S. W. AKINS.
BUTT HINGE GAGE.
APPLICATION FILED JAN. 23, 1905.

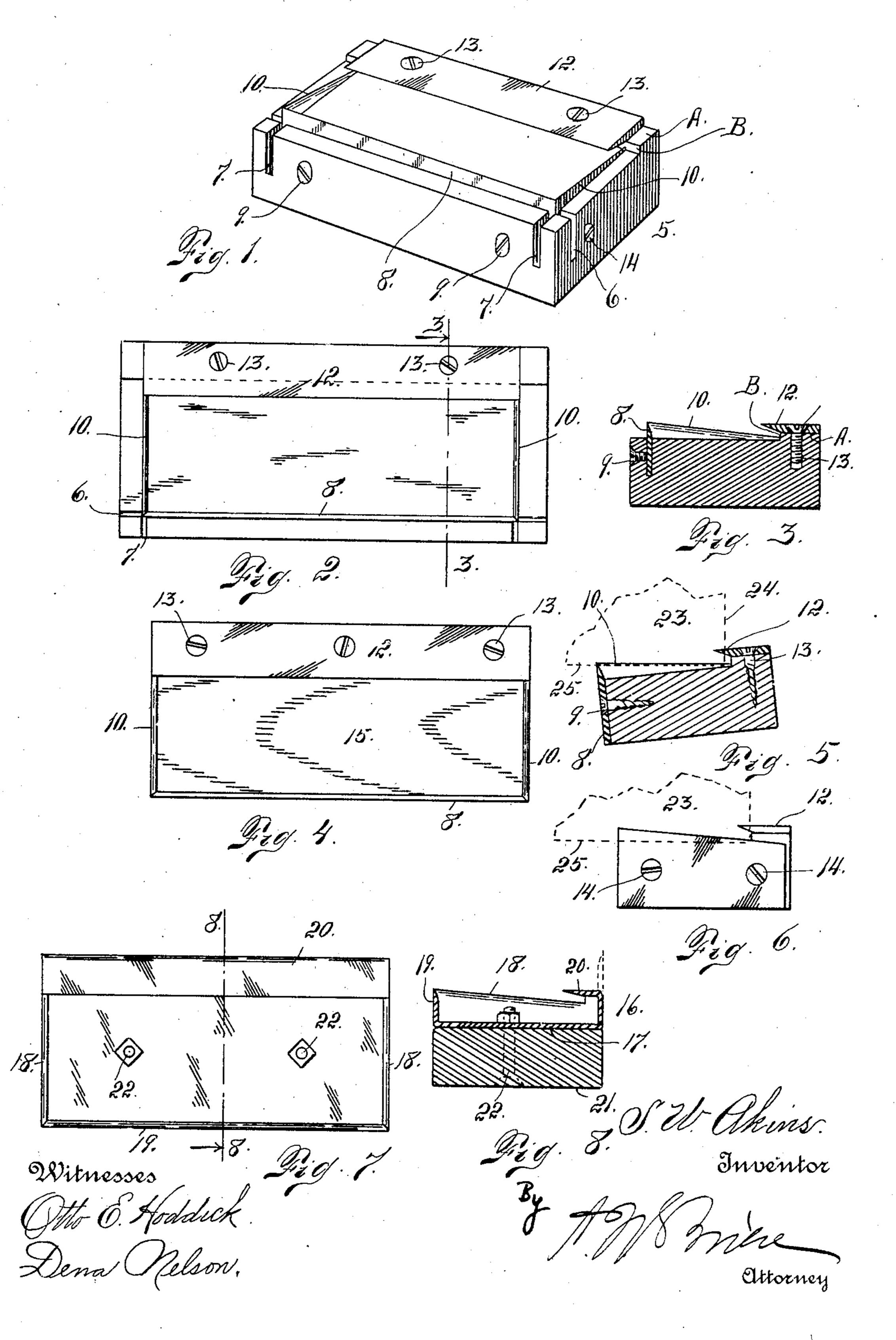


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United States Patent Office.

SAMUEL W. AKINS, OF DENVER, COLORADO.

BUTT-HINGE GAGE.

SPECIFICATION forming part of Letters Patent No. 785,847, dated March 28, 1905.

Application filed January 23, 1905. Serial No. 242,263.

To all whom it may concern:

Be it known that I, SAMUEL W. AKINS, a citizen of the United States, residing in the city and county of Denver and State of Colo-5 rado, have invented certain new and useful Improvements in Butt-Hinge Gages; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in butt-hinge gages, the object of the device being to accurately indicate the location, size, and depth of the mortise in which one member of the hinge is to be located in the door or 20 the casing thereof. Without an instrument of this class great difficulty is experienced in accurately indicating the location of the hinge on the door or casing.

Hence the object of my improved device is 25 to facilitate the work above indicated; and to this end the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying 30 drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a perspective view showing one form of my improved gage. Fig. 2 is a top or plan view of the same. Fig. 35 3 is a section on the line 3 3, Fig. 2. Fig. 4 illustrates another form of construction. Fig. 5 is a section taken through the construction shown in Fig. 4. Fig. 6 is an end elevation of the same. Fig. 7 is a plan view of still another 40 form of construction. Fig. 8 is a cross-section of the same.

The same reference characters indicate the same parts in all the views.

Referring first to Figs. 1 to 3, both inclu-45 sive, of the drawings, let the numeral 5 designate a block, preferably composed of metal. This block is provided with a longitudinal groove 6, near one side thereof, and two trans-

of the block. In the groove 6 is located a 50 knife 8, which is secured by screws 9. The edge of this knife projects above the groove for the purpose hereinafter explained. In the groove 7 are also located knives 10, which occupy positions at right angles to the knife 55 8. The edges of the knives 10 adjacent the knife 8 protrude above the block to the same height as the knife 8, but diminish in height from the knife 8 toward the opposite side of the block. To the top of the block, on the side 60 adjacent the lower extremities of the knives 10, is secured a knife 12 by means of screws The knives 10 are held in place by screws Assuming that the face of the block opposite the protruding edges of the knives oc- 65 cupies a horizontal position, the knives 8 and 10 will occupy vertical positions, while the knife 12 occupies a horizontal position. For convenience these terms will be used in describing the construction. As shown in the 70 drawings, the knife 12 is applied to a raised portion A, the depth of this raised portion being indicated by the offset B. This raise, together with the thickness of the knife 12, indicates the depth of the mortise to be formed 75 for the hinge member in the door or the casing thereof, while the knives 8 and 10 when applied to the door-casing indicate the size of this mortise or its superficial area.

In Figs. 4, 5, and 6 a construction adapted 80 to answer the same purpose is illustrated. This device consists of a block 15, which may consist of wood, metal, or any other suitable material. To one of the vertical side edges of this block is applied a knife 8, while to the 85 opposite ends of the block are applied the knives 10, the knives being secured by screws 9 and 14. To the top of the block, on the side remote from the knife 8, is secured a knife 12 by screws 13. These knives perform pre- 90 cisely the same function as the corresponding knives shown in the other views.

In Figs. 7 and 8 still another form of construction is shown. In this case the main part of the device is formed from an integral piece 95 of metal stamped to form the four knives. This piece of metal is designated 16 and converse grooves 7, formed near the opposite ends | sists of a bottom 17, end knives 18, a vertical

side knife 19, and a horizontal side knife 20. This device 16 is preferably secured to a base-

block 21 by means of screws 22.

In applying the device the gage is so placed 5 upon the door or casing thereof that the knife 12 or 20, as the case may be, will occupy a vertical position and indicate the depth of the mortise, while the knives 8 and 10 or 18 and 19, as the case may be, will indicate the size of the mortise on the door or jamb of the frame.

The manner of using the device is illustrated in Figs. 5 and 6, the door or casing thereof being indicated by dotted lines and designated 23. Taking the device and holding it in such 15 a position that its side edges are vertical, the

device is tilted, as indicated in Fig. 5, until the knife 12 or 20, as the case may be, is made to indent the vertical wall 24 of the door or frame to indicate the depth of the mortise.

20 The block is then crowded inwardly to the position shown in Fig. 6, causing the knives 8 and 10 to enter the jamb 25 of the door or frame to indicate the size of the mortise. The device is then removed, after which the work-

25 man is enabled to form the mortise in exactly the right place.

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Having thus described my invention, what I claim is—

1. A butt-hinge gage provided with side

and end knives to indicate the size of the mor- 30 tise, and another side knife disposed at right angles to the first-named knives, to indicate the depth of the mortise.

2. A butt-hinge gage composed of a body part, vertical side and end knives to indicate 35 the size of the mortise, the end knives decreasing in width as described, the said knives being adapted to indicate the size of the mortise, and another side knife disposed at right angles to the first-named knives and arranged 40 to indicate the depth of the mortise, substan-

tially as described.

3. The combination with a block, of knives applied to three of its sides and protruding from its upper surface, and a fourth knife ap- 45 plied to the upper surface of the block and occupying a position at right angles to the other knives, the edge of the top knife being far enough from the upper surface of the block to indicate the depth of the hinged mor- 50 tise, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

SAMUEL W. AKINS.

Witnesses:

DENA NELSON, A. J. O'Brien.