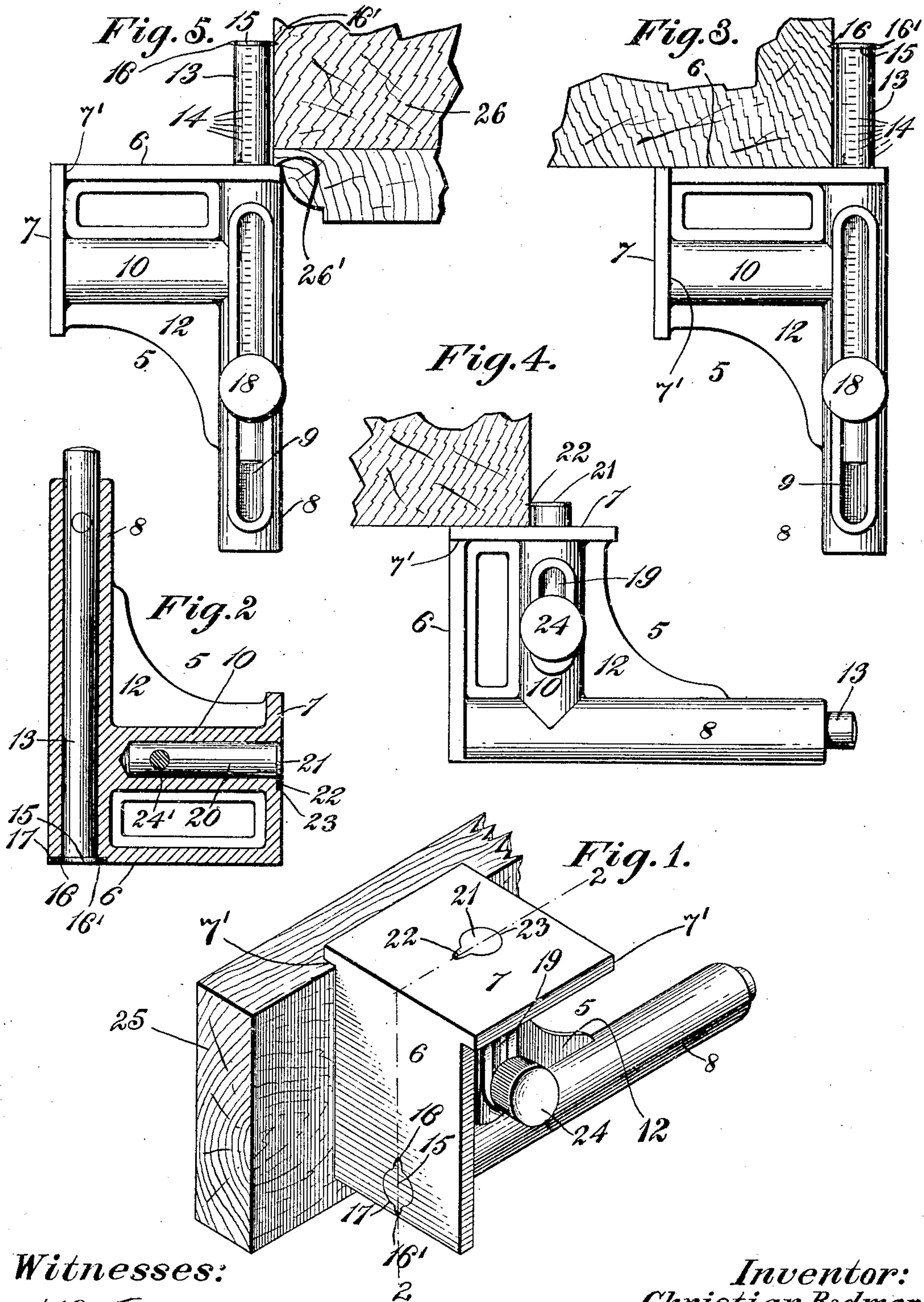


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C. BODMER.
HINGE BUTT GAGE.

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Witnesses:

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UNITED STATES PATENT OFFICE.

CHRISTIAN BODMER, OF NEW BRITAIN, CONNECTICUT.

HINGE-BUTT GAGE.

No. 875,688.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed July 11, 1906. Serial No. 325,636.

To all whom it may concern:

Be it known that I, CHRISTIAN BODMER, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Hinge-Butt Gages, of which the following is a specification.

This invention relates to tools for use in forming incisions or lines on door-stiles, jambs, and articles of various kinds to which hinges are to be applied, and it is what is technically known in the art as a "hinge-butt-gage".

Primarily the object of the invention is the provision of a gage of peculiar construction, and embodying two plates located at a right-angle to each other, said plates having smooth surfaces, and one plate being slightly narrower than the other, so that flanges or ledges will project from one of the plates and afford a convenient means for employing the improved tool as a straight edge or square, thus to indicate positively by pencil-marks or otherwise the lines necessary for any purpose within the province of the tool.

A further object of the invention, is the provision, in connection with the plates above mentioned of sliding-tools the heads of which are provided with incising cutters or edges, and which tools may be so adjusted within the plates that their surfaces will either be flush with or slightly below said plates, or may be projected therefrom to any desired position, and then clamped in place by means hereinafter described.

Other objects of the invention relate to a support or body of peculiar construction and preferably formed as a single casting, and still other objects of the invention will be set forth in the detailed description which now follows.

In the accompanying drawings, Figure 1 is an isometrical perspective view of my improved gage, illustrating one of the uses to which it may be applied. Fig. 2 is a vertical, longitudinal section of my improved device on line 2—2 of Fig. 1. Figs. 3, 4, and 5 illustrate my improvement in various positions in which it may be utilized for marking out the lines of incision of hinge-butt recesses.

Like numerals designate similar parts, throughout the several views.

Referring to the drawings, the numeral 5 designates in a general way the body of my

improved tool, said body being preferably in the form of a single casting, and having a pair of smooth-surfaced plates 6 and 7 located at a right-angle to each other. Projecting from plate 6, which is longer than plate 7, is a tubular post 8 longitudinally slotted at 9 for a purpose hereinafter described, and at right-angles to said post is a tubular boss or extension 10, while connecting the post with the plate 7 is an integral bracket 12.

Inserted in the tubular post 8 is a rod 13 having lines or graduations 14, which indicate inches and fractions of inches, and on the end of said rod where it passes through the plate 6, a head 15 is formed, said head having beveled marking points or projections 16, 16'. When the gage-rod 13 is withdrawn these beveled incising-points or projections are received within a countersunk recess 17, so that the head may lie flush with or slightly below the outer surface of the plate 6.

A screw 18 passes through the slot 9 of post 8 and is threaded into the gage-rod 13,—the under side of the head of said screw bearing against the walls of the slot, and serving when the screw is tightened to clamp the gage-rod firmly in its adjusted position. In the wall of the tubular boss 10 is also formed a longitudinal slot 19, and this boss is, as above stated, located at right-angles to the post or bearing 8, as illustrated in the several figures.

Mounted for sliding movement in the boss 10 is a depth-gage rod 20 which is provided at its end where it passes through the plate 7 with a head 21 having a beveled-tooth 22, the construction being such that said tooth and head may be received within the countersunk recess of plate 7, to lie flush with the surface of said plate, or slightly below said surface.

A thumb-screw 24 is provided with a threaded shank 24', (Fig. 2) which passes through the slot 19 and enters the depth-gage rod 20, and by loosening this screw and adjusting said rod, the head 23 may be projected to the desired extent and the rod then tightly clamped in position.

Referring to Fig. 1 it will be seen that the plate 7 projects at its side edges over the longer plate 6, thus forming ledges 7' which rest upon the material 25, and enabling said plate to be utilized as a straight edge, either when in the position shown, or when longitu-

dinally reversed, to mark off the length of the recess.

In Fig. 3 the tool is shown in position on a piece of material, and the gage-rod 13 is adjusted to cause its tooth 16 to lie at the proper point to incise a line to indicate the width of a butt-recess to be formed when the tool is slid along said material.

In Fig. 4 the rod 13 is withdrawn and its incising-head is within the countersunk recess 17 in plate 6, while the rod 20 is projected to cause its tooth 22 to incise a line to indicate the depth of a recess to be formed.

In Fig. 5 a molded or beaded stile or other piece of material 26 is illustrated, and the device is shown in reverse position from that of Fig. 3, with the inner end of the plate 6 resting upon a ledge 26' of the molding, the beveled-tooth 16' of head 15 acting to form an incision to indicate the depth of the recess to be made in said molding.

From what has been stated it will be obvious that a simple and convenient tool is provided, and one with which hinge-butt recesses of any desired dimensions within the capacity of the tool may be marked off or incised, and that too whether the material is, or is not, molded or beaded.

Changes may be made in the various details of the invention, which is not limited to the precise construction shown and described.

Having thus described my invention, what I claim is—

1. A butt-gage comprising a pair of plates located at right-angles to each other, and one of which projects at its edges over the other; devices adjustable through the plates, and having marking-points; and means for clamping said devices.

2. A butt-gage comprising a pair of plates at right-angles to each other, and one of which projects at its edges over the other, rods adjustable through openings in the plates, and each having a marking-point, and means for securing the rods.

3. A butt-gage comprising a pair of plates located at right-angles to each other, and one of which is of greater width than the other, each plate having a countersunk

opening; rods adjustable through the openings of the plates, each rod having an incising-head of a shape to fit the countersunk opening in the plate through which it works; and means for securing the rods in any position of adjustment.

4. A butt-gage comprising a pair of plates at right-angles to each other, one plate being of less width than the other, and each plate having a countersunk opening, of rods movable through the openings in the plates; incising-teeth carried by the rods; and means for clamping the rods in any desired position of adjustment.

5. A butt-gage comprising a pair of perforated plates located at right-angles to each other, one plate being of less width than the other plate, and one plate being of greater length than the other plate; rods passing through the openings of the plates and having incising-heads; and means for clamping said rods in adjusted positions.

6. A butt-gage comprising a body in the form of a single casting, and having passages at right-angles to each other; plates also at right angles to each other; rigid with the walls of said passages, one of said plates being of less width than the other plate; a graduated rod inserted in one of the passages, and having an incising-head; means for clamping said rod in any desired position of adjustment; a rod passing through the other passage, and also having an incising-head; and means for securing said rod when adjusted.

7. A butt-gage comprising a body having passages at right-angles to each other, rods, each provided with an incising-head, inserted in said passages, screws inserted through the body and engaging the rods, and a pair of perforated plates at right-angles to each other, and countersunk to receive the incising-heads, one of said plates being of less width and also longer than the other.

In testimony whereof I affix my signature in presence of two witnesses.

CHRISTIAN BODMER.

Witnesses:

F. E. ANDERSON,
J. D. WOOD.