J. W. READ.

BUTT GAGE.

APPLICATION FILED MAY 21, 1919.

1,336,157. Patented Apr. 6, 1920.

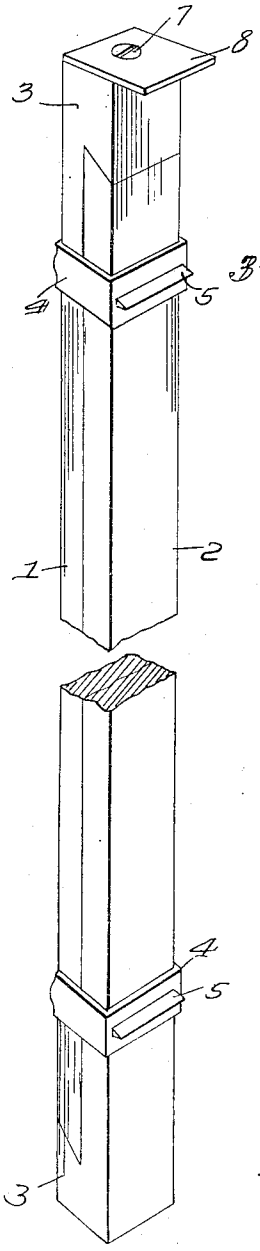


Fig. 1.

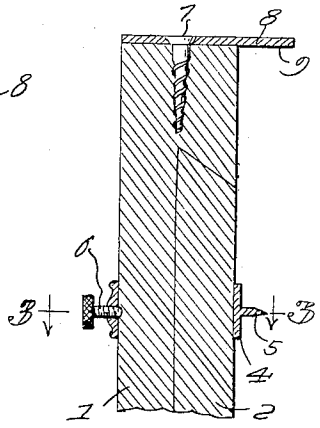


Fig. 2.

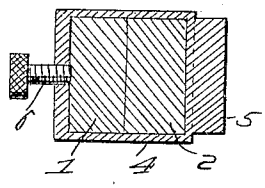


Fig. 3.

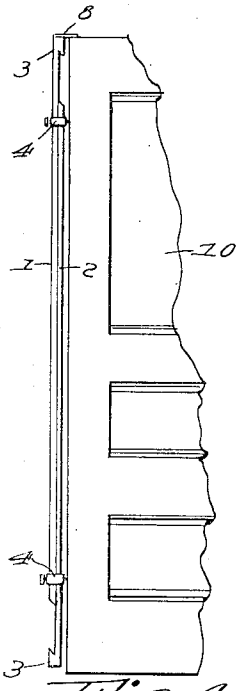


Fig. 4.

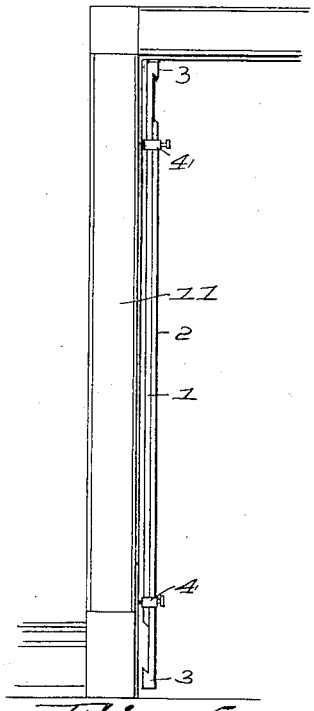


Fig. 5.

Inventor

J. W. Read,

By G. Bruce Talbert Attorney

UNITED STATES PATENT OFFICE.

JUDSON W. READ, OF DENVER, COLORADO.

BUTT-GAGE.

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Application filed May 21, 1919. Serial No. 298,583.

To all whom it may concern:

Be it known that I, JUDSON W. READ, citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented new and useful Improvements in Butt-Gages, of which the following is a specification.

This invention relates to an improvement in hinge gages in the use of which the hinge mortises of the door and frame may be accurately and relatively gaged in a simple expeditious manner.

The improved gage is provided with the usual gaging elements and terminal positioning plate. Additionally the improved gage consists of slidably related sections to permit the gage to be readily adjusted in length for various heights of doors or to be collapsed into a comparative short length for convenient storage or transportation. The sections of the gage are held in sliding coöperation and fixed in positions of relative adjustment by the gaging elements.

In the drawings:

Figure 1 is a perspective view of the improved gage.

Fig. 2 is a broken vertical sectional view of the same.

Fig. 3 is a transverse section of the same on the line 3—3 of Fig. 2.

Fig. 4 is a broken elevation illustrating the gage in use in connection with the door.

Fig. 5 is a similar view showing the gage in use with the door frame.

The improved gage is here shown as comprising two sections 1 and 2, substantially duplicate, with each section having an end portion 3 of substantially the full sectional area of the gage, beyond which end portions each section is cut away for its full width and substantially half its thickness. The sections are arranged to complete the gage with the reduced portions in contact and the enlarged ends 3 of the respective sections forming opposite ends of the completed gage.

The gage is thus of uniform area throughout its length, with the sections capable of sliding one upon the other to space the respective ends of the sections to thereby extend the length of the gage over the normally collapsed relation of minimum length, illustrated in Fig. 1.

The sections are held in slidable relation through the gaging elements, two of which are usually employed, though any number are contemplated. The gaging elements comprise bands 4 which embrace the reduced portions of the sections, and are of course rigid in construction to properly hold the sections in sliding coöperation. Marking elements 5 of appropriate width and length are provided on one face of the bands 4, and the opposing face is provided with a set screw 6, threaded through said face and adapted to engage at will the underlying gage section, to thereby position the marking elements 5 in any desired relative adjustment. The set screws also serve, in an obvious manner to permit the fixing of the respective sections of the gage in relative longitudinal adjustment following the manual movement of such sections as required.

To the end 3 of the gage section which constitutes the upper end of the gage is secured, as by a screw 7, a gage plate 8. The plate extends beyond the surface of the gage on that side of the gage carrying the marking elements to provide the usual supporting lip 9.

The use of the gage is as well understood for determining the proper positions of one margin of the hinge mortises in the door and frame, and following the adjustment of the gage sections to the proper length, and the positioning of the gaging elements as required by conditions, the gage is ready for use. Its application to the door edge is illustrated in Fig. 4 wherein the lip 9 is rested upon the upper edge of the door, and the mortise marks determined by lightly driving the marking elements 5 into the surface of the side edge of the door. The gage without change is used as indicated in Fig. 5 for similarly marking the door frame.

The sectional gage may be constructed to occupy a comparatively short length, rendering it convenient for carrying or storage, while yet permitting the sections to be readily and conveniently adjusted for use with any door of a height within the limits of such adjustment.

The gage plate 8 carried at the end of one of the sections, being secured to that section by means of a screw, may be turned around on the screw as a pivot, so that the plate may be out of the way to permit the use of the marking elements 5 when transferring the measurement from the door to the stile of the door frame. Obviously this plate would, if permitted to stand as it

stands when marking the door for the attachments of the butts, interfere with the marking elements 5 reaching the stile of the door frame when being used to mark the latter.

The invention having been described, what is claimed as new and useful is:

A hinge gage comprising two sections having end portions of the full sectional area of the completed gage and reduced portions of approximately half the thickness of the completed gage and adapted for sliding contact, gaging members encircling and maintaining the relative positions of the reduced portions of said sections, set screws carried by said members to fix the sections in adjusted positions, marking elements carried by the members, and a gage plate secured to and projecting beyond the surface of the end of the gage.

In testimony whereof I affix my signature.

JUDSON W. READ.