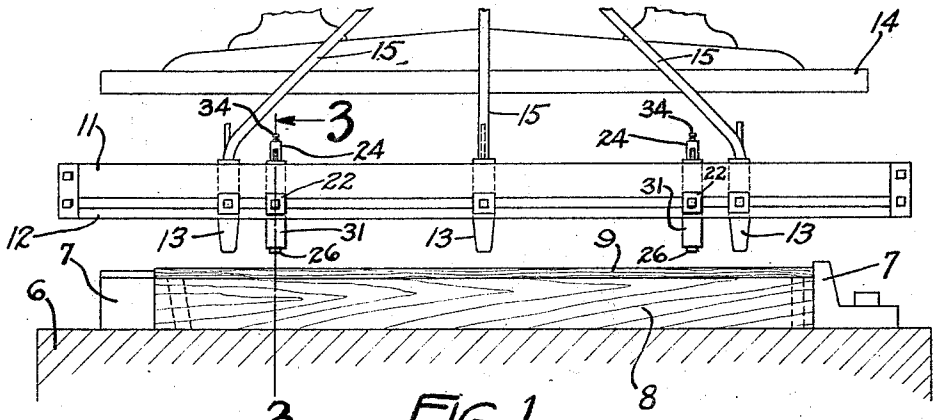
Feb. 12, 1929. 1,702,095

M. O. SOLHEIM

ATTACHMENT FOR NAILING MACHINES

Filed Sept. 8, 1925



3

FIG. 1

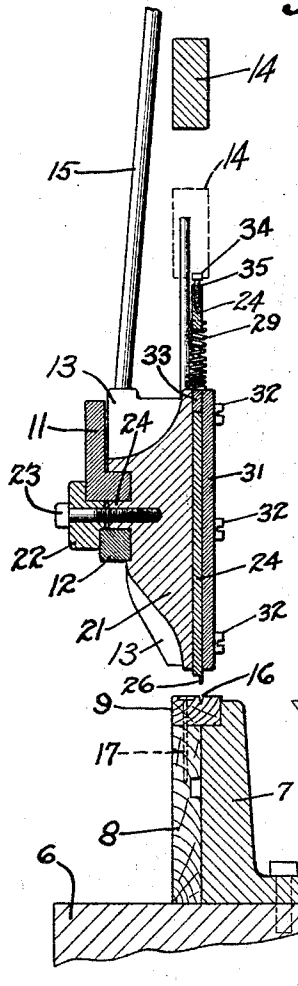


FIG. 3

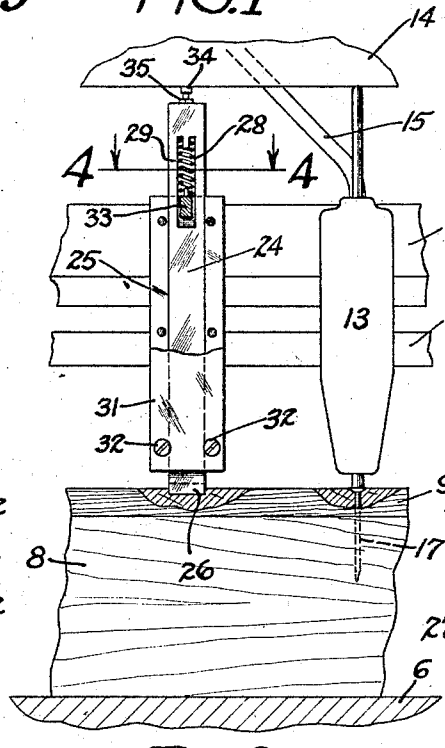


FIG. 2

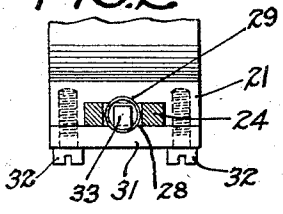
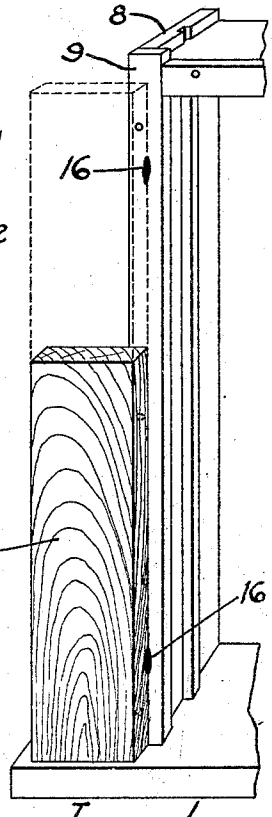


FIG. 4

FIG. 5



Inventor
MARCUS O. SOLHEIM
By Paul, Paul & Woods
ATTORNEYS

Patented Feb. 12, 1929. 1,702,095

UNITED STATES PATENT OFFICE.

MARCUS O. SOLHEIM, OF BAYPORT, MINNESOTA, ASSIGNOR TO ANDERSEN LUMBER COMPANY, OF BAYPORT, MINNESOTA, A CORPORATION OF WISCONSIN.

ATTACHMENT FOR NAILING MACHINES.

Application filed September 8, 1925. Serial No. 55,115.

This invention relates to new and useful improvements in nailing machines of the type usually employed in lumber or wood-working mills for nailing together window-frames and the like, or for nailing the blind stops to the jambs of such frames, and more particularly relates to an improved marking attachment for such a nailing machine adapted for use to make a guide mark or imprint upon the blind stop simultaneously as it is nailed to the jamb, for the purpose of providing means for accurately locating or positioning the usual casing or facing of the window frame with relation thereto after the frame has been secured in place in the building structure.

In erecting new buildings considerable time is often required to properly arrange or locate the window casings with relation to the jambs of the window frames, that they may be mounted in parallel relation substantially with the blind stop or edge of the frame and with the proper offset with relation thereto. The method most commonly employed at present for thus relatively locating and aligning the casings upon the frames, consists in manually placing guide-marks with a pencil or other device upon the outer face of the blind stop or edge of the frame on each side thereof, with which the inner edge of each casing is aligned before being nailed or secured in place. The jambs or frame edges are usually thus marked adjacent their upper and lower end-portions. It is therefore desirable that means be provided whereby such manual marking of the frames may be dispensed with, and whereby the edges of the frame may be automatically and accurately marked, without loss of time, during the process of manufacturing or assembling the frame.

The particular object of this invention, therefore, is to provide an improved marking attachment for a nailing machine of the above type whereby the edges of the frame jambs may be automatically marked simultaneously as the blind stop of the jamb is nailed thereto, thereby greatly simplifying and expediting the operation or work of mounting the casings upon the frames.

Other objects of the invention will appear from the following description and the accompanying drawings and will be pointed out in the annexed claims.

In the accompanying drawings there has been disclosed a structure designed to carry out the objects of the invention, but it is to be understood that the invention is not to be confined to the exact features shown, as various changes may be made within the scope of the claims which follow.

In the accompanying drawings forming part of this specification:

Figure 1 is a view in front elevation of a portion of a nailing machine showing my invention applied thereto;

Figure 2 is an enlarged detail view, partially in section, showing the marking device in engagement with the blind stop to make a mark thereon simultaneously as a nail is being driven through it by the nailing machine;

Figure 3 is an enlarged detail sectional view on the line 3—3 of Figure 1, showing the preferred manner of mounting the marking device upon a nailing machine;

Figure 4 is a sectional plan view on the line 4—4 of Figure 2; and

Figure 5 is a perspective view of a portion of a window frame showing how the blind stop or edge of the frame is marked to provide means for aligning and locating the casings thereon.

The form of nailing machine shown in the accompanying drawings is of the type employed in lumber or woodworking mills for nailing together window frames and the like, and especially for nailing the blind stops to the jambs of the frame. As shown in Figure 1, this machine comprises a bed 6 having a frame or guide 7 mounted thereon against which the jamb 8 and blind-stop 9 may be seated preparatory to being nailed together, as shown in Figures 2 and 3. A pair of supporting bars 11 and 12 are arranged over the bed 6 to provide means for supporting the nailing boxes 13, which are adjustably mounted thereon so that the spacing between the nails may be varied to suit the particular size of the work being assembled thereon. These supporting bars are mounted upon a suitable supporting means, not shown. The usual hammer bar 14 is mounted over the nailing boxes 13 and is adapted to be downwardly moved to the dotted line position shown in Figure 3 by a suitable operative mechanism not shown in the drawings. A nail tube 15 leads from each box 13 to a suitable source of supply. The above disclosed

mechanism is old and it is therefore thought unnecessary to describe or illustrate it in detail.

A feature of this invention resides in the novel means provided for automatically marking the outer face of each end-portion of the blind-stop 15 with suitable guide-marks 16 simultaneously as the nails 17 are driven through the blind-stop 9 and into the jamb 8 during the operation of securing the blind-stop thereto.

Such means preferably consists of adjustably mounting a pair of marking heads 21 upon the supporting bars 11 and 12 as shown in Figure 3. Each head may be suitably secured to the supporting bars by means of a clamp 22 having a screw 23 mounted therein in threaded engagement with the head 21 as shown. The heads are also provided with tongues 24 adapted to fit between the supporting bars 11 and 12 so as to retain them in their proper vertical position with relation to the bars and the frame portion positioned therebeneath. By thus securing the marking heads 21 to the bars 11 and 12 they may be readily shifted or adjusted thereon to properly space the marks upon the face of the blind-stop as shown in Figure 1.

A slide bar 24 is reciprocally mounted in a guide 25 provided in each head 21. This slide has its lower end-portion formed to provide a relatively thin edge 26 which is adapted to be forced downwardly into the face of the jamb or blind-stop as shown in Figures 2 and 3, for the purpose of producing the guide marks 16 against which the inner edge of the casing 27 may be placed as shown in Figure 5, when mounting the casing upon the window frame. The upper end portion of the slide 24 is preferably provided with an elongated opening or slot 28 in which a coiled compression spring 29 is mounted, having its lower end seated upon the upper face of the head 21 and a plate 31 secured to the head by means of screws 32 as shown in Figures 3 and 4. This plate functions to retain the slide 24 in the guide 25. The upper end of the spring 29 is seated against the end of the slot 28 so that the spring constantly tends to exert an upward force against the slide 24 to normally hold it in the position shown in Figure 3, wherein it will be noted that the lower end of the slot is in engagement with a stop lug 33 preferably integrally formed with the plate 31 as shown. An adjusting screw 34 is mounted in the upper end-portion of the slide bar 24 adapted to be engaged by the lower face of the edge of the hammer bar 14 as shown in Figure 2, thereby forcing the slide 24 downwardly from the position shown in Figure 3 to that shown in Figure 2. A lock nut 35 is preferably provided upon the adjusting screw 34 to securely lock it in its adjusted position.

By the employment of this novel marking device in connection with the nailing machine of the type above described, the outer face of the blind-stop will be automatically marked at each end, without loss of time, simultaneously as it is being secured to the jamb 19. By adjustably mounting the marking heads upon the supporting bars 11 and 12 as above described, their relative positions thereon may be varied to properly space the guide-marks upon the face of the blind-stops, as particularly shown in Figure 5.

From the foregoing, therefore, it will readily be noted that the operation of thus marking the blind-stops to provide means for locating and aligning the casings thereon will be accomplished simultaneously with the operation of nailing the blind-stop to the jamb, thereby providing means for thus automatically marking the stops without increasing the cost of manufacturing the window frame and by thus marking the frames a considerable amount of time and labor will be saved in not having to mark with a pencil or other device each window frame prior to mounting the casing thereon. The construction of the device is also very simple and inexpensive and is so designed that it may readily and quickly be mounted upon nailing machines of ordinary construction, and, when desired, may readily be removed therefrom.

I claim as my invention:

1. In a nailing machine, the combination with a suitable base adapted to receive a window jamb placed on edge thereon, means for supporting and positioning a blind stop with respect to said jamb, nailing means for securing the blind stop to said jamb, and means adapted to operate simultaneously with the nailing means for placing casing aligning marks on said blind stop.

2. In combination with means for holding a jamb and blind stop positioned to be nailed, nailing means arranged to drive nails to secure the blind stop to said jamb, and a plurality of markers movable with said nailing means and arranged to place marks upon the face of the blind stop in aligned relation lengthwise thereof.

3. In combination with means for holding a jamb and blind stop positioned to be nailed, nailing means arranged to drive nails to secure the blind stop to said jamb, and a plurality of markers movable with said nailing means and arranged to place marks upon the face of the blind stop in aligned relation lengthwise thereof so that a line connecting said marks will be parallel with the longitudinal edges of the stop, said marking means being adjustable lengthwise.

4. In combination with means for holding a jamb and blind stop positioned to be nailed, nailing means arranged to drive nails to secure the blind stop to said jamb, and a plurality of markers movable with said nailing means and arranged to place marks upon the

face of the blind stop in aligned relation lengthwise thereof so that a line connecting said marks will be parallel with the longitudinal edges of the stop, said marks being disposed on a line laterally offset with respect to the nails.

5. In combination with means for holding a jamb and blind stop positioned to be nailed, nailing means arranged to drive nails to secure the blind stop to said jamb, and a plurality of markers movable with said nailing means and arranged to place marks upon the face of the blind stop in aligned relation lengthwise thereof so that a line connecting said marks will be parallel with the longitudinal edges of the stop, said marks being disposed on a line laterally offset with respect to the nails in a direction toward the inner side of the blind stop.

6. In combination with means for holding a jamb and blind stop positioned to be nailed, nailing means arranged to drive nails to secure the blind stop to said jamb, and a marker movable with said nailing means and arranged to place a mark upon the face of the blind stop parallel with the longitudinal edges of the stop, for the purpose specified.

7. In combination with means for holding a jamb and blind stop positioned to be nailed, nailing means arranged to drive nails to secure the blind stop to said jamb, and a marker adapted to automatically place a mark upon the face of the blind stop substantially parallel with the edge of the stop whereby the casing may be accurately located or positioned with respect to the edge of the stop.

In witness whereof, I have hereunto set my hand this 3rd day of September, 1925.

MARCUS O. SOLHEIM.