips. In addition to covering the space between the two frame strips **16** and **18** as well as assisting in securing the strips together, the face strip **36** serves as the door stop.

The strap members **24** are provided with a plurality of apertures **42** by means of which they are secured to the frame strips **16** and **18** and to the wall structure.

For assembling and installing the present jamb assembly the frame strips **16** and **18** are first laid flat on a working surface such as a bench, and after positioning them in parallel relation and spaced selectively such that the overall width thereof is the same as the overall width of the wall assembly to which the jamb is to be connected, two or more straps **24** are secured transversely on the rear surface of the two strips. Such securement is accomplished by screws **44** or other fasteners passing through appropriate apertures **42** in the straps. The strap members **24** are selectively attached to the frame strips with particular relation to the length of said strap members in that they are placed such that the ends thereof with the single bend line **26** project beyond one edge of one of the strips **16** or **18** with the single bend line in substantial alignment with the edge of the frame strip. The opposite ends of the strap members thus project beyond the outside edge of the other strip and one or more of the bend lines at this end of the strap members will be aligned with such outside edge.

For securing the jamb assembly to the wall, connected strips **16** and **18** are placed in the door opening whereupon the ends **24***a* and **24***b* of the strap members are bent away from the jamb assembly at a right angle. Thereupon, the jamb assembly is secured to the wall structure by nails **46** or other fasteners passing through appropriate ones of the apertures **42**. After the jamb assembly has been secured to the wall, the door casings or moldings **48** are secured in place, as by nails not shown. These casings conceal the ends of the strap members.

In the use of the present jamb assembly, it may be shipped or stored in disassembled relation as explained above whereby the carpenter builds the assembly at the site. That is, each of the parts is disconnected and packaged in flat condition for consuming a minimum of package space. If desired, however, the strap members may be partially installed at the factory, as shown in full lines in FIG. 2, wherein they are held by one screw and during shipment are placed in longitudinal alignment with the frame strip to which they are attached. The strap members are secured to the other frame strip at the construction site after first pivoting them to a position at right angles to the frame strips. It is preferred that the attaching ends of the strap members in the case just mentioned comprise the ends **24***a* and the carpenter at the site will bend these ends as well as the other ends at the appropriate place for installation.

It is to be understood that a complete jamb assembly will enclose the sides and head portion of a door opening and thus will comprise two separate side portions and a header portion. These portions are suitably secured together when being installed in the door opening.

FIG. 6 shows a somewhat modified form of jamb assembly. In this embodiment the frame strips **16***a* and **18***a* have a tongue and groove connection **50** in their adjacent side edges. For the purpose of providing such connection, the frame strip **16***a* is of thickened construction in order to accommodate the groove connection **50**, and furthermore has a longitudinal face groove **52** to receive the edge of the door. Nails **38** or the like assist in holding the frame strips **16***a* and **18***a* in secured position.

FIG. 7 shows another embodiment of the invention. In this embodiment the jamb assembly is similarly secured to the wall by the strap members **24** but utilizes a single frame member **54**. This frame member has a full length face groove **56** for receiving the door edge. FIG. 7 is intended to illustrate application of features of the present invention to an outside door wherein one door casing **48** comprises the inside casing, and the other door casing **48***a* comprises the outside casing. Even though the ends **24***b* of the strap members are not fully covered by the casing **48***a*, such ends are covered by an outer layer of siding **58**.

In accordance with the present invention there is provided a door jamb assembly which can be shipped and stored in knocked-down condition and readily assembled at the site. Or, if desired, the jamb may be partially assembled before shipment. It is apparent that by using the jamb assemblies of FIGS. 1 and 6 suppliers need have only one inventory to fit all wall thicknesses. It is to be understood that the form of my invention herein shown and described is to be taken as a preferred example of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claim.

Although it is stated herein that the present door jamb assembly is shipped and stored in knocked-down condition, it is to be understood that it may be partially assembled at the factory. For example, one of the door casings **48** may be secured to its respective frame strips **16** or **18** at the factory and the other casing **48** secured when the jamb is being mounted. In such case, fastening means **46** on the side which has the casing **48** attached at the factory would have to be applied through the said casing at the site since those fasteners shown in the drawings could not be applied. It is also to be understood that other types of fasteners **46** may be used such as staples, in which case such staples may be power driven through the bent ends of the strap members and holes **42** would not be necessary.

Having thus described our invention, we claim:

1. A door jamb assembly comprising a pair of longitudinal frame strips having front and rear faces, the front faces of one of said strips being arranged to have a closure member attached thereto, at least two strap members secured transversely across the said rear faces to hold said longitudinal frame strips securely together in parallel relation, the length of said strap members being greater than the combined width of said frame strips whereby the ends of said strap members project beyond the outer side edges of said strips, said strap members being formed of bendable material whereby the projecting ends of said strap members are arranged to be bent angularly for mounting the strap members and connected frame strips by means of said angular portions of said strap members to supporting structure, said strap members having at least one transversely extending weakening line located inwardly from each end to facilitate bending said projecting ends at an angle to the strap members, said weakening lines being selectively positioned with relation to the ends of said strap members to cause the bent ends to receive a wall of selected thickness therebetween, a door stop strip lying in partially overlapping relation on the front face surfaces of said two frame strips and covering any longitudinal space therebetween, said door stop strip having a tongue and groove connection with the front face of one of said frame strips whereby to be positioned in a selected lateral position on said one frame strip.

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