Nov. 26, 1940. C. R. NEAL 2,222,877

BULLNOSE FORMING TOOL

Filed March 22, 1939

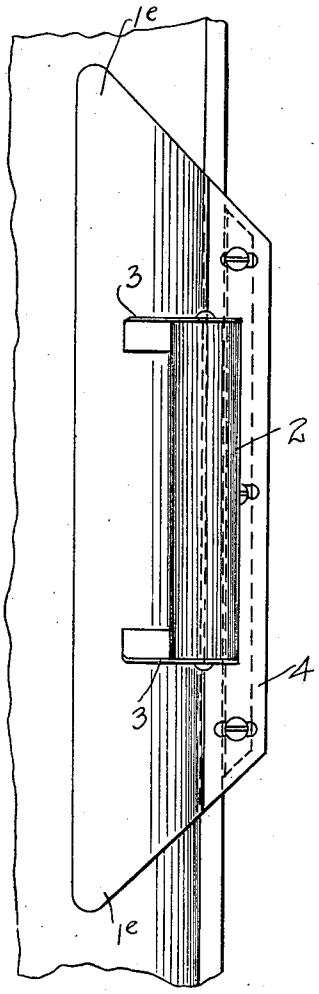


Fig. 1

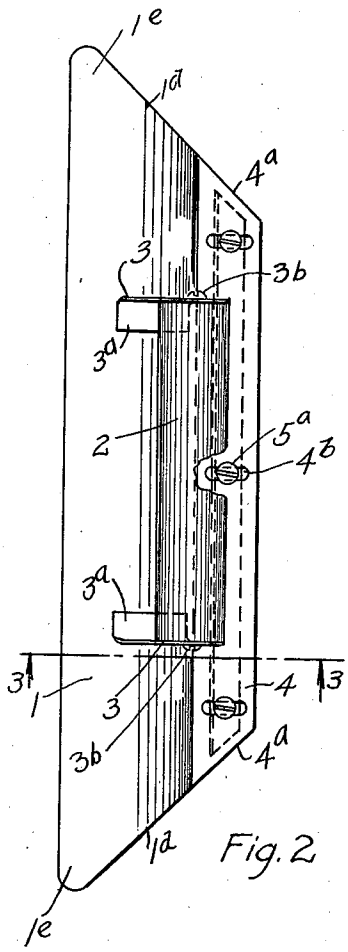


Fig. 2

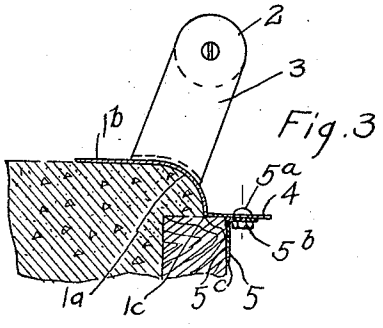


Fig. 3

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Patented Nov. 26, 1940 2,222,877

UNITED STATES PATENT OFFICE

2,222,877

BULLNOSE FORMING TOOL

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Application March 22, 1939, Serial No. 263,441

6 Claims. (Cl. 72—136)

My invention relates to a tool for forming bullnose corners around door or window frames or for like purposes and the objects of my invention are:

First, to provide a tool that is shaped to properly form and position the bullnose corner relatively to the door or window frame or the like;

Second, to provide a tool of this class with a guide which engages the door or window frame for guiding the tool in the proper position for forming the corner;

Third, to provide a tool of this class in which the guide is adjustable so that the corners may be positioned in varying relation with the window or door frame as desired;

Fourth, to provide a tool of this class in which the door or window frame serves as a support so that the bullnose corner will be uniform in thickness and positioned from the door frame;

Fifth, to provide a tool of this class with 45° angled ends to facilitate the making of the corners that intersect each other at the top and side of a door frame or window; and

Sixth, to provide a bullnose forming tool of this class which is very simple and economical of construction, easy to operate, efficient in its action and which will not readily deteriorate or get out of order.

With these and other objects in view as will appear hereinafter, my invention consists of certain novel features of construction, combination and arrangement of parts and portions as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawing and to the characters of reference thereon which form a part of this application in which:

Figure 1 is a front elevational view of my bullnose forming tool shown in operative position with a door frame for forming a bullnose corner adjacent thereto; Fig. 2 is a similar view showing the tool alone and showing the portions broken away to facilitate the illustration; and Fig. 3 is a transverse sectional view taken from the line 3—3 of Fig. 2 and showing a portion of the door frame and bullnose corner by dash line.

Similar characters of reference refer to similar parts and portions throughout the several views of the drawing:

The forming blade 1, forming blade handle 2, forming blade handle support 3, guide support 4 and adjustable guide 5 constitute the principal parts and portions of my bullnose forming tool.

The forming blade 1 is a relatively thin piece of sheet metal, preferably stainless steel, and it is provided with a curved portion 1*a* which is the arc of a circle of the proper radius to provide the proper thickness of walls. It is also provided with an extended straight portion 1*b* which is adapted to form the straight portion of the wall which intersects with the curved bullnose corner. Secured on a portion of the curved portion 1*a* and a portion of the straight portion 1*b* and extending outwardly are two handle supports 3 positioned in opposed relation to each other spaced the length of the handle 2 and are preferably provided with turned ends 3*a* which are secured to the outer surface of the blade 1, preferably by welding. These supports 3 extend outwardly two and one-half to three inches and secured between the outer ends is the handle 2 which is a round handle secured thereto by means of screws 3*b*, two in each end to prevent the handle from turning. This handle is of sufficient length to provide a grip for the hand in operating the tool. The curved portion of the blade 1*a* terminates in a substantially short sharp corner 1*c*, as shown best in Fig. 3 of the drawing. Extending from this corner 1*c* from the curved portion 1*a* is the guide support 4 which is parallel with the straight portion 1*b* and extends outwardly some distance as shown in the drawing, it being noted that it is preferred to form the guide support 4 as an integral part with the blade 1, but if desired, it may be made of separate material and welded thereto and may be made of heavier material if desired.

It will be here noted that the members 1 and 4 are bevelled on a 45° angle at 1*d* and 4*a* at the opposite ends forming extended angular wing portions 1*e* at opposite ends of the blade 1 which provides means for finishing the intersecting corner of the side and front toe molding of a window or door.

The guide support 4 is provided with three transverse slots 4*b* adapted to receive screw bolts 5*a* for supporting the angular shaped adjustable guide 5 which is provided with holes for receiving said screw bolts 5*a* and said adjustable guide 5 is clamped to the support 4 by means of nuts 5*b* on the bolts 5*a*. Thus, it will be noted that this adjustable guide 5 may be shifted to vary the space between the point 1*c* and the member 5*c* of the guide 5 for varying the space between the door or window frame and the bullnose corner formed by the tool.

The operation of my bullnose forming tool is substantially as follows:

The adjustable guide 5 is adjusted to the proper position from the sharp corner 1c to provide the proper positioning of the bullnose corner from the door or window frame. Then the plaster is applied and formed by using the tool, the guide member 5c being permitted to rest against the wall of the door or window casing and the tool is shifted upwardly and downwardly at the corner with the guide 5c for guiding the same and a portion of the support 4 inwardly of the guide 5c rests against the frame also thus providing a substantial support for forming the corner in conformance with the shape of the inner side of the blade 1, the adjacent corner to the frame being formed in an arcuate curve and blending into a straight portion, thus the tool is fully guided and supported by the door or window frame.

Though I have shown and described a particular construction, combination and arrangement of parts and portions, I do not wish to be limited to this particular construction, combination and arrangement, but desire to include in the scope of my invention the construction, combination and arrangement substantially as set forth in the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a bullnose forming tool of the class described, thin sheet metal forming blade including an arcuate portion terminating in a sharp corner at one side and having a plane portion merging with the opposite side, and a guide support merging with the one side of said arcuate portion opposite to said plane portion at a substantially right angle to its connection with the arcuate portion to form a support and guide for the tool on a door or window frame.

2. In a bullnose forming tool of the class described, thin sheet metal forming blade including an arcuate portion terminating in a sharp corner at one side and having a plane portion merging with the opposite side, a guide support merging with the one side of said arcuate portion opposite to said plane portion at a substantially right angle to its connection with the arcuate portion to form a support and guide for the tool on a door or window frame, and a handle secured to the curved and straight portion and extending outwardly some distance.

3. In a bullnose forming tool of the class described, thin sheet metal forming blade including an arcuate portion terminating in a sharp corner at one side and having a plane portion merging with the opposite side, a guide support merging with the one side of said arcuate portion opposite to said plane portion at a substantially right angle to its connection with the arcuate portion to form a support and guide for the tool on a door or window frame, and an angular guide member adjustably connected with said support and adapted to be shifted laterally thereon.

4. In a bullnose forming tool of the class described, thin sheet metal forming blade including an arcuate portion terminating in a sharp corner at one side and having a plane portion merging with the opposite side, a guide support merging with the one side of said arcuate portion opposite to said plane portion at a substantially right angle to its connection with the arcuate portion to form a support and guide for the tool on a door or window frame, the extended ends of said blade being provided with angular wing portions.

5. In a bullnose forming tool of the class described, a metallic blade provided with an arcuate portion and two plane portions extending from opposite sides of said arcuate portion, said plane portions being in parallel relation with each other, a handle secured to said arcuate portion and a portion of one of said plane portions, and a guide adjustably mounted on one of said plane portions.

6. In a bullnose forming tool of the class described, a metallic blade provided with an arcuate portion and two plane portions extending from opposite sides of said arcuate portion, said plane portions being in parallel relation with each other, a handle secured to said arcuate portion and a portion of one of said plane portions, the opposite ends of said blade being tapered to form extended wings at the opposite end.

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