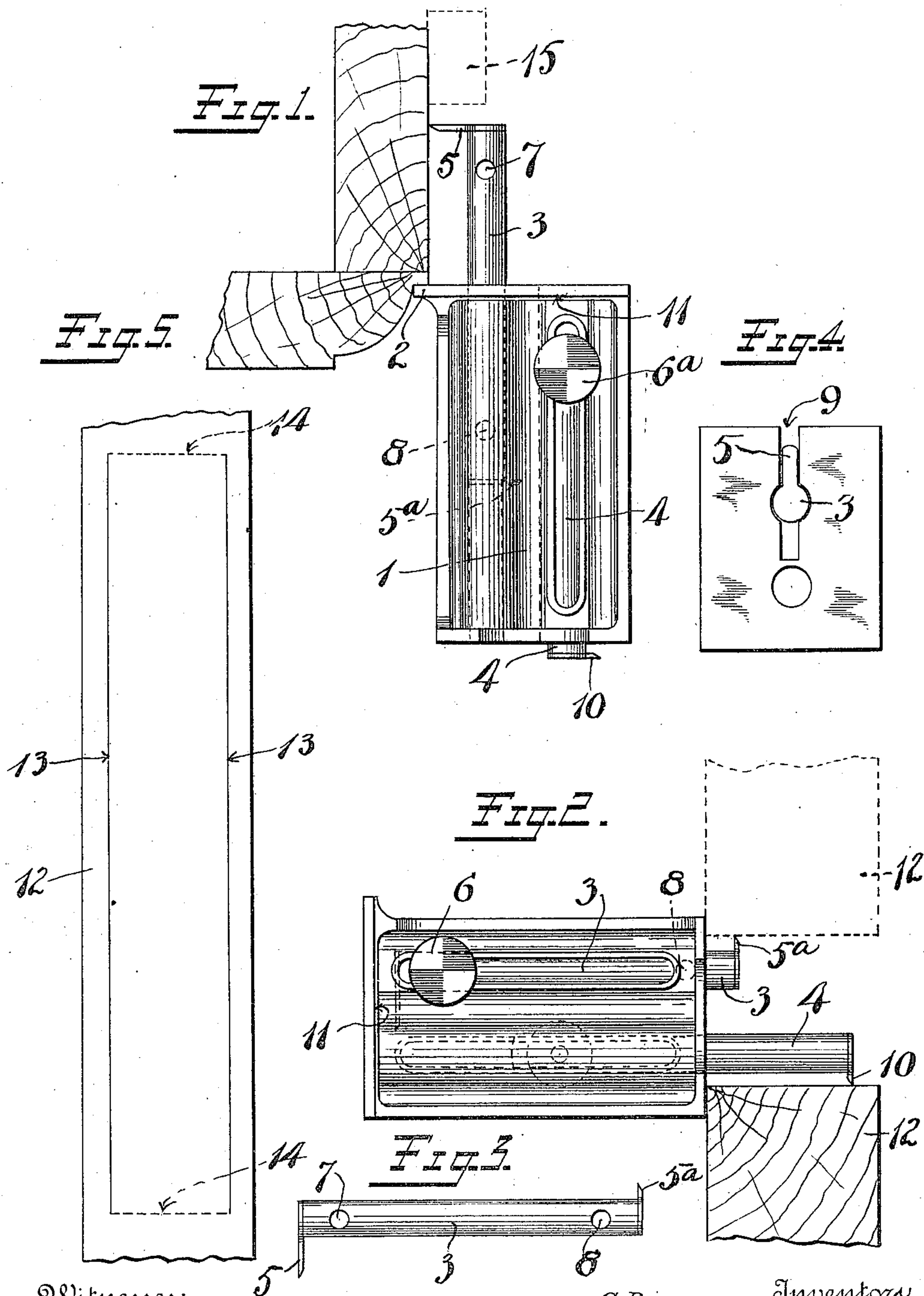


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HINGE BUTT AND MORTISE GAGE.
APPLICATION FILED APR. 30, 1909.

985,504.

Patented Feb. 28, 1911.



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UNITED STATES PATENT OFFICE.

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ORS TO THE STANLEY RULE & LEVEL COMPANY, OF NEW BRITAIN, CONNECTICUT,
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HINGE-BUTT AND MORTISE GAGE.

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985,504.

To all whom it may concern:

Be it known that we, CHRISTIAN BODMER and ROBERT N. PECK, citizens of the United States, residing at New Britain, county of Hartford, State of Connecticut, have invented certain new and useful Improvements in Hinge-Butt and Mortise Gages, of which the following is a full, clear, and exact description.

Our invention relates to improvements in carpenters' tools and particularly to so-called hinge and butt gages.

The object of the invention is to improve the construction set forth in a copending application, Serial No. 486,997, filed by one of the applicants herein.

The present invention aims at providing a tool of the character described which has a wider range of action than that disclosed in the above referred to application.

It frequently happens that in certain classes of work, the door stop, so-called, of the casing is not formed by rabbeting the casing but is formed by nailing a separate strip upon the face of the casing either before or after the door is hung. It is therefore desirable that the instrument shall be capable of being successfully employed for the purpose of outlining the hinge recess hereon even though no stop be present.

In the accompanying drawings, Figure 1 is an elevation adjusted for the purpose of enabling the user to strike all the lines necessary for the forming of a hinge. Fig. 2 is a view of our gage adjusted for the purpose of striking the lines of a mortise in the edge of a door to receive a lock. Fig. 3 is a view of one of the cutter bars and Fig. 4 is an end elevation of a portion of a lock mortise.

ences by which great advantages are obtained.

1 is the gage body having a central web portion, the ends of which are parallel and the sides and edges of which are respectively parallel and at right angles to the plane of the ends. One end is provided with a projecting bearing flange 2, the function of which will be hereinafter explained. This feature is one of the additional features to those set forth in the former application.

3—4 are cutter bars adjustably mounted in longitudinal bores or guideways in body 1. The cutter 3 (see Fig. 3) is provided at opposite ends with cutters of different lengths, as shown, and it will be observed that the cutter 5 has an inside bevel, the cutter 5^a has an outside bevel, and the cutter bars 3—4 are provided with set screws 6—6^a, the function of which is to lock the cutter bars in any position. The set screw 6^a for bar 4 is located at the rear end of the shank of the screw passing through the slot or passage intersecting the bore in which the cutter bar 3 is provided. The cutter bar 3 is provided with threaded openings indicated by the opposite ends of said cutter bar 3 in its adjusted position. The set screw 6 of the gage is channelled (Fig. 4), said channelled side of the bore for the cutter being sufficient clearance for the lock mortise. This feature likewise will first be described in connection with the

outwardly. The adjusting screw 6 in this instance is located in the opening 8. The cutter 5 is so adjusted, that, measured from the adjacent end of the gage to the cutting edge of the cutter, a line struck by the latter, would be spaced away from that portion of the door against which the cutter is placed for guidance, a distance suitable to outline the rear of a recess arranged adjusted that the cutter bar 4 is so able to receive a hinge. The cutter bar 4 is so adjusted from the adjacent end of the gage body an appropriate distance for striking a line which is to coincide with the depth of the recess for receiving the hinge. In Fig. 1, we have shown a door casing of the type sometimes found to which no stop has yet been applied and which is provided with a molded edge affording a very narrow ledge for the guidance of the tool. In this instance there being no stop to guide the gage, the parts are arranged so that the bearing flange 2 may bear against the narrow ledge as the gage is moved up and down to strike the rear line of the hinge recess. The cutter 5 is drawn up and down the face of the casing until a score is formed to determine the back line of the hinge recess. When this is formed, the front face of the door casing and the bearing flange 2 are placed against the line 11 Fig. 2 is an edge of the said gage, where the sides of the said gage, where the end lines of the hinge recess, may be used as a "try-square" the narrow ledge, occupied by the bearing flange 2 in Fig. 1, for this outline of a mortise in the face plate of a door must be observed and we adjust the parts as in this view, it will be seen that the faces of the cutter 5^a have been turned inwardly, see dotted line in this instance is the opening 7 (in the adjacent end of the gage) to be scratched in the parts being adjusted in Fig. 2 during this figure bearing line. To form the mortise for the lock

face plate, the cutter bar 4 is extended until the cutter 10 is arranged in the proper position to strike said line. It will be observed that the measurements are taken from the same side of the door, this being essential in order that a mistake may not occur from variation. The measurements are preferably made from that side of the door which is intended to engage the stop indicated in dotted lines at 15. In Fig. 5 the two side lines of a lock mortise are indicated at 13-13 while the end lines are indicated in dotted lines 14-14. To mark an inside flange 11 against the side of the door. These lines 14 are then struck, using the body of the tool as a square.

From the foregoing, it will be seen that the instrument is so constructed that it will perform all the functions of the gage shown and described in the above referred to application and the additional functions pointed out herein, these additional functions being accomplished by the provision of the reversible cutter bar 3, the gage body appropriate thereto and the bearing flange 2.

What we claim is:

1. A butt gage comprising a body, two independent cutter bars carried thereby and adjustable longitudinally therein, one of said bars being reversible axially and end for end, said body having one parallel guide passage for said bar in both directions of movement of said bar to permit entirely through said body irrespective of the position of adjustment of said bar.
2. In a gage, a body, a cutter bar thereby, a guide passage in said body, a cutter bar carried oppositely in said body for 105

respectively projecting cutters having a slot entering said bar, said clearance for one of said cutters, said guide passage on the opposite side of said bar for the other cutter, said body having cutters being reversible both axially and end for end and being arranged to pass through said gage body from end to end in either direction and in any of its adjusted positions said cutter bar being arranged to project one of its cutters beyond the end of said body.

3. In a gage, a body, a cutter bar carried thereby, said body having a guide passage having supplemental passages for cutters projecting laterally from the bar ends, two cutters one on each end of said bar and projecting laterally therefrom in opposite directions, one of said supplemental clearance passages constituting a slot intersecting one edge of the body and extending from end to end thereof, one of said

cutters being of sufficient length to project through said slot and to stand slightly above the plane of said edge, and a laterally projecting bearing flange at one end of said body adjacent to said slotted edge.

4. In a gage, a body having parallel sides and edges respectively and parallel ends square with respect to said sides, an integral side offset at one end of the body and squared along its inner edge relatively to the axis of said body, a flanged offset from one end of said body and adjacent to one edge of said body and squared on its outer edge adjacent to the end and relatively to the axis of said body, and a cooperating cutter device adjustably carried by said body the cutter part of said cutter device being arranged to be projected beyond the end of said body.

5. In a gage, a body having two parallel end bearings, two parallel side bearings, two parallel edge bearings and a laterally projecting integral inside squaring flange at one side of said body at one end thereof and a laterally projecting outside squaring flange at one end of said body, and a cutter device adjustably carried by said gage body and movable longitudinally relatively thereto.

6. In a gage, a body having two parallel end bearings, two parallel side bearings, two parallel edge bearings and a laterally projecting inside squaring flange at one side of said body, and a laterally projecting outside squaring flange at one edge of said

body, said body also having a guide passage for a cutter bar and a cutter bar adjustable in said guide passage, two oppositely laterally projecting cutters at the ends of said bar respectively, said cutter bar and cutters being reversible in said gage body.

7. In a gage, a body having two parallel end bearings, two parallel side bearings, two parallel edge bearings and a laterally projecting inside squaring flange at one side of said body and a laterally projecting integral outside squaring flange at one edge of said body at the end thereof, and two parallel cutter devices adjustably carried by said gage body and movable longitudinally relatively thereto.

8. In a butt gage, a removable and reversible cutter bar, a cutter at each end thereof, said cutters projecting laterally from said bar in opposite directions, one of said cutters being longer than the other, and a body having a guide passage for said cutter bar, said body having a slot entering said guide passage from one edge and having a channel at the opposite side of said passage, said slot and channel being sufficiently large to afford clearance for said laterally projecting cutters when said bar is moved end wise in either direction.

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