940,001.

W. H. GELBAUGH.

HINGING GAGE.

APPLICATION FILED NOV. 28, 1908.

Patented Nov. 16, 1909.

2 SHEETS—SHEET 1.

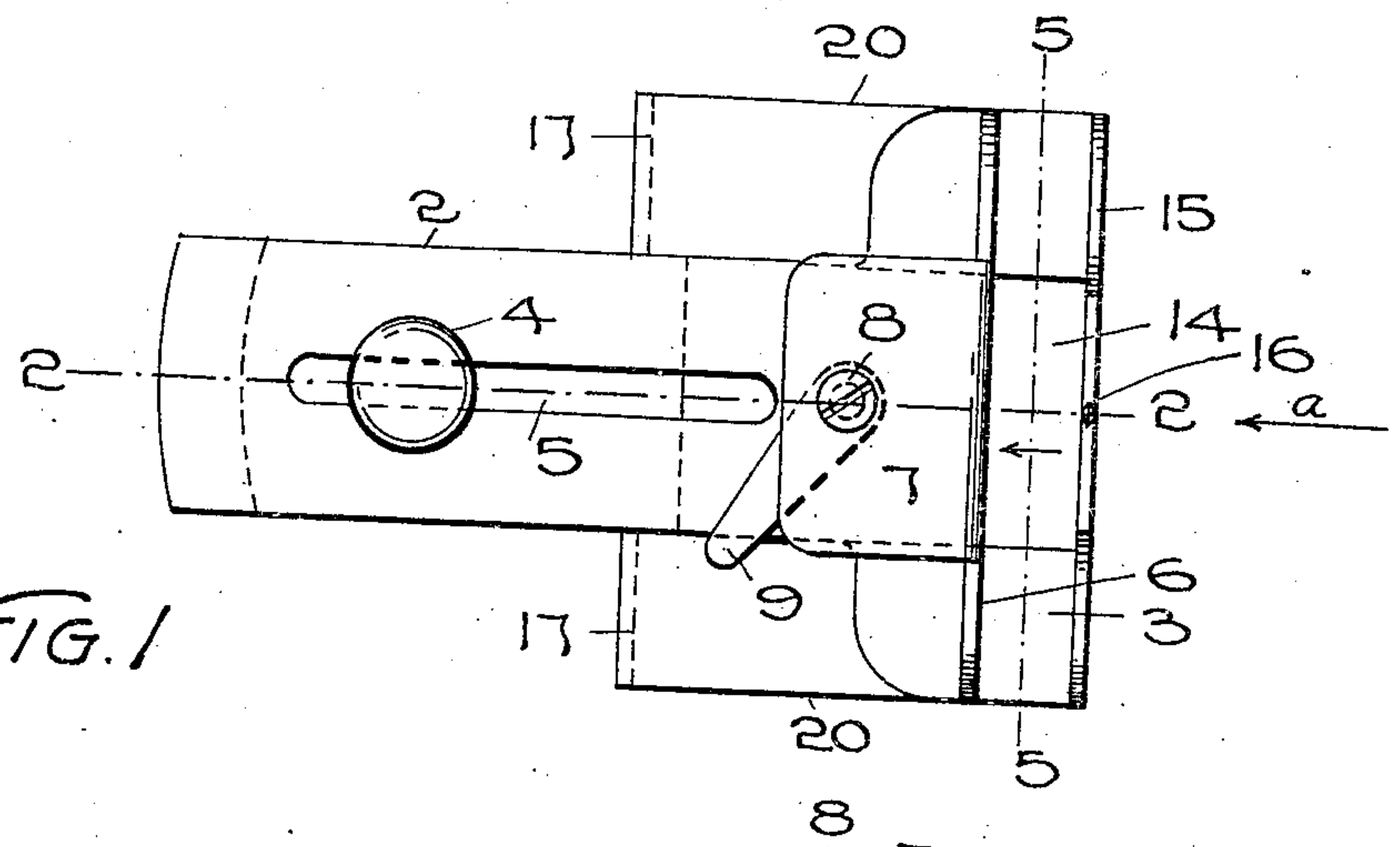

FIG. 1

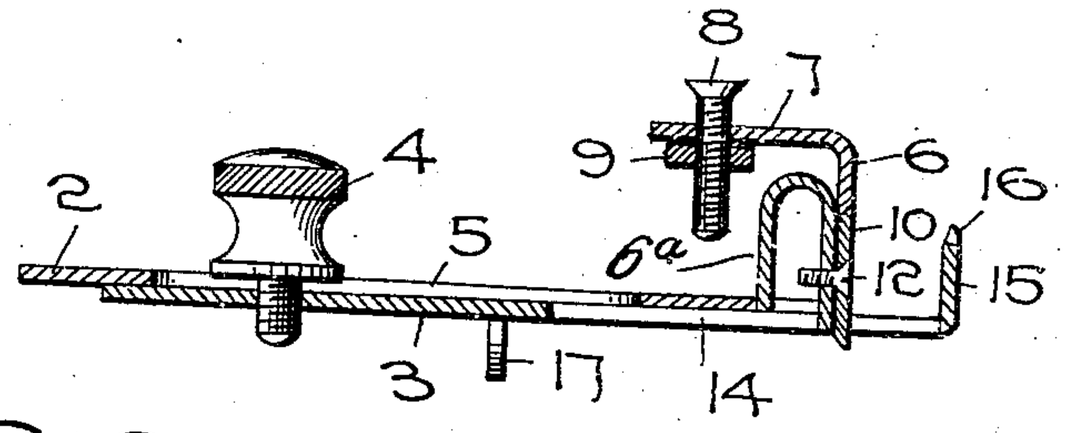

FIG. 2

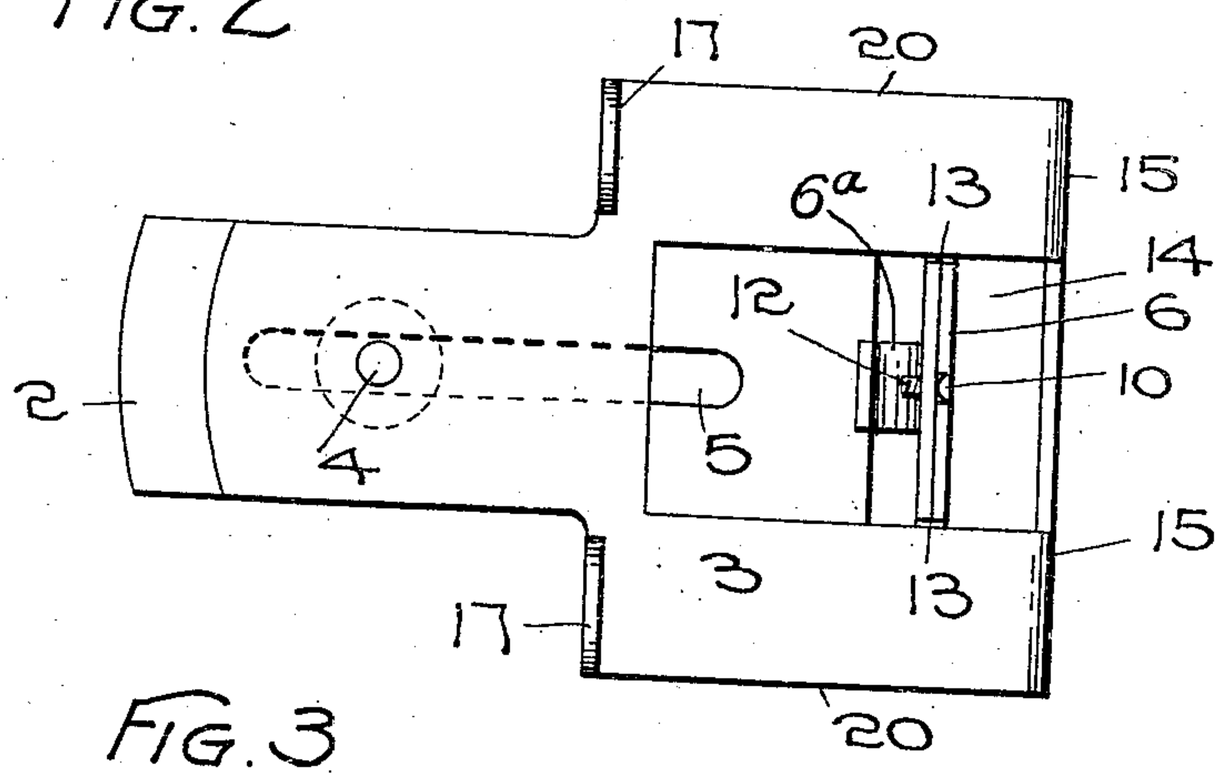

FIG. 3

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2 SHEETS—SHEET 2.

FIG. 4

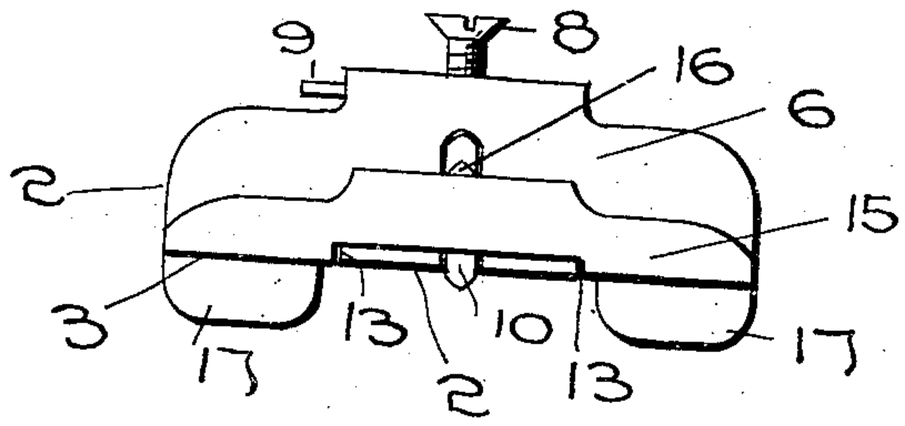


FIG. 5

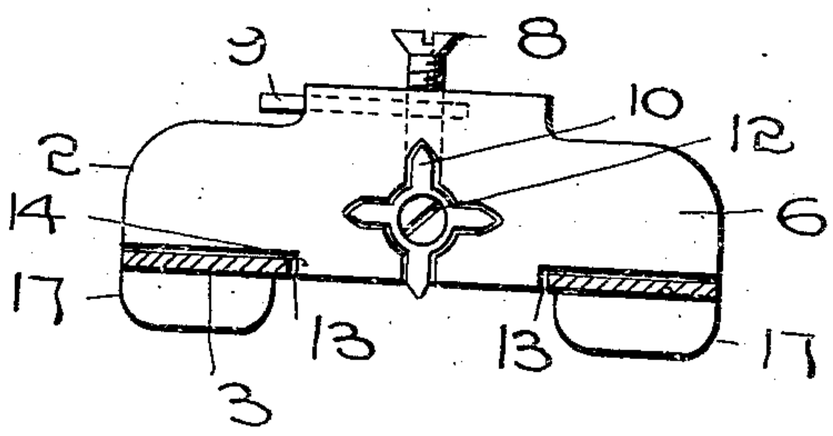


FIG. 6.

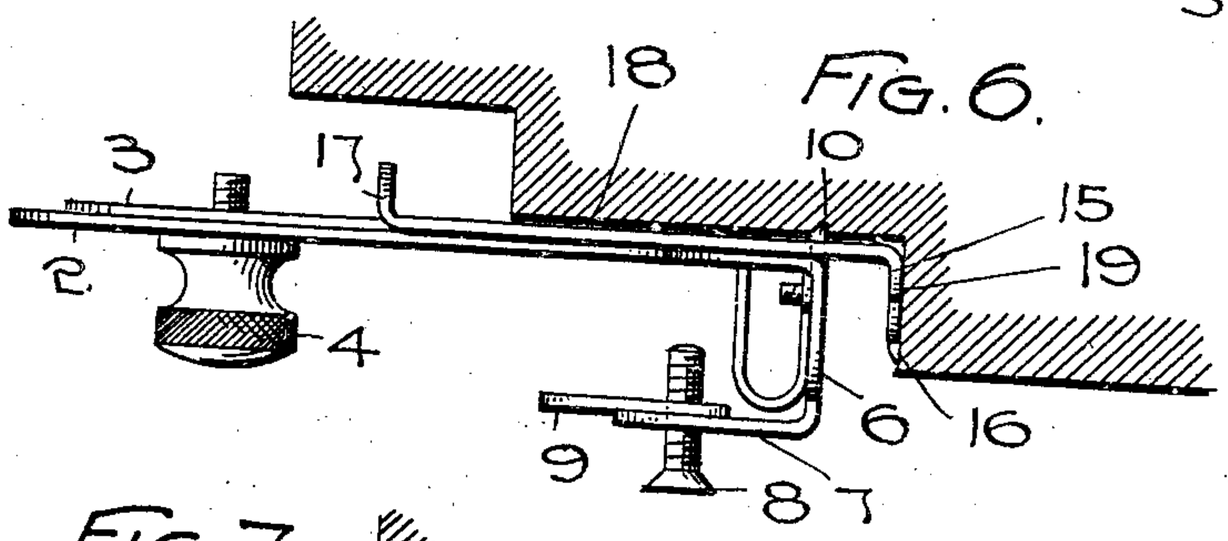


FIG. 7

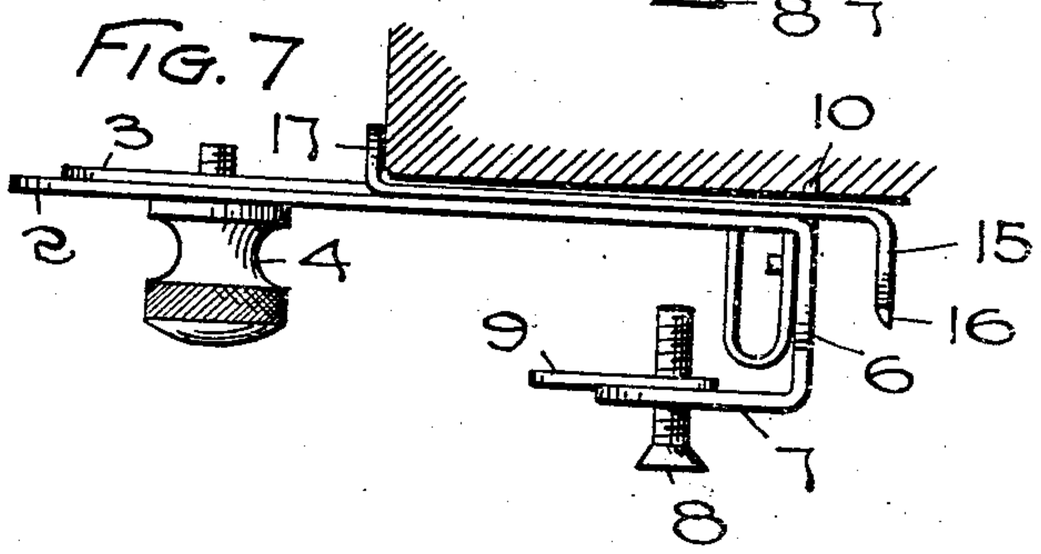


FIG. 10

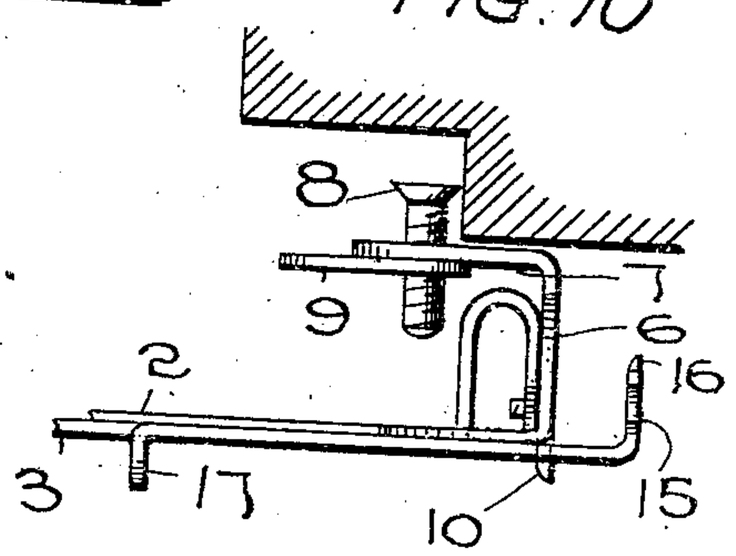


FIG. 8

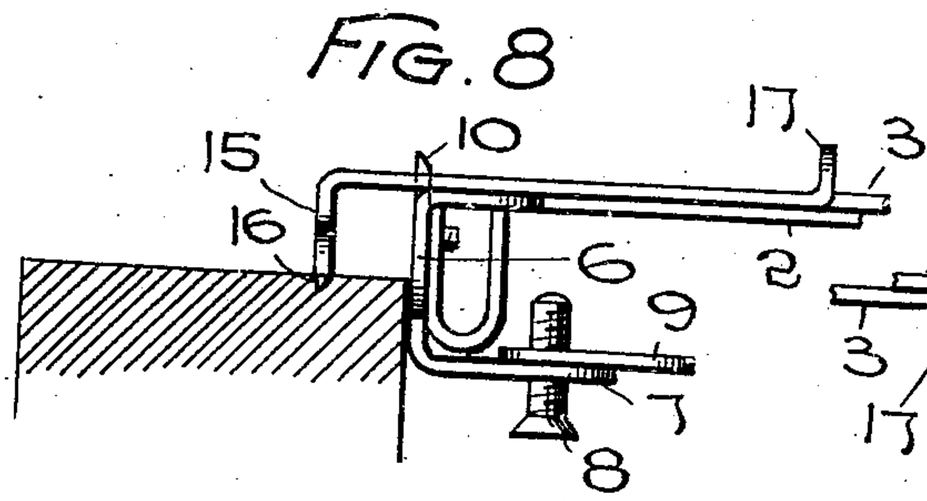
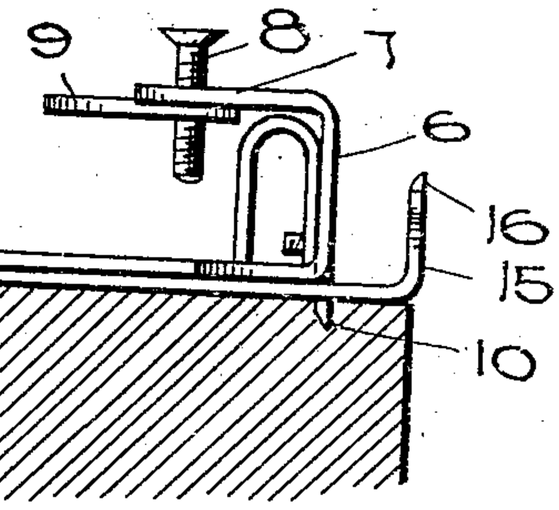


FIG. 9



WITNESSES:

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WILLIAM H. GELBAUGH, OF TACOMA, WASHINGTON.

HINGING-GAGE.

940,001. Specification of Letters Patent. Patented Nov. 16, 1909.

Application filed November 28, 1908. Serial No. 464,903.

To all whom it may concern:

Be it known that I, WILLIAM H. GELBAUGH, a citizen of the United States of America, residing at Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Hinging-Gages, of which the following is a specification.

This invention relates to gages for use by carpenters in applying hinges to doors and door-jambs, and more particularly to improvements in the device shown and described in my United States Patent No. 750,842, issued, February 2nd, 1904.

The object of the present invention is to provide an instrument whereby the outline of the corresponding hinge recesses on the door and jamb may be delineated with accuracy and great rapidity, and which can be used as well on rabbeted as on stop-door-jambs. I attain these objects by the means illustrated in the accompanying drawings, in the various views of which like parts are similarly designated and in which—

Figure —1— represents a plan view of the device. Fig. —2— a section taken along the line 2—2 Fig. 1, Fig. —3— an underneath view of the gage, Fig. —4— an end-view of the same, looking in the direction of the arrow, Fig. 1, Fig. —5— a transverse section taken along the line 5—5 Fig. 1, Fig. —6— a side-view of the gage in operative position on a rabbet-jamb, Fig. —7— a similar view of the device in position on a stop-jamb, Fig. —8— a fragmentary side view of the gage in position on a door for use in connection with the jamb illustrated in Fig. 6, Fig. —9— a similar view of the device on a door intended to be connected with the stop-jamb shown in Fig. 7, and Fig. —10— a fragmentary view of the instrument in the position it occupies when marking the depth of the recess.

The improved gage comprises two members 2 and 3, which are longitudinally adjustably connected by means of a set screw 4, which projects through a longitudinal slot 5 in the member 2, and a therewith registering, threaded aperture in the member 3.

The gage member 2 consists of a plate which has at one of its ends an upturned flange 6, extending at right angles to its body portion and constituting one of the straight-edges, which are essential in the operation of the device, and the upper portion of this flange is again bent at right angles to provide a plate 7, which is parallel to the slotted body portion of the member. The plate 7 is provided in proximity to its outer edge with a threaded aperture for the reception of a bevel-headed screw 8, which is employed in the operation of the device, to mark the depth of the hinge-recess, and which may be secured in its adjusted position by the use of a jam-nut 9, which engages the under side of the plate 7. A centrally disposed scratch gage 10, projects beyond the straight edge 6 where it adjoins the body portion of the member and this gage is preferably formed with a plurality of pointed arms, which project radially from a common center, and is detachably held in a correspondingly formed recess in the flange 6, by means of a screw 12 which projects through a central aperture in said gage to be secured in a threaded aperture in an arm of the inverted V-shaped member 6^a whose other arm projects into a corresponding recess in the plate 2. When the point of the arm projecting beyond the edge, becomes dull by constant use, it may thus be at once replaced by a sharp point, by loosening the screw 12 and turning the gage 10. The central portion of the flange 6 in which the above described gage is disposed, projects a short distance beyond the line of juncture of the said flange with the body portion of the member to form two shoulders 13, which engage the longitudinal edges of a rectangular opening 14 in the member 3, for the purpose of preventing independent lateral motion of the connected members.

The member 3, which also consists of a plate, is formed at its end, adjacent the flanged end of the member 2, with an upturned flange 15 which extends parallelly, opposite the flange 6, and which carries at its outer edge a centrally-disposed scratch point 16. The member 3 is furthermore provided with two lugs 17 which project at right angles to its body portion at a point intermediate its extremities, and in a direction opposite to that of the flange 15, with which they are parallel.

Having thus described the mechanical construction of the improved gage, the manner in which it operates will be readily understood by reference to Figs. 6 to 10, inclusive, of the drawings. When the device is employed to mark the corresponding recess on a door and jamb of the so-called rabbet type, it is first placed against the flat-

surface of the jamb 18 with the flange 15 in engagement with the rabbet 19, after the member 2 has been adjusted in relation to the other member so that the distance between the outer surfaces of the flanges 6 and 15 is equal to the distance between the rabbet 19 and the edge of the recess to be formed in the surface of the jamb,—(see Fig. 6). The instrument is now moved in a vertical direction with the result that the exposed point of the scratch-gage 10 produces a line, parallel to the rabbet and the outer edge of the jamb, which line determines the width of the recess. The length of the latter is established by laying off the length of the hinge butt on the line produced by the gage 10 and subsequently drawing lines with a pencil or sharp-pointed instrument along the longitudinal edges 20 of the slotted portion of the member 3. To mark the recess on the door, as is shown in Fig. 8, the position of the instrument is reversed so that the outer surface of the flange engages the back-side of the door while the scratch point 16, marks on the edge thereof a line which determines the width of the recess. It is obvious that, if the relative positions of the two members remain unchanged, the recesses in the jamb and the door will correspond to receive the opposite butts of the hinge member.

The method of marking the depth of a recess is illustrated in Fig. 10. The screw 8 is adjusted until the distance between the flat surface of its beveled head and the outer surface of the plate 7 is equal to the required depth, after which the screw is secured by means of the jamb-nut 9. The instrument is now placed with the outer surface of the plate 7 in engagement with the surface of the door or jamb upon which the recess has been outlined after which it is moved laterally to permit the sharp edge of the beveled head of the screw 8 to describe a straight line which determines the width of the recess.

When the instrument is employed to outline a hinge recess on a stop jamb as is shown in Fig. 7, the lugs 17 are placed in engagement with the outer edge of the jamb and the line indicative of the width of the recess is produced by the projecting point of the gage 10. The width of the recess on the door employed in connection with the door-jamb, is marked in an identical manner as is illustrated in Fig. 9.

From the above description it will be understood that by longitudinal adjustment of the two members 2 and 3 in relation to each other, the instrument may be employed to meet the different requirements and the different sizes of hinges while it is suitable for use on door jambs of different constructions and dimensions.

Having thus described my invention, what I claim is:—

1. In a device of the class described, two gage members longitudinally-adjustably connected, one of the said members having a straight edge, and a circular scratch gage adjustably connected with the other member and formed with a plurality of peripheral scratch points.

2. In a device of the class described, two gage members longitudinally-adjustably connected, one of the said members having a straight-edge and the other a flange substantially parallel thereto and a scratch gage detachably secured upon the said flange and formed with a plurality of radial, sharp-pointed arms.

3. In combination, two longitudinally-adjustably connected gage members having parallel flanges at adjacent ends, scratch points projecting oppositely from opposite edges of the said flanges, one of the said flanges having a right angular extension at its opposite end, and a scratch-element longitudinally adjustable relative to the said extension.

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

WILLIAM H. GELBAUGH.

Witnesses:

J. E. Bowman,

Marion A. Shaffer.