

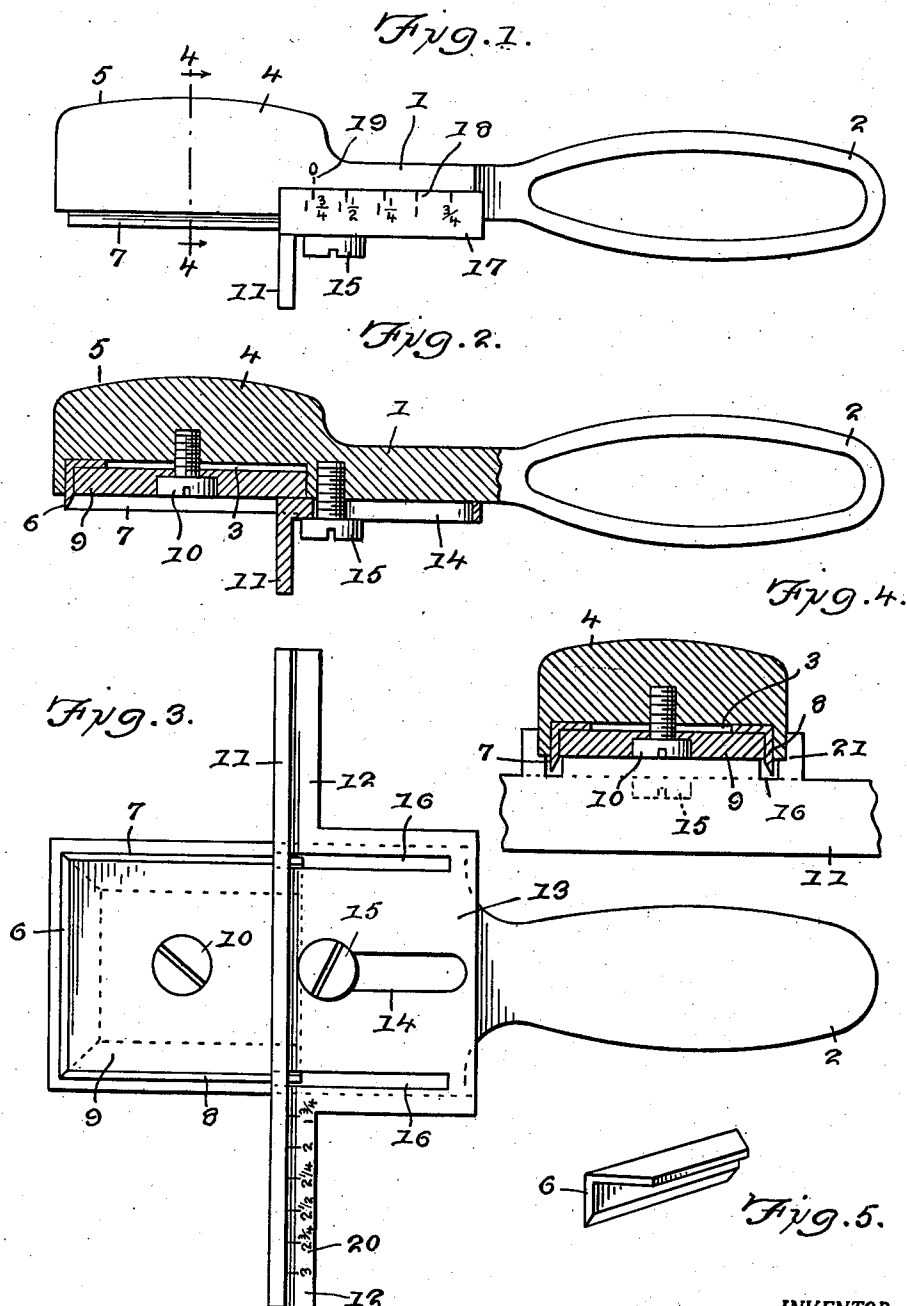
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MORTISE GAUGE AND CUTTING TOOL

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MORTISE GAUGE AND CUTTING TOOL

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1 Claim. (Cl. 145—26)

This invention relates to mortise gauge and cutting tools, and its general object is to provide a tool that is primarily designed for marking or cutting the outline of a hinge mortise or seat in a door or its jamb, as well as windows or the like, in an easy, expeditious and accurate manner, the tool including gauge means to determine the exact width and length of the mortise desired, and the gauge is adjustable and holds the tool square with the door or jamb so as to eliminate any possibility of inaccuracy when cutting the mortise outline, and the cutting action is brought about by striking the head of the tool with a sharp blow, to cause the blades thereof to penetrate the door or jamb.

A further object is to provide a tool of the character set forth, that is simple in construction, inexpensive to manufacture, and extremely efficient in operation, use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claim.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a side elevation of the tool which forms the subject matter of the present invention.

Figure 2 is a partial longitudinal sectional view taken through the tool.

Figure 3 is a bottom plan view thereof.

Figure 4 is a sectional view taken approximately on line 4—4 of Figure 1, looking in the direction of the arrows.

Figure 5 is a fragmentary perspective view of one of the blades.

Referring to the drawing in detail, it will be noted that my tool includes a rectangular body 1 having a handle 2 formed on and extending in alignment with and from one end thereof, and the body is provided with a relatively shallow substantially square recess 3 in the under face thereof, the recess extending from adjacent the front end of the body for approximately two-thirds its length and is of a width substantially coextensive with that of the body, as best shown in Figure 3. The handle is outwardly bulged in rounded formation to provide a convenient gripping surface, and the recessed portion of the body is enlarged or thickened to provide a head 4 that is formed with a rounded upper striking face 5.

Removably mounted in the recess and disposed in engagement with the front and side walls thereof are elongated flanged cutting blades 6, 7 and 8, that have angled confronting ends arranged in fitting contact with each other. The blades are secured within the recesses by an anchoring plate 9 that bears against the flanges of the blades, as best shown in Figure 2, which likewise illustrates that the beveled edges of the blades extend outwardly beyond the recess to perform their cutting function, and that the plate 9 is secured in place by a screw bolt 10 arranged centrally with respect thereto and which of course is threaded in the body.

A gauge member is adjustably associated with the body and includes a cross sectional right angle bar 11 of a length to extend upon opposite sides of the body and formed on the horizontal portion 12 of the bar, to extend centrally and rearwardly therefrom is an attaching plate 13 having a slot 14 along the center thereof for mounting the gauge member on the shank of a screw bolt 15 for slidable movement on the under face of the body for adjustment relative to the blade 6, to bring about a mortise of the desired width, and the bolt 15 is of course threaded in the body. The bar and attaching plate 13 are provided with slots 16 that extend along the sides of the attaching plate, for receiving the outer or beveled edges of the side blades 7 and 8, as will be apparent upon inspection of Figure 3.

Formed on the sides of the attaching plate for disposal along the length thereof are upturned flanges 17 that bear against the sides of the body, and the outer face of one or both of the flanges 17 have graduation marks 18 thereon for cooperation with an index mark 19 on the body, to determine the width of the mortise desired. One end portion of the bar 11 also has graduation marks 20 thereon and the graduation marks 18 and 20 are numbered in inches and portions thereof, as clearly shown in Figures 1 and 3. The graduation marks 20 provide an indicator to determine the length of the mortise desired, and it will be noted as best shown in Figure 4 that the upturned flanges 17 are reduced to provide shoulders 21 on the inner faces thereof along their length, with the side edges of the body mounted on the shoulders.

From the above description and disclosure in the drawing, it is believed that the use of my tool will be obvious, but it might be mentioned that the gauge member is adjusted relative to the blade 6, and tightened in adjusted position through the medium of the screw bolt 15. The

tool is then positioned on the edge of a door or the like, with the vertical portion of the bar 11 bearing against the side face of the door and with the edges of the blade bearing against the edge of the door. Thence the head 4 is struck a sharp blow for causing the blades to penetrate the door and thus mark or provide the outline of a mortise therein. It will be further obvious that the outline provides a guide for cutting the mortise in the usual manner, by a chisel, or the like. In the event the length of the mortise desired is greater than that of the space between the blades 7 and 8, two or more outlines may be provided and the length can be determined by the use of the graduation marks 20.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:

An adjustable cutting tool for mortising, comprising a body formed with a rectangular recess in the under face thereof, a plurality of flanged blades, one disposed against each of three walls of the recess and projecting beyond the face of the body to cut the outline of a mortise, a plate removably attached in the recess and engaging the blades and the flanges thereof to hold the same in place, an adjustable guide member, having a wall parallel to the intermediate one of three blades, slidably mounted on the under face of said body, said guide member having parallel slots to receive the projecting edges of the other two blades, thereby to move over the under face of the body and plate to position the blades with respect to the object in which the mortise is to be cut, and a dome on the body above the blades to provide a striking head.

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