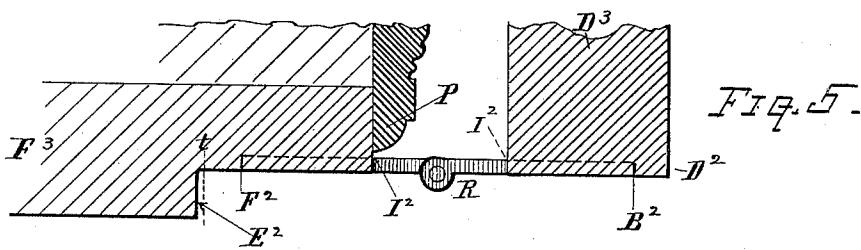
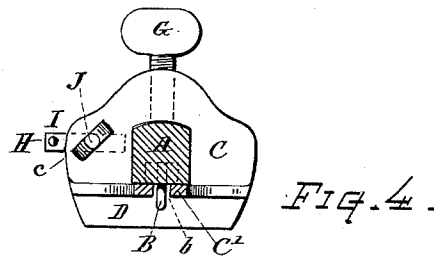
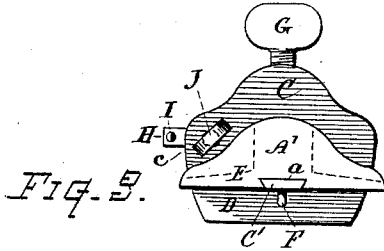
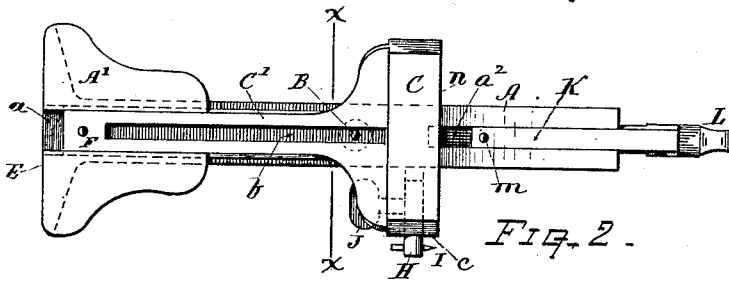
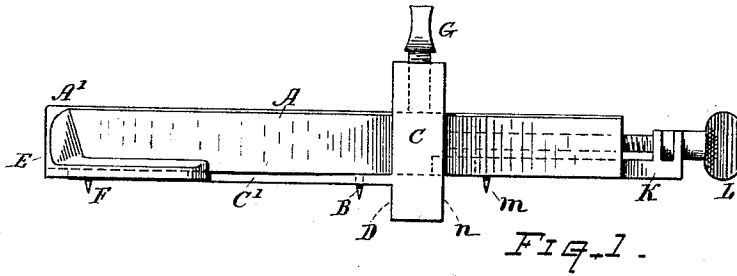


(No Model.)

C. LE FRANCOIS.
DOOR HANGING GAGE.

No. 435,089.

Patented Aug. 26, 1890.



Witnesses.

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CÉRÉAL LE FRANÇOIS, OF WORCESTER, MASSACHUSETTS.

DOOR-HANGING GAGE.

SPECIFICATION forming part of Letters Patent No. 435,089, dated August 26, 1890.

Application filed April 14, 1890. Serial No. 347,831. (No model.)

To all whom it may concern:

Be it known that I, CÉRÉAL LE FRANÇOIS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Door-Hanging Gages, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

The object of my present invention is to provide a gage especially designed for facilitating the hanging of doors or fitting butts or hinges to doors and jambs, said gage being provided with marking-points and means of adjustment arranged in such manner that the proper markings for laying off the width of the hinge-recess on both the door and the jamb are simultaneously attained by a single adjustment of the instrument; also, to afford, in connection with the gage for the width of hinge-recesses, a marker for the thickness of the hinge-plate that can be conveniently used on the edge of the jamb without interference with the casings or finish-moldings. These objects I attain by the gage-instrument herein shown and described. The particular subject-matter claimed is hereinafter definitely specified.

In the drawings, Figure 1 is a side view of my improved door-hanging gage. Fig. 2 is a bottom view of the same. Fig. 3 is an end view. Fig. 4 is a transverse section at line x . Fig. 5 is a sectional diagram showing a door and jamb to illustrate the use of my gage.

In referring to parts, A denotes a bar of suitable form, furnished at one end with a head A' or laterally-extended flanges, and provided on the under side thereof with a centrally-disposed undercut or dovetailed guideway a . At a central position, or at some distance from the head A', a marking-point B is rigidly fixed in and projects from the under side of the bar, as illustrated.

C denotes a sliding head mounted and adjustable upon the bar and provided with a slotted tongue C', that extends along the bar and has its end supported in the undercut guideway a , so that it will move along the guide accordingly as the head C is adjusted

along the central part of the bar. Said tongue C' carries near its end a marking-point F, rigidly fixed therein, as shown. The slot b in the tongue accommodates the marking-point B and permits longitudinal movement of the tongue without interfering with said marking-point. The arrangement of the marking-point B relatively to the face D of the gage-head C and of the marking-point F relatively to the end face E of the head A' is such that the distance from the point F to the face E will correspond with the distance from the point B to the face D plus the excess of space required as clearance for the angle of the door from the offset or shoulder of the rabbet on the door-jamb, and by reason of the adjustment of the gage-head moving the face D to or from the point B and tongue C simultaneously as a part of the head, carrying the point F to or from the end face E with the same extent of movement, this relation of the respective marking-points to the respective gage-surfaces is maintained throughout any and all adjustments of the gage. A thumb-screw G or other suitable clamping device is provided for retaining the sliding head C at position of adjustment.

On one side of the head C and projecting therefrom transversely to the direction of the bar I arrange an adjustable stud H, carrying a marking-point I, that gages from the side face c of the head C. A thumb-screw J is provided, whereby said stud is retained at position of adjustment, as required.

The manner of using my improved door-hanging gage for laying out the position of butts or hinges on doors and door-jambs is as follows: The gage is first adjusted so that the distance from the point B to the face D on the gage-head C will correspond with the desired distance at which the edge of the butt R is to be located from the angle D² of the door D³. (See Fig. 5.) The line B² for the position of the edge of the butt can then be scribed on the door by placing the face D of the gage-head against the angle D² and marking the line at B² with the point B. Then with the same adjustment of the gage the line F² for the position of the edge of the butt R on the jamb F³ can be scribed by placing the end face E of the bar-head A' against the shoulder or offset E² of the rabbet and marking said

line F^2 on the standing jamb by moving the gage along the rabbet, the part of the tool with the head C projecting to the front of the jamb, so that it does not interfere with the perfect
 5 working of the rabbet-gage, thus quickly and surely laying off the recess for the hinge or butt on both the door and jamb, so that they will properly correspond and at the same time afford the requisite amount of clearance in
 10 the jamb-offset, at t , to give space for the painting and varnishing without causing the door to bind or scrape the adjacent surfaces when opened and closed. In like manner for any thickness of door or lap of the butt-plate the
 15 single adjustment of the gage-head C gives both the dimension for the door by the point B and face D and the dimension of the jamb by the point F and face E, thus affording a very convenient and useful instrument where-
 20 by the labor of hanging doors is greatly facilitated and reduced, while at the same time greater accuracy and perfection are attained in executing the work.

The line at I^2 for the depth of recess corresponding to the thickness of the butt-plates can be conveniently marked off by means of the side-gage point I, its carrying-stud H being previously adjusted so that the point I will stand at a distance from the edge c of the
 30 head C corresponding to the distance which the butt-plates are to be sunk into the jamb and the door. This side gage I, when constructed as shown and described, is disposed and arranged in such manner that the marking
 35 on the narrow fillet at the front of the jamb can be conveniently effected without the gage interfering with the finishing-molding P or other portion of the standing wood-work.

At the rear end of the bar A there is formed

a groove a^2 , in which is fitted a slide K, preferably worked by a thumb-screw L, for carrying the marking-point m , that serves, in connection with the face n on the head C, for general gage purposes. This slide K and marking-point m may be omitted, if in any
 45 instance preferred.

I claim as my invention herein, to be secured by Letters Patent—

1. The door-hanging gage composed of the bar A, having the central fixed marking-point
 50 B, and the sliding head provided with the tongue C' , carrying the marking-point F near the end thereof, with the adjustable stud H, fitted in the side of said sliding head and carrying the marking-point I, and means for se-
 55 curing the adjustable parts in position, substantially as and for the purpose set forth.

2. The within-described gage-instrument, composed of the bar A, having the head A' , with the end face E and guideway a , the centrally-disposed marker or point B, fixed in said
 60 bar, the adjustable gage-head C, provided with the attached slotted tongue C' , its end extending into the guideway a and carrying the point F, the slide K, fitted in the guideway
 65 a^2 , carrying the marking-point m , the adjustable stud H, carrying marker I, fitted in the side of the gage-head, and the screws G, J, and L, for respectively effecting or retaining
 70 adjustment of the parts, all arranged substantially as shown and described.

Witness my hand this 9th day of April, A. D. 1890.

CÉRÉAL LE FRANÇOIS.

Witnesses:

CHAS. H. BURLEIGH,
 ELLA P. BLENUS.