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.

10 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 depending application, Serial No. 456,907, 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 nailing 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 looking down upon our improved gage adjusted for the purpose of enabling the user to strike all the lines necessary for the forming of a recess or hinging. Figure 2 is a view of our gage adjusted for the purpose of striking the lines of a mortise. In Figure 3 is shown a view of one of the cutter bars and a view of one of the cutter bars and the end elevation of a portion of a lock mortise, by which great advantages are obtained. 1 is the gage body having a central web 55 portion, the ends 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.

2—4 are cutter bars adjustable in longitudinal bores or guideways in body 1. The cutter 3 (see Fig. 3) is viced at opposite ends with cutters. These cutters are preferably of different lengths, as shown, and it will be observed that the cutter 5a has an outside bevel. The cutter bars 2—4 are provided with set screws 6—8, the function is to lock the cutter bars in any position. The set screw 6 for bar 4 is located at the rear end of the shank of the screw passes through the bore in which the cutters are provide threaded openings indicated on the opposite ends of said set screw 6, said pass the edge and to a point side of the bore for channel being sufficient for the lock clearance for the lock cutter be turned over to this feature will first be.
the 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 to ensure 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 of the door casing. In Fig. 3 the stop is indicated in dotted lines at 15. In Fig. 5 the two side lines of the lock mortise 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 being adaptable to betroth and the bearing flange 2.

What we claim is:

1. A butt gage comprising a body, two independent cutter bars carried thereby and 95 adjustable longitudinally therein, one of said bars being reversible axially and end for end, said body having parallel guide passages for said bars, one guide passage having cutter clearance grooves to permit 100 movement of said bar in both directions entirely through said body irrespective of the position of adjustment of said bar.

2. In a gage, a body, a cutter bar carried thereby, a guide passage at the end of said bar, two opposite respectively of said bar, said bar being having a slot entering said guide passage from one edge of said bar, said cutter having a channel on the opposite side of clearance for the other cutter, said cutter 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 ar- the end of said body.

3. In a gage, a body, a cutter bar carried thereby, said body having a guide passage having supplemental clearance passages for 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 adjustable 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 adjustable 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 adjustable 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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Witnesses:
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