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2,827,712

TEMPLATE

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FIG. 1.

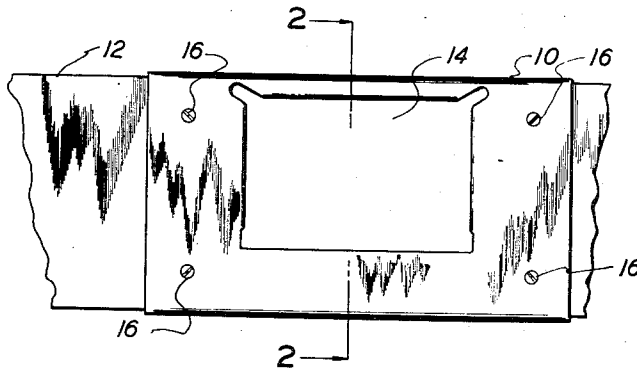


FIG. 2.

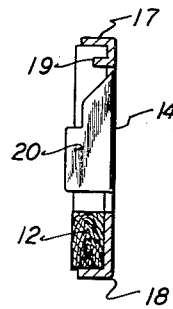


FIG. 3.

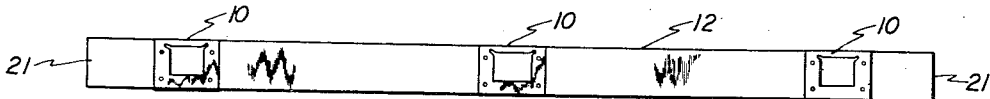
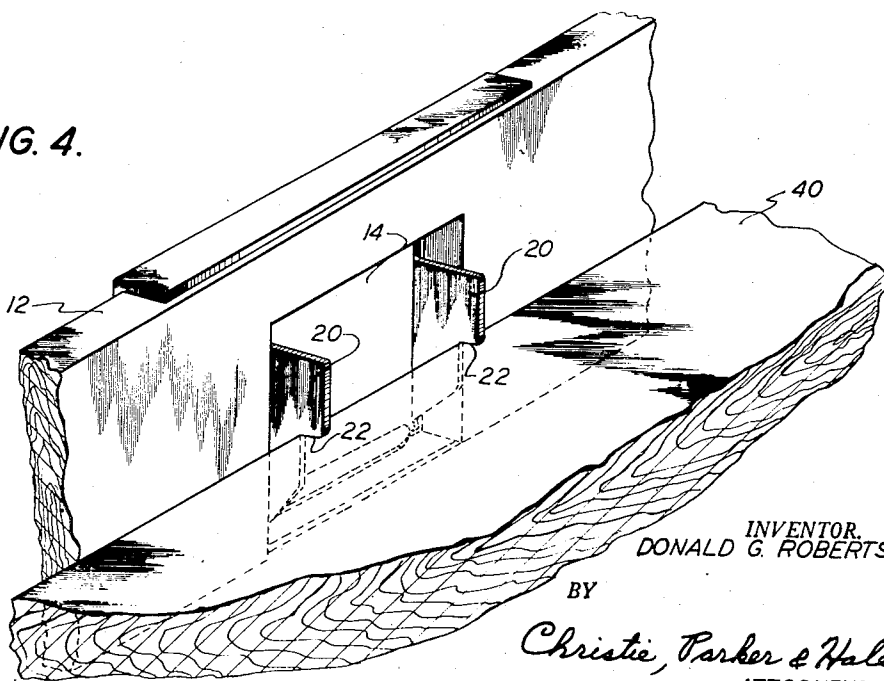


FIG. 4.



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1

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TEMPLATE

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1 Claim. (Cl. 33—197)

This invention relates to the mounting of members upon hinges and more particularly to the making of rabbets in which hinges, such as leaf hinges, are placed before being screwed in place.

The most common method of locating and making the rabbets for the mounting of hinges is tedious and time-consuming. For example, if you desire to mount a door upon a door jamb, the locations of the hinges are measured by means of a measuring means such as a ruler. After the locations of the rabbets are determined, their area must then be measured and marked. Then the rabbets are formed by cutting out to a desired depth the proper size of rabbet. The cutting is usually done by means of a chisel.

Each time a new door or gate, or any other type of pivotal member is to be hinge-mounted, the procedure of measuring, marking, and cutting must be repeated.

In accordance with my invention a template is provided which automatically locates the position and defines the area of each hinge rabbet without requiring any measuring or marking. Each template is designed for a particular size hinge mount and a particular size door or other pivotable member. For example, I provide a hinge template which is designed for use with a 76-inch door and a 3-inch hinge size. The template is merely slid over the edge of the door and the hinge leaf rabbets automatically located and defined. A router can then be used to form the rabbet. Other sizes of hinges and doors can be formed by the use of a different size template which has the same structure as the template used in forming the hinge leaf rabbets on the 76-inch door.

One aspect of my new invention contemplates the provision of a plate member which can be used in forming one's own hinge template. A handyman or carpenter need only purchase a plurality of the plates according to the size of rabbet he desires to make. He can then form a template by taking a board, such as a plywood board, forming spaced-apart notches in the board and mounting a plate over each notch. The conventional router bit protrudes beyond a planar router base an adjustable distance. The base face is conventionally used as a rest surface which slides along a reference surface or the work being routed. The preferred plate of the invention provides a bearing surface upon which the router base may slide. The thickness of the plywood board may be selected to space the plate surface the proper distance from the surface to be rabbeted so that the router bit may be adjusted conveniently within the adjustable range of the router. My new invention also contemplates the provision of a hinge template comprising a board-shaped member with the plate members already located in the proper positions. The user need only align the ends of the board with the ends of the member in which he desires to form the rabbets. The length of the board-shaped member and the longitudinal separation of the plates mounted thereon are chosen so that when the board-shaped member is properly located on the member in which the rabbets are to be made, such as a door, the spacing of the

2

rabbets and the area of the rabbets for a particular size door and hinge are automatically located and defined, respectively.

My new invention will be better understood by a reading of the following detailed description when taken in conjunction with the drawings, in which:

Fig. 1 is a plan view showing one of my new plate members mounted on a board-shaped member;

Fig. 2 is a view taken along lines 2—2 of Fig. 1;

Fig. 3 is a plan view showing my new template for use in forming three hinge rabbets; and

Fig. 4 is a perspective view showing the location of my new template upon a door edge when the template is being used.

Referring more particularly to Figs. 1 and 2, a plate member 10 is shown mounted upon a board-shaped member 12. The plate member 10 is of a rectangular shape and has formed therein a rectangular hole 14. Plate 10 may be mounted upon the board 12 by any suitable means such as the screws 16.

The side edges 17 and 18 of plate 10 are flanged to fit over the edge of the board-shaped member 12. A shorter second flange 19 is provided adjacent flange 17 and parallel thereto to provide strength and support to the template when construction of the template is completed. Second flange 19 also provides a guide surface for the router shaft collar and defines the width limit of the rabbet.

A pair of guide tabs 20 (see Figs. 2 and 4) are formed on the plate 10. These guide tabs are integrally connected to each of the short edges of the rectangular hole 14. Guide tabs 20 are disposed perpendicularly to the plate and have their edges 22 forming stop surfaces parallel to the flanges 17 and 18. Guide tabs 20 extend below the board 12 and the side edges 22 are located so that the rectangular hole in the plate 10 will automatically expose an area equal to the desired rabbet size when placed upon the member in which the hinge rabbets are to be made so that the stop surface registers against the surface of the member normal to the surface in which the rabbet is to be formed.

The plate members 10 can be used to construct a hinge template for locating and defining any number of hinge rabbets. The template itself is constructed by forming notches in a board-shaped member such as a piece of plywood. The length of the board-shaped member 12 is made equal to the length of the door or member in which the rabbets are to be formed. The spacing between each of the plates 10 and the distance of the end plates from the longitudinal edges of the board-shaped member is made equal to the desired spacing of the hinges.

Fig. 3 shows a plan view of a completed template. This template may be of any dimension depending upon the size of the hinges to be mounted and the size of the door. For example, if a 3-inch hinge size is desired, a half-inch plywood, $3\frac{1}{16}$ inches wide and 76 inches long, can be utilized. The distance of the center of the two end notches is $8\frac{1}{2}$ inches from the longitudinal edges 21 of the board 12. The center notch is located at the center of the board 12.

Fig. 4 illustrates the manner in which my new template is used in preparation for the forming of the hinge leaf rabbets. The template is slid over the edge of the member in which the rabbets are to be formed, such as a door 40. The longitudinal extremities of the board-shaped member 12 are made to coincide with the longitudinal extremities of the edge of the door 40. The sliding movement of the board-shaped member 12 is limited by the guide tabs 20, the edges 22 of which contact the door 40. The electric router or other cutting means is then placed into the rectangular holes 14 and the proper size rabbet is formed. The rabbets in the door jamb are made

3

in a similar manner. The door is then mounted on the door jamb.

It is clear, therefore, that I have provided the art with a hinge template which is simple in construction. When used the hinge template is time-saving and automatically locates the position and automatically defines the area of the rabbets to be formed.

I claim:

A template for use in forming hinge rabbets in doors and doorway elements by means of a router and router bit and comprising an elongate member having a length substantially equal to the height of the doorway and having notches extending for a portion of the width of the member and spaced along a longitudinal side of the member at intervals coinciding with the desired hinge locations on the particular door and doorway element, a plurality of router guide plates adapted to be fixed to the elongate member one at each notch, a first and a second guide tab each extending from the central portion of each guide plate so as to extend through and beyond the respective notch in the elongate member, the tabs being spaced apart a distance greater than the desired rabbet length and extending for a portion of the width

4

of the notch, a router guide rail extending from each guide plate near one of its longitudinal edges so as to penetrate a portion of the respective notch depth, the first and the second tabs and the guide rail defining in part an opening in the guide plate giving access to the area of the door and doorway element to be rabbeted, a stop on each guide tab adapted to register against a surface of the doorway elements and door that is normal to the surface to be rabbeted for orienting the opening in the guide plate with respect to the area to be rabbeted, a first and a second flange extending from opposite longitudinal sides of each guide plate so as to register each against an opposite side of the elongate member, and means fixing each guide plate to the elongate member at a notch therein.

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