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BUTT GAUGE AND CUTTING TOOL

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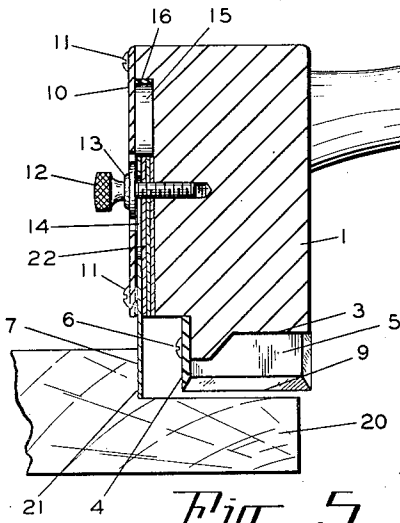


Fig. 5

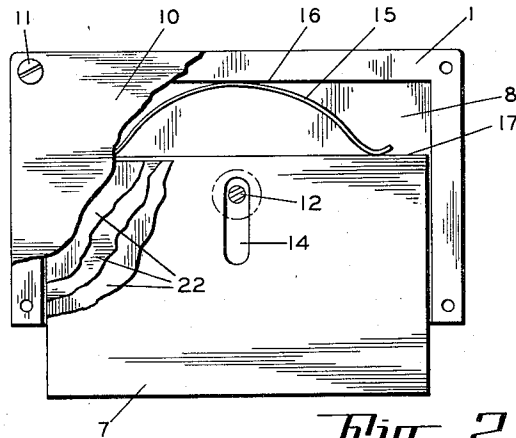


Fig. 2

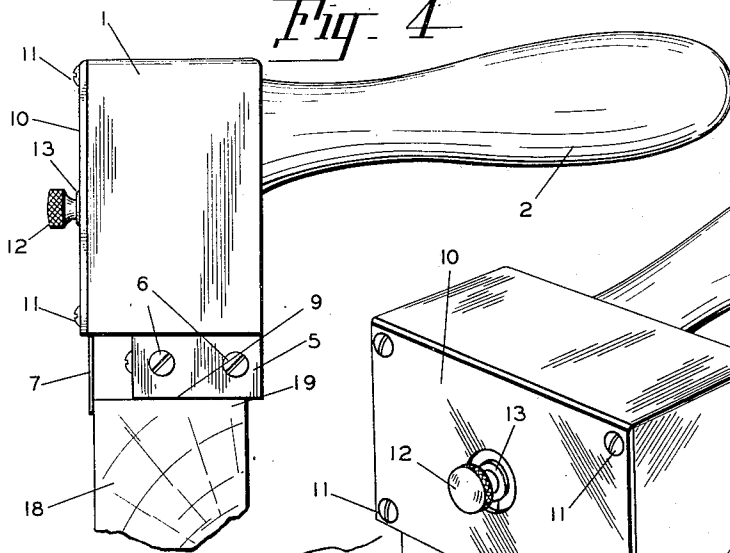


Fig. 4

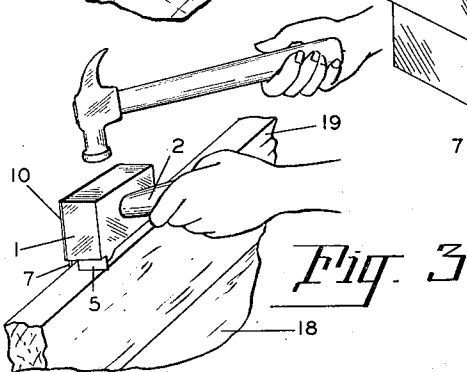


Fig. 3

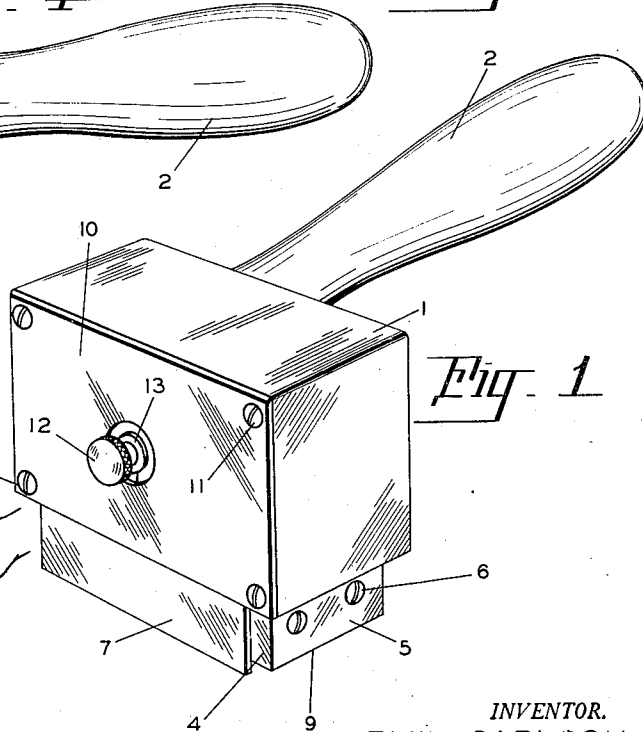


Fig. 1

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BUTT GAUGE AND CUTTING TOOL

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1 Claim. (Cl. 145—25)

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This invention relates to butt gauges and cutting tools and is particularly adapted for gauging and cutting recesses in door jambs and doors adapted to receive the hinges.

In the cutting of recesses in door jambs and doors it has required considerable time and incidentally inaccuracy in gauging the cutting of these recesses.

With my new and improved gauge and cutting tool ease of operation is provided and at the same time the cut will be accurately made.

The primary object of my invention is a simplified cutting tool having removable cutter plates associated therewith and a simple form of gauge provided for locating the tool relative to the work to be performed.

A further object of my invention is the provision of means relative to the gauge for taking the said gauge out of operation while making special cuts where the gauge is not required.

A still further object of my invention is the provision of a gauge that will mark the cut on the door and also the cut in the door jamb, the said gauge being of such a thickness and principle of operation that it will allow for the clearance required between the door and the jamb for accommodating paint and the like.

These and other incidental objects will be apparent in the drawings, specification and claim.

Referring to the drawings:

Figure 1 is a perspective front view of my new and improved gauge and cutter.

Figure 2 is a front view of the tool, parts broken away for convenience of illustration relative to the operation of the gauge.

Figure 3 is a view of the cutter making a cut on the edge of a door.

Figure 4 is an enlarged side view of the cutter as being used in Figure 3.

Figure 5 is a side sectional view of the cutter as it is being used in the door jamb, illustrating the gauge positioning the cutter blades.

Referring more specifically to the drawings:

My new and improved gauge and cutting tool consists of a main body 1 having a handle 2 secured thereto. The body 1 may be of either solid or hollowed out material. I have illustrated the body being of a solid member in my drawings.

The lower portion 3 of the body of the tool 1 is of a lesser width and is adapted to have the cutter blades 4 and 5 secured thereto by any suitable means, as screws 6. Located on the front or face of the tool is a gauge member or blade 7 operating in the countersunk portion or space 8 of the body of the tool, adapted to work

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up and down relative to the cutting edges 9 of the cutting blades. This slidably mounted gauge plate is maintained in the space 8 of the tool by the cover plate 10, which is secured to the tool by the screws 11. Sufficient clearance is allowed between the cover plate and the gauge blade to permit easy movement of the plate within the space 8.

The various widths of doors to be encountered are provided for by being able to adjust the gauge plate 4. This is accomplished by providing filler plates 22. These plates may be placed behind or in front of the gauge plate, referring to Figures 2 and 5, they are shown placed behind the plate, but they may be in front of the plate or there may be filler plates both in front or behind the filler plate depending upon the width of the door to which the hinges are to be mounted.

The blade is maintained within the space by the set screw 12, which is threaded into the body 1 and which has a shoulder 13 for engaging the face of the gauge plate 7. A slot 14 is formed in the plate and is adapted to straddle the set screw 12 under the shoulder 13. The gauge plate is normally forced down to the position shown in the drawings by the spring 15 bearing against the edge 16 of the space 8 and against the upper edge 17 of the gauge plate, this continuously forces the gauge plate downwardly, the object of which will be described later.

I will now describe the operation of my new and improved gauge and cutting tool. When it is desired to cut a recess within the edge of the door 18 for the installing of the door hinge the tool is placed on the edge of the door as indicated in Figures 3 and 4. The cutting edges 9 of the cutter blades 4 and 5 contact the edge of the door while the gauge blade 7 contacts the outer edge of the door, as indicated, positioning the cutter blades for making the cut or recess in the door, the tool is then struck with a hammer making the cut within the edge of the door for receiving the hinge to be applied to the door in the casing. It can be readily seen that the cut will be made accurately from the edge of the door without any other measuring.

When making the recess for the hinges within the door jamb 20, indicated in Figure 5, the gauge plate 7 contacts the door stop or rabbet at 21, positioning the cutter blades a definite distance from the stop or rabbet. The thickness of the gauge blade allowing for operating clearance between the door and the stop of the jamb.

As the hammer is brought on to the tool cutting the recess within the door jamb the spring

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15 permits the gauge plate 7 to rise in the space 8. This is one of the important features of my invention.

In the event that it is desired to use the tool without the gauge, the operator forces the plate 7 up into the recess 8 and then tightens the set screw 12 and its shoulder 13 against the side of the plate 7, maintaining the same in its retracted position within the space 8.

From the above description of my invention it can be readily seen that the tool is of simple construction, having a minimum number of parts to be adjusted, the same being automatic in making the cuts between the edge of the door and the door stop, providing for the proper clearances between the door and the door stop for ease of operation after the same has been painted.

What I claim is:

A butt gauge and cutting tool, comprising a body portion having opposed side faces and edge face, a handle fixed to one side face of the body portion, rectangularly arranged cutting blades fixed to said edge face of the body portion and spaced from the other side face, said other side face having a recess opening through said blade supporting edge face, a screw threaded into said

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body portion within the recess, a gauge plate slidably mounted within said recess and having an elongated slot to receive said screw and adapted to extend beyond the cutting edge of said blades, a plurality of filler plates mounted within said recess on said screw for selectively spacing said gauge plate from said blades, a cover plate on said body portion inclosing the open side of said recess, and a leaf spring within the inclosed recess and positioned to bias said gauge plate, subject to the setting of said screw, edgewise beyond the plane of the cutting edges of said blades.

EMIL CARLSON.

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