May 13, 1958 N. R. LYBARGER 2,834,066

ADJUSTABLE DOOR JAMBS

Filed Dec. 21, 1953 2 Sheets-Sheet 1

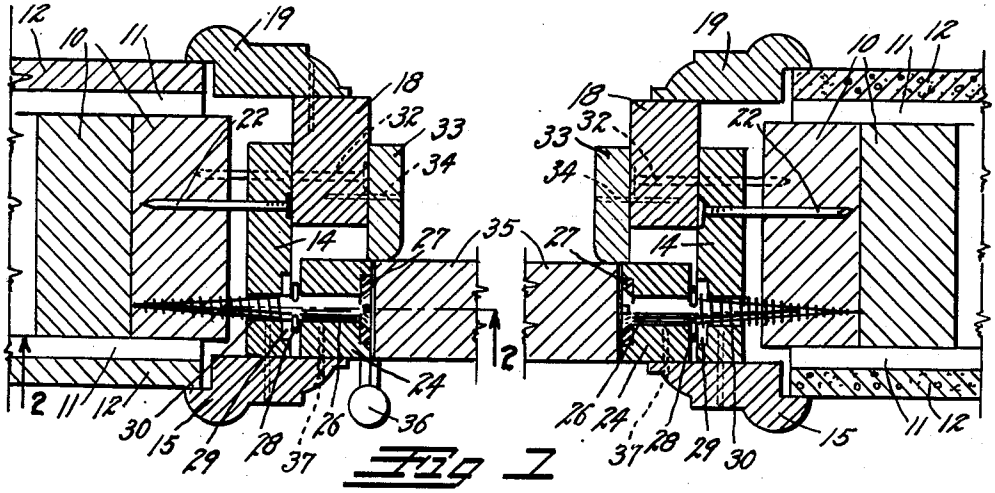


FIG 1

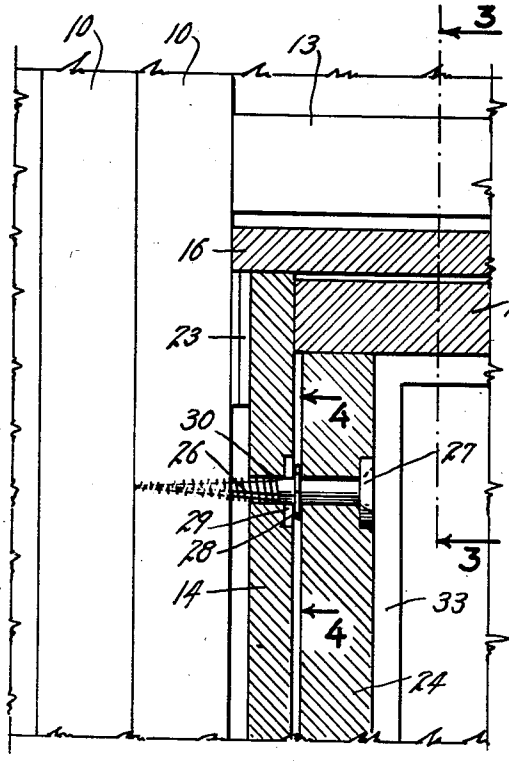


FIG 2

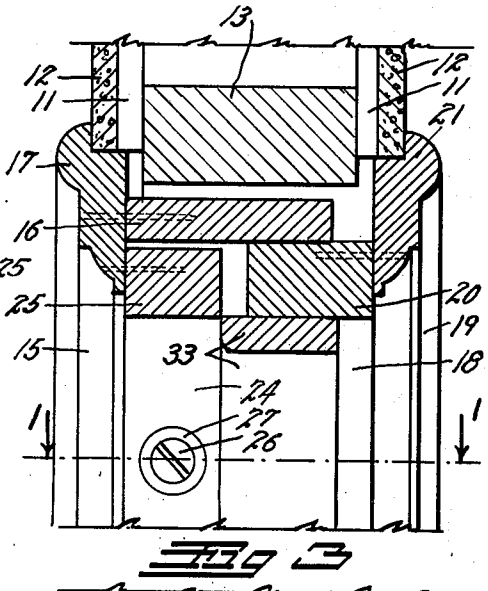


FIG 3

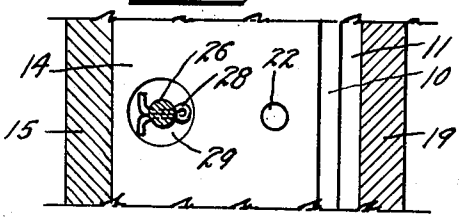


FIG 4

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ADJUSTABLE DOOR JAMBS

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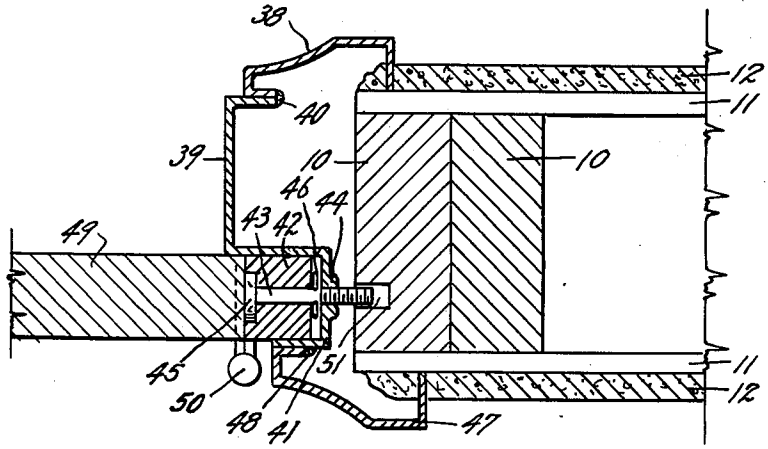


Fig 5

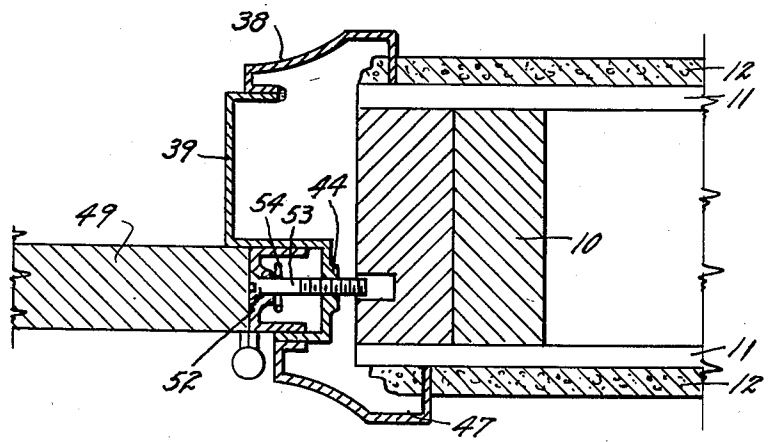


Fig 6

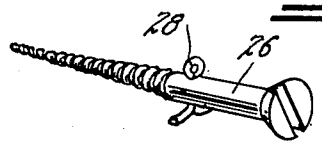


Fig 7

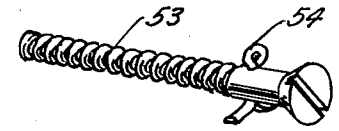


Fig 9

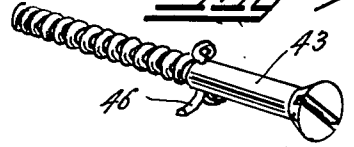


Fig 8

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ADJUSTABLE DOOR JAMBS

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2 Claims. (Cl. 20—12)

This invention relates to an adjustable door jamb. With the usual door jamb construction, the door is fitted to the jamb. The principal object of this invention is to provide a construction which will require no trimming of the door but in which the jamb may be fitted to any given door.

Another object of the invention is to so construct the device that the adjustment of the jamb to fit the door can be quickly and easily accomplished with the use of a simple screw driver.

A further object is to provide an adjustable door jamb construction which can be incorporated in either wooden or metal door jambs.

Other objects and advantages reside in the detail construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention, reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 is a horizontal cross-section through the improved door jamb, taken on the line 1—1, Fig. 4, with the door broken away to decrease the width thereof;

Fig. 2 is a fragmentary, vertical section through the upper left-hand corner of the improved door jamb, taken on the line 2—2, Fig. 1;

Fig. 3 is a vertical section through the head of the improved door jamb, taken on the line 3—3, Fig. 2;

Fig. 4 is a detail section, taken on the line 4—4, Fig. 2;

Fig. 5 is a horizontal section through the hinge side of an alternate form of the improved door jamb;

Fig. 6 is a similar section, illustrating a second alternate form of the improved door jamb; and

Figs. 7, 8 and 9 are detail, perspective views, illustrating the type of screws employed in the forms of Fig. 1, Fig. 5 and Fig. 6, respectively.

In the drawings, conventional door opening framing studs are indicated at **10**, the lathing or other plaster support at **11**, the wall plaster at **12** and a conventional 2″ x 4″ framing header at **13**. The studs **10** and the framing header **13** roughly outline the opening in which the improved door jamb is to be installed.

The improved jamb is applicable to either wood or metal. The adaptation for wood is illustrated in Figs. 1 to 4 and comprises an inner frame structure which is installed from one face of the door opening, and an outer frame structure which is installed from the other face of the door opening in telescopic relation with the inner frame structure so that the two structures may be adjusted relative to each other to accommodate any desired wall thickness.

The inner frame structure comprises a vertical frame board, herein designated as a side casing nailer **14**, positioned at each side of the door opening. Each side casing nailer **14** is permanently attached to an inner

side casing **15** which projects outwardly and inwardly from the casing nailer. The attachment between the members **14** and **15** is made at the mill before installation in any desired manner, such as by gluing, nailing, or both.

At the head of the frame a head casing nailer **16** overlies the upper extremities of both the side casing nailers **14**. The upper casing nailer **16** carries an inner head casing **17** permanently attached thereto.

The inner jamb structure comprises two vertically elongated side jamb strips **18**, to each of which an outer side casing **19** is permanently affixed at the mill. An inner head jamb strip **20** overlies the upper extremities of both the side jamb strips **18** and carries an outer head casing **21** permanently attached thereto.

The improved jamb is installed by sliding the inner jamb frame into the opening outlined by the studs **10** and the header **13**, with the inner casings **15** and **17** overlying and resting against the plaster **12**. The side casing nailers are then nailed into position by means of suitable nails **22** extending into the framing studs **10**. If necessary for alignment purposes, suitable wedging **23** may be installed between the nailers **14** and the studs **10**.

Hinge and lock strips **24** are now inset against the inner face of the side casings **15** at each side of the door, and a header strip **25** is set over the strips **24**. The strips **24** carry a plurality of relatively large, vertically spaced wood screws **26**, as shown in detail in Fig. 7. The heads of the screws **26** rest in countersunk bearing washers **27** inset in counterbores in the hinge and lock strips **24**. The screws **26** are held in position in the strips by means of suitable cotter keys **28** which extend through key holes bored through the screws. The screws **26** extend through holes **30** in the casing nailers **14** and engage in the studs **10**. The holes **30** are provided with counterbores **29** to receive the cotter keys **28** should the strips **24** be brought closely against the boards **14**.

The inner jamb frame is now placed in position by sliding the side jamb strips **18** into the enclosure of the casing nailers **14**, with the head jamb strip **20** sliding below the head casing nailer **16**. The outer casings **19** and **21** are now brought snugly against the surface of the plaster **12** and the jamb strips **18** are nailed, by means of suitable nails **32**, through the nailers **14** and into the studs **10**.

It will be noted that this leaves a space between the side jamb strips **18** and the hinge and lock strips **24**, depending upon the thickness of the wall. This opening is covered by means of door stop or finishing strips **33** which are nailed to the strips **18** by means of suitable nails **34**. The inner vertical edges of the door stop strips **33** are brought into alignment with the hinge and lock strips **24**.

The improved jamb is now ready to be fitted to a door, such as indicated at **35** in Fig. 1. The door is hinged to one of the strips **24** by means of suitable door hinges **36** and the lock or latch of the dor engages a keeper on the other strip **24** as is usual in door mountings. Should the opening between the jamb members **24** be too narrow for the door, it is only necessary to tighten the screws **26** to carry their respective strips **24** outward to increase the width of the door opening. The width can be decreased by simply loosening or unscrewing the screws **26** to cause the cotter keys to force the strips **24** toward the door.

Thus, it can be seen that the width of the jamb can be accurately fitted to the width of the door without any cutting or planing of the door being required. When the desired fit has been obtained, the strips **24** may be permanently secured in place, if desired, by means of suitable nails **37** driven through the inner side casings **15**.

Thus, it can be seen that an adjustment is provided,

both for the width of the door and for the thickness of the partition or wall in which the door is being installed.

In Fig. 5, the same principle of operation for varying the width of a door opening has been incorporated in a metal door frame. The metal frame consists of an outer metal molding **38** which rests against the lathing or other plaster support **11** and outlines the door opening. A metal door casing **39** is welded, as indicated at **40**, or otherwise secured to the casing **38**. The metal casing **39** is provided with an indented channel **41** in which an adjustable wooden strip **42** is positioned.

The jamb strip **42** is held in the channel **41** by means of machine screws **43** which are threaded through threaded bosses **44** in the bottom of the channel **41**. These screws are provided with conical heads which are countersunk into bearing washers **45** inset in counterbores in the jamb strips **42**, similarly to the washers **27** previously described.

The screws **43** are provided with cotter keys **46** extending through diametric key holes in the screws similar to the cotter keys **28** previously described. An inner casing molding **47** is welded, as shown at **48**, or otherwise secured to the side of the channel **41** to outline the inner face of the door opening.

A door **49** is hinged, as indicated at **50**, to one of the jamb strips **42** at one side of the door, and the latch or lock is installed at the other side of the door to engage the other jamb strip, as is usual in door hanging.

It can be readily seen that rotation of the screws **43** will move the jamb strips **42** inwardly and outwardly to adjust the width of the door opening to accommodate any given door. The adjacent stud **10** may be bored, as indicated at **51**, if necessary for the reception of the screws **43**.

In Fig. 6, a metal jamb strip **52** is employed in place of the wooden jamb strip **42** of the form of Fig. 5. The jamb strip **52** comprises a vertical metal channel member bored and countersunk to receive machine screws **53** as illustrated in detail in Fig. 9. The screws **53** are also provided with cotter keys **54** to prevent them from being withdrawn from the jamb strip **52**. The screws **53** thread through the screw nut portions or bosses **44** of the previous form. The operation of the form of Fig. 6 is similar to that previously described with reference to the preceding forms of the invention.

While a specific form of the improvement has been described and illustrated herein, it is to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. An adjustable jamb for mounting a door in a door opening, having a pair of door bucks and a header in a wall forming a door opening, said door bucks and header having a first face and a second face, both faces being parallel with the plane of the opening, and said door bucks and header having a side face normal to the plane of the opening, comprising: a side casing nailer secured in said opening at each side thereof; a casing secured to each nailer and projecting outwardly therefrom to overlie one face of said wall and projecting inwardly therefrom towards said door; a hinge and lock strip positioned against the inwardly projecting portion of each casing; screws extending through said strips and through said casing nailer adapted to be threaded into the sides of said door opening; abutment means on said screws acting to prevent longitudinal movement of the latter in said strips; a jamb strip positioned against the inner face of each casing nailer in spaced relation to the hinge and lock strip thereon; a second casing secured to each jamb strip and adapted to overlie the other face of said wall; and a door stop strip secured to each jamb strip and extending to the adjacent hinge and lock strip to cover the space between said jamb strip and said hinge and lock strip and acting as a stop for said door.

2. An adjustable jamb for mounting a door in a door opening, having a pair of door bucks and a header in a wall forming a door opening, said door bucks and header having a first face and a second face, both faces being parallel with the plane of the opening, and said door bucks and header having a side face normal to the plane of the opening, comprising: a side casing nailer of less width than the thickness of said wall secured in said opening at the sides and top thereof, one edge of said side casing nailer being in substantial alignment with the first face of said wall; a jamb strip secured to and overlying a portion of the width of said nailer throughout the length thereof and projecting sidewardly therefrom to substantial alignment with the second face of said wall; a hinge and lock strip secured to and overlying the remaining portion of the width of said nailer in spaced relation to said jamb strip throughout the length thereof and having one edge in substantial alignment with the second face of said wall; screws extending through said hinge and lock strip into and through said nailer and into the sides and top of said door opening; means on said screws preventing said hinge and lock strip from moving longitudinaly on said screws; a first casing secured to said hinge and lock strip and overlying the first face of said wall; a second casing secured to said jamb strip and overlying the second face of said wall; and a door stop strip secured to and extending along said jamb strip and projecting sidewardly toward said hinge and lock strip to cover the space between said jamb strip and said hinge and lock strip and acting as a stop for said door.

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