(No Model.)

C. C. HARRIS.

GAGE.

No. 464,867. Patented Dec. 8, 1891.

Fig. 1.

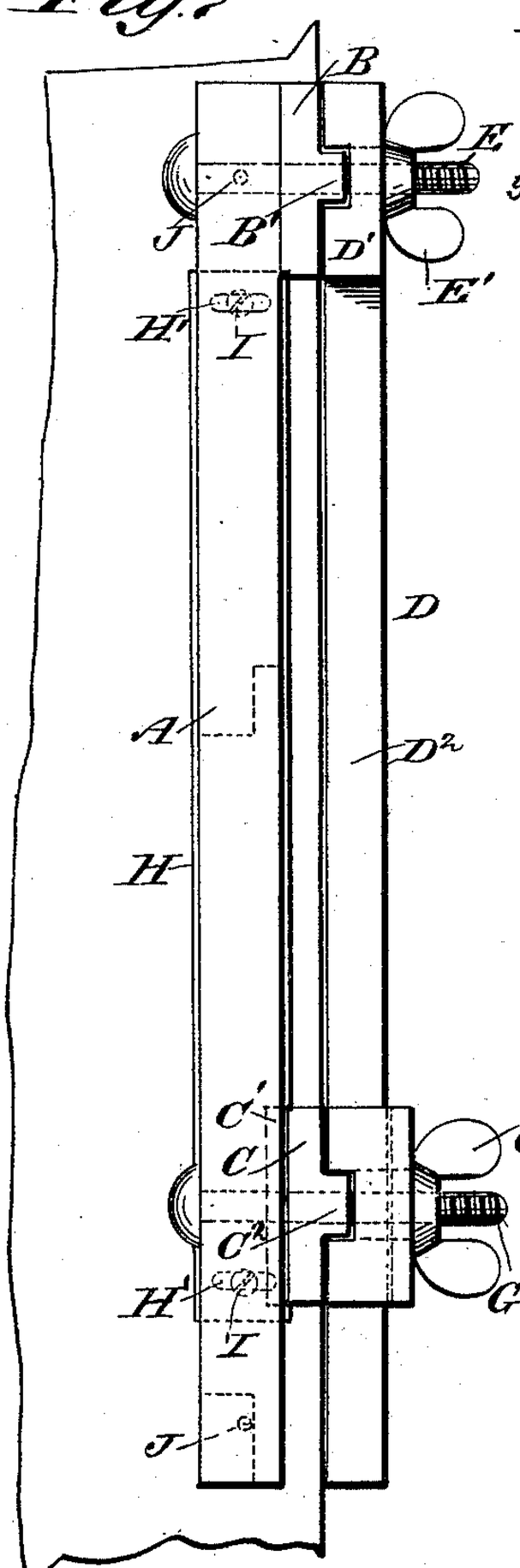


Fig. 2.

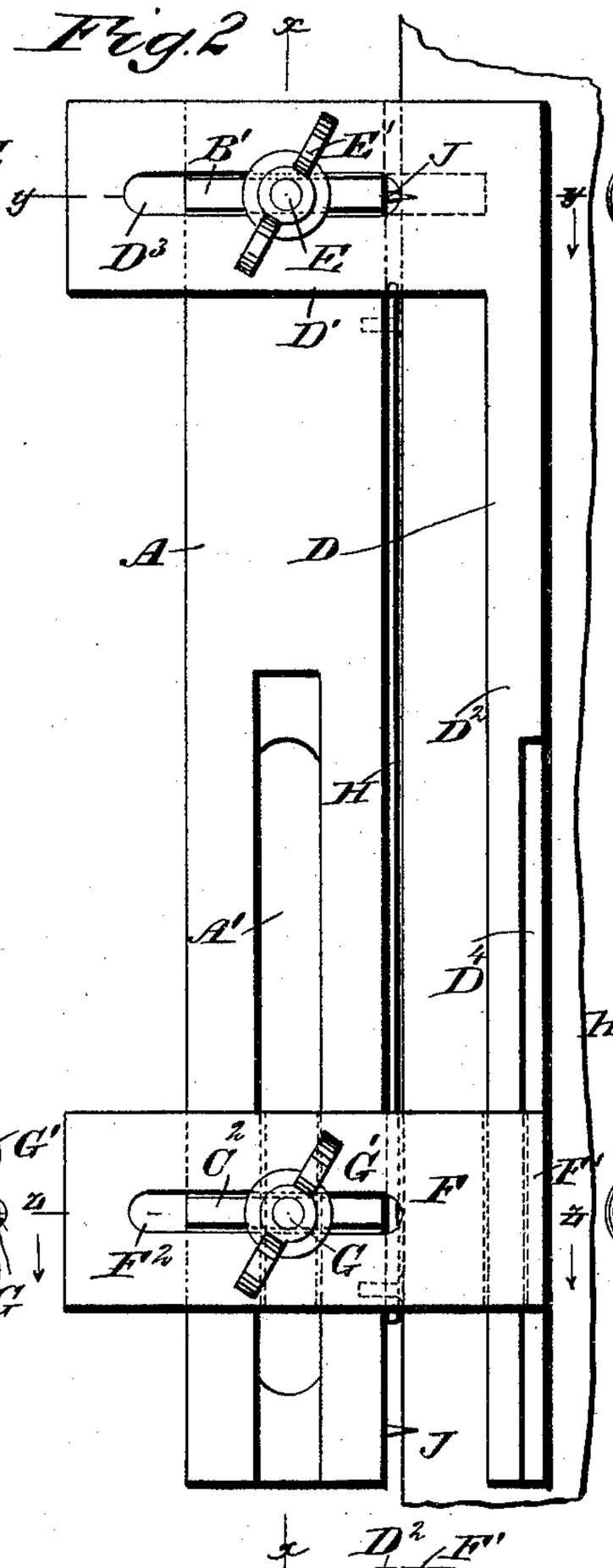


Fig. 3.

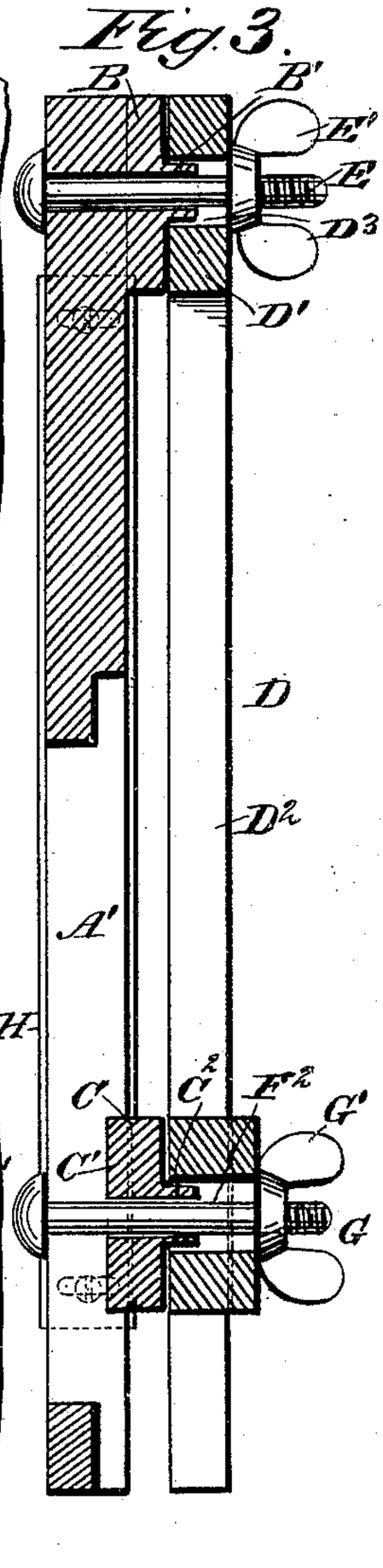


Fig. 4.

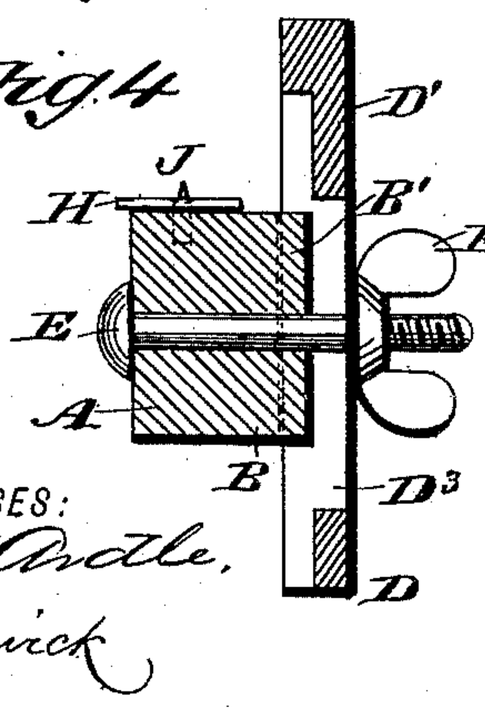
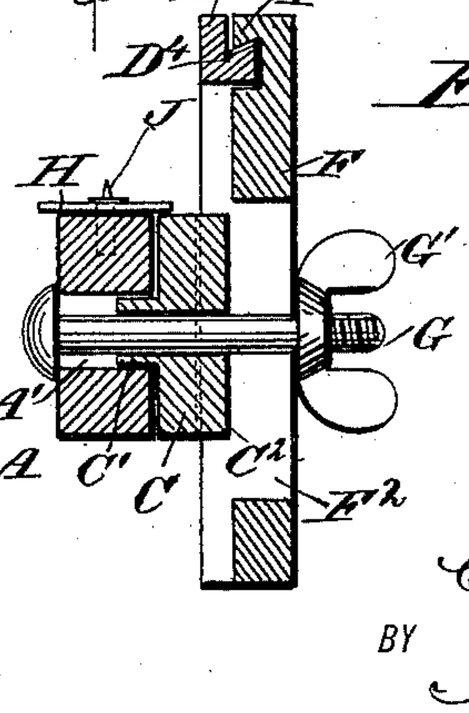


Fig. 5.



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CHRISTOPHER C. HARRIS, OF MISSOULA, MONTANA.

GAGE.

SPECIFICATION forming part of Letters Patent No. 464,867, dated December 8, 1891.

Application filed July 20, 1891. Serial No. 400,079. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. HARRIS, of Missoula, in the county of Missoula and State of Montana, have invented a new and Improved Gage, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved gage, which is simple and durable in construction, being more especially designed for the use of carpenters and other mechanics to mark for hinges on doors and jambs to facilitate the hanging of doors.

The invention consists of a bar provided with a fixed head and a movable head, an L-shaped guide-rod fitted to slide with one end on the fixed head, and a connecting-arm fitted to slide on the guide-rod and connected with the movable head.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of the improvement. Fig. 2 is a front view of the same. Fig. 3 is a sectional side elevation of the same on the line *x x* of Fig. 2. Fig. 4 is a sectional plan view of the same on the line *y y* of Fig. 2, and Fig. 5 is a similar view of the same on the line *z z* of Fig. 2.

The improved gage is provided with a bar A, formed with a longitudinal slot A′ and with a head B, having a transversely-extending tongue B′, the said head being located near the upper end of the bar A. A movable head C is fitted to slide on the bar A, and is formed with a longitudinal tongue C′, engaging the longitudinal slot A′ in the bar A. On the movable head is also formed a transversely-extending tongue C^2, arranged parallel to the tongue B′ of the fixed head B. An L-shaped guide-rod D is formed with the arms D′ and D^2, of which the arm D′ extends transversely across the head B being provided with a transverse slot D^3, engaged by the tongue B′ of the head B. A bolt E, provided with a wing-nut E′, passes through the bar A, the head B, and the slot D^3, the wing-nut screwing on the front face of the arm D′ to fasten the latter in position on the fixed head. In the other arm D^2 of the guide-rod D is formed a longitudinally-extending dovetail groove D^4, engaged by a tongue F′, formed on one end of an arm F, extending transversely parallel to the arm D′. In this arm F is arranged a transverse slot F^2, engaged by the tongue C^2 of the movable head C. A bolt G, similar in construction to the bolt E, passes through the slot A′ of the arm A, the head of the bolt resting against the back of the said bar. The bolt also passes through the movable head C and the slot F^2, the wing-nut G′ of the said bolt abutting against the front face of the arm F to fasten the latter in position on the head C and the latter to the bar A. On the side of the bar A adjacent to the arm D^2 of the guide-rod D is held a gage-plate H for setting the gage according to the thickness of the hinge, to mark the proper place for the depth of the cut on the door or jamb. The gage-plate H is formed near its ends with parallel grooves H′, engaged by screws I, screwing in the bar A and serving to hold the plate in the proper position, so that the distance between the front edge of the said plate and the rear side of the guide-rod D and arm F is equal to the thickness of the hinge for which the mark is to be made. On the same side of the bar A and near its ends are arranged points J for securely holding the gage in place while marking the place for the hinge on the door or jamb.

The device is used as follows: In order to adjust the gage according to the width of the leaf of the hinge, the operator loosens both wing-nuts E′ and G′, and then slides the guide-arm D transversely until the distance between the inner edge of the arm D^2 and the front edge of the gage-plate H corresponds with the width of the leaf. The operator then screws up the wing-nut E′ to fasten the guide-rod D in place on the bar A. He then slides the head C and arm F toward or from the arm D′ until the distance between the arms D′ and F corresponds to the length of the leaf of the hinge. The wing-nut G′ is then screwed up to fasten the head C to the bar A and the arm F in position on the head C. The operator next loosens the screws I

and adjusts the gage-plate H, according to the thickness of the leaf of the hinge. The screws I are then screwed up to fasten the plate in position on the side of the bar. The operator now places the gage on the door or jamb, with the pins J resting on the face of the door and with the guide-rod D placed against the edge of the door. The operator now, with a pencil or other marking-instrument, follows the inner edges of the guide-rod D and the top of the arm F, then along the gage-plate H, thus laying off the thickness, width, and length of the leaf on the door or jamb.

It will be seen that when the gage is set for a certain kind of hinges no adjustment is necessary, and the operator can readily mark the doors and jambs at the proper places for the accurate size of the leaves of the hinge. It will further be seen that no superfluous pencil-marks are made on the door or jamb, as the operator's tool for marking is confined within the space of the gage, as above described, for marking the proper size. Hence the door or jamb are not unduly defaced.

The points J hold the gage in proper position while the operator marks the place for the hinge, as above described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A gage comprising a bar provided with a fixed head and a movable head, an L-shaped guide-rod held by one arm adjustably on the fixed head, and an arm for connecting the other arm of the guide-rod with the movable head, substantially as shown and described.

2. A gage comprising a bar provided with a fixed head and a movable head, an L-shaped guide-rod fitted to slide by one arm on the said fixed head, a bolt for fastening the said arm of the guide-rod to the said fixed head, an arm fitted to slide longitudinally on the guide-rod and transversely on the said movable head, and a bolt for fastening the said movable head and arm to the bar, substantially as shown and described.

3. In a gage, the combination, with a bar formed with a longitudinal slot and a head having a transverse tongue, of a guide-rod formed with two arms extending at right angles to each other, the transverse arm being formed with a slot engaging the tongue on the said fixed head, a bolt for fastening the transverse arm of the guide-rod to the said fixed head, a movable head having a longitudinal tongue fitted to slide in the slot of the bar and also provided with a transverse tongue, an arm engaging the longitudinal arm of the said guide-rod and formed with a slot engaging the transverse tongue of the movable head, and a bolt for fastening the said movable head to the said bar and the arm to the said head, substantially as shown and described.

4. A gage comprising a bar, an L-shaped guide-rod held adjustably on the said bar, a connecting-arm for connecting the longitudinal arm of the guide-rod with the said bar, and a gage-plate held adjustably on the said bar, substantially as shown and described.

5. A gage comprising a bar, an L-shaped guide-rod held adjustably on the said bar, a connecting-arm for connecting the longitudinal arm of the guide-rod with the said bar, a gage-plate held adjustably on the said bar, and points held on the said bar on the same side as that on which the gage-plate is held adjustable, substantially as shown and described.

CHRISTOPHER C. HARRIS.

Witnesses:
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R. T. LOVE.