

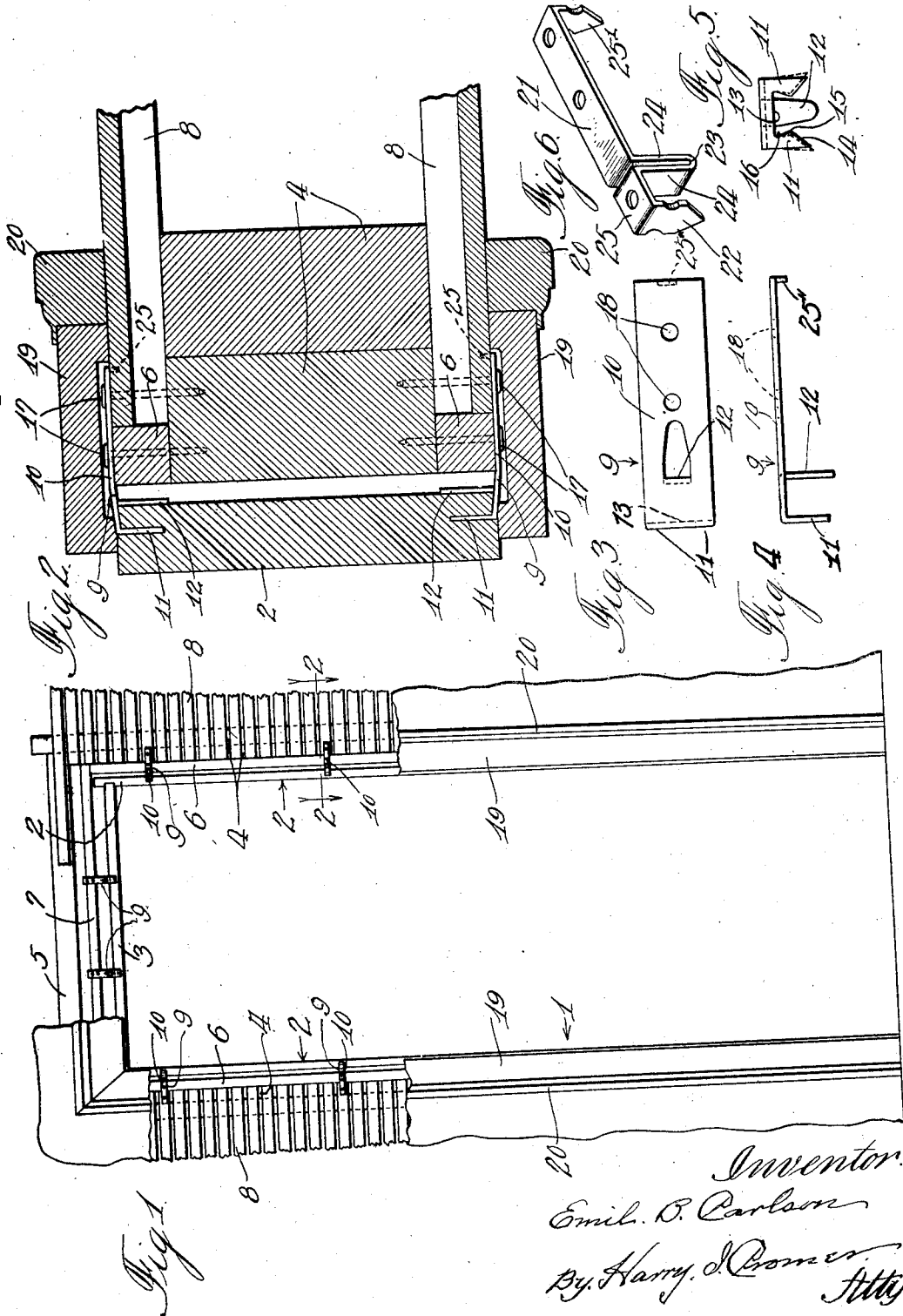
Sept. 14, 1926.

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1,599,985

JAMB SUPPORTING STAY FOR DOOR AND WINDOW FRAMES

Filed Dec. 4, 1925



UNITED STATES PATENT OFFICE.

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JAMB-SUPPORTING STAY FOR DOOR AND WINDOW FRAMES.

Application filed December 4, 1925. Serial No. 73,185.

This invention relates to jamb-supporting stays for securing and holding the jambs of door frames and window frames in position and in properly spaced relation to the other frame members.

The principal object of this invention is to provide a simple, economical and efficient jamb-supporting stay for door frames and window frames adapted to enable the jambs to be secured and held in properly spaced relation to the posts and other frame members of door frames and window frames, and adapted to enable the stays to be secured to the jamb before placing the jamb in position in the frame, and then secured to the door posts or other frame members and covered and concealed when the frame is finished.

Other and further objects of the invention will appear from the following description and claims, and from an inspection of the accompanying drawings which are made a part hereof.

The invention consists in the features, combinations, details of construction and arrangement of parts herein described and claimed.

In the accompanying drawing:—

Figure 1 is a view in elevation of a door frame provided with jamb-supporting stays constructed in accordance with my invention, and showing a door jamb secured in position and connected with the door posts by means of my improved stays;

Fig. 2 is an enlarged view in section taken on line 2—2 of Fig. 1 looking downward, as indicated by the arrows, and showing in detail a door frame provided with jamb-supporting stays in position to connect and securely hold the jamb in properly spaced position with respect to the door posts and the other frame members of a door frame, and with the stays in position to be concealed from view in the finished frame;

Fig. 3 is an enlarged detail view of my improved metallic jamb-supporting stay;

Fig. 4 is a view in side elevation of the jamb-supporting stay shown in Fig. 3;

Fig. 5 is an end view of the metallic stay shown in Figs. 3 and 4, and shows the pointed prongs in full lines in their normal initial position, and in broken lines as they would appear after being driven into the jamb and thereby bent or spread apart so as to securely hold the stay in position upon the jamb; and

Fig. 6 is a detailed view in perspective of a modified form of my improved jamb-supporting stay.

In the accompanying drawing I have shown a door frame provided with jamb-supporting stays constructed in accordance with my invention and having the jamb secured and held in proper position with respect to the door posts and other frame members of a door frame. It will be readily understood, however, that my improved jamb-supporting stays are adapted to be employed with equal advantage for window frames as well as door frames.

In constructing a door frame or window frame, or similar structure, provided with jamb-supporting stays, in accordance with my invention, I provide a frame 1, which may be either a door frame or a window frame, or the like. The door frame shown in the accompanying drawings comprises upright side jambs 2, the upper ends of which are connected with and by means of a top jamb or header 3 thus forming the inside frame or jambs of a door frame in connection with which my improved door supporting stays are to be employed. The frame thus formed is adapted to be mounted in upright position between opposite door posts or studs 4 and beneath a top door frame member or scantling 5 which extends across the top of the doorway and is connected with the door posts or door studs. Upright grounds or ground strips 6 are secured to the door posts adjacent to the outer margins of the side jambs 2; and a similar horizontal ground or ground strip 7 is secured to the horizontal top frame member 5 in position to form stops for the plaster when it is spread upon the laths 8 in the usual manner.

In order to provide means for securing and holding the jambs in proper position and in proper spaced apart relation to the door posts in accordance with my invention, I provide any desired number of metallic jamb-supporting stays 9 which are constructed in accordance with my invention, and each of which, by preference, comprises a flat metallic body portion 10 formed of a strip of sheet metal which is stamped or bent to form at one end thereof one or more sharp pointed prongs or teeth 11 which normally extend at right angles to the main body portion of the stay, and has by preference, a projecting stop or guard 12 which

may be stamped and bent outward or downward from the main body of the strip or metallic stay, so as to extend inward along and in contact with the inner surface of the jamb to which said stay is to be secured, and between the jamb and the adjacent door post or frame member with which the jamb is to be connected and to which the stay is to be secured.

The stop or guard 12 is, by preference, formed in one integral piece with the body 10 and pointed prongs or teeth 11 of the stay, and somewhat longer than the pointed prongs or teeth, so that the stop is adapted to serve as a guide or guard which, by coming into engagement with the jamb and projecting inward between the jamb and the adjacent door post or frame member in advance of the pointed ends of the prongs 11, enables the stay to be readily and accurately placed in exactly the proper position on the jamb for enabling the sharp pointed prongs 11 to be driven into the jamb. A transverse flange 13 which is integral with the main body portion of the stay extends across the space between the pointed prongs 11 and in the same plane with said prongs and forms a transverse projecting flange on the inner side or toothed side of the body of the strip or stay. This transverse flange 13 serves not only to connect and strengthen or brace the pointed prongs but also serves to compress and render more compact the wood or material into which the prongs are driven, and in which they are embedded when the stay is in use.

Each of the pointed prongs 11, in the preferred form of the device, is tapered so as to form opposite side margins which are in oblique relation to each other on opposite sides of the pointed end toward which said margins converge. In the form of the device shown in the accompanying drawings each of the prongs 11 has an inner oblique marginal portion or edge 14 which is in oblique relation to the outer margin or edge of such prong, and an inner projecting shoulder 15 is, by preference, formed on the inner side of each of said prongs or teeth 11. A recessed portion 16 is thus formed between the shoulder 15 of each prong 11 and the adjacent edge of the flange 13, into which recess the wood or material into which the prongs are driven, is forced and compressed. It should also be noted that the inclined or oblique margins 14 of the pointed prongs are adapted to cause the prongs to be bent or curved outward so as to tend to clinch the prongs in engagement with the material into which they are driven. The transverse flange 13, by compressing the wood or material renders it more compact and forces it into the recesses 16, and serves to confine the wood or material in compact form between said flange and the projecting stop 12, so

that the stay is securely held in operative position upon the jamb into which the prongs are driven.

From the foregoing it will be readily seen that jamb-supporting stays constructed in accordance with my invention are adapted to be secured in position upon the jambs of doors or windows, or upon any structure upon or in connection with which the stays are to be used, and that the jambs may be placed in position after the stays have been secured thereto, and the stays may then be readily secured to an adjacent door post or frame member or other structure, and are adapted to serve as a convenient means for enabling the jambs to be properly positioned accurately and with facility. After the jambs with the jamb-supporting stays thereon have been placed in proper position, the stays may be readily secured to the door posts or adjacent structure by means of nails 17 which may be inserted through openings 18 in the stays. The casings 19 and back bands or moldings 20 are then secured in place so as to cover and conceal the metallic stays and form the finished frame or structure.

In Fig. 6 is shown a modified form of my metallic jamb-supporting stay which is formed of a strip of sheet metal cut and bent or stamped to form a flat body portion 21, a pointed prong 22, at one end of the stay, a projecting stop 23 having connected double walls 24, and if desired a second pointed prong 25 at the opposite extremity of the body of the stay from said first mentioned prong 22, all formed in one integral piece of sheet metal. The projecting stop 23 shown in said figure is in parallel relation to and spaced apart from the pointed prong 22 and adapted to be inserted into the space between a jamb and an adjacent door post or other structure to which the stay is to be secured. The outer or projecting extremities of the normally parallel walls 24 which form the stop 23 being formed in one integral piece and flexibly connected, and the base of one of said walls being united to the body portion 25 on which the first mentioned pointed prong 22 is located, and the opposite wall 24 of said guard or stop 23 being united to the body portion 21 between said stop and the opposite pointed prong 25', or opposite end of the stay, it will be readily seen that the stop 23 may be extended or spread by spreading apart the walls 24 to any desired extent, either to position the jamb with respect to the door posts, by spreading the stop 23 inside of the space between the jamb and door post, or to extend and increase the effectual length of the stay as desired, or as circumstances may require.

I claim:—

1. A jamb-stay comprising a metal strap bent to afford an elongated body portion

and a jamb-entering element at one end of and at right angles to said body portion, said jamb-entering element being bifurcated to provide a pair of spaced pointed piercing fingers provided with inclined opposed edges which, without meeting, converge toward the body portion, said piercing fingers being adapted to spring apart when simultaneously driven into a jamb, said body member being adapted for attachment to a frame wherein the jamb is mounted.

2. A jamb-stay comprising a metal strap bent to afford an elongated straight body portion and a jamb-entering element at one

end of and at right angles to said body portion, said jamb-entering element being bifurcated to provide a pair of spaced pointed piercing fingers, said piercing fingers having opposed edges which converge from the points of the fingers and then diverge toward the body portion, said body portion being adapted for attachment to a frame wherein is mounted a jamb pierced by the fingers aforesaid.

Signed at Chicago, in the county of Cook and State of Illinois this 30th day of November, 1925.

EMIL B. CARLSON.