

No. 757,132.

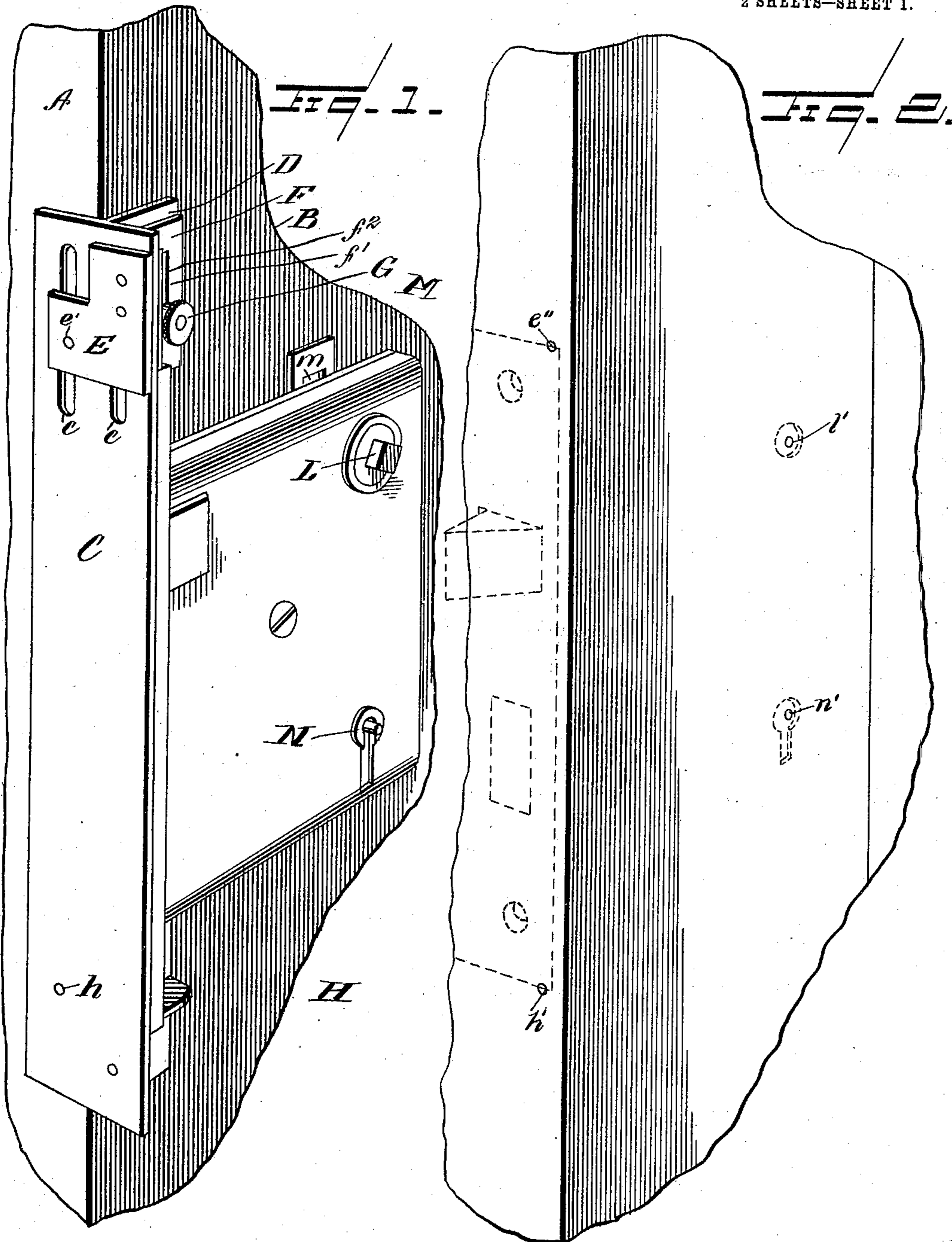
PATENTED APR. 12, 1904.

W. E. LOUGH.
GAGE AND MARKER.

APPLICATION FILED DEC. 2, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

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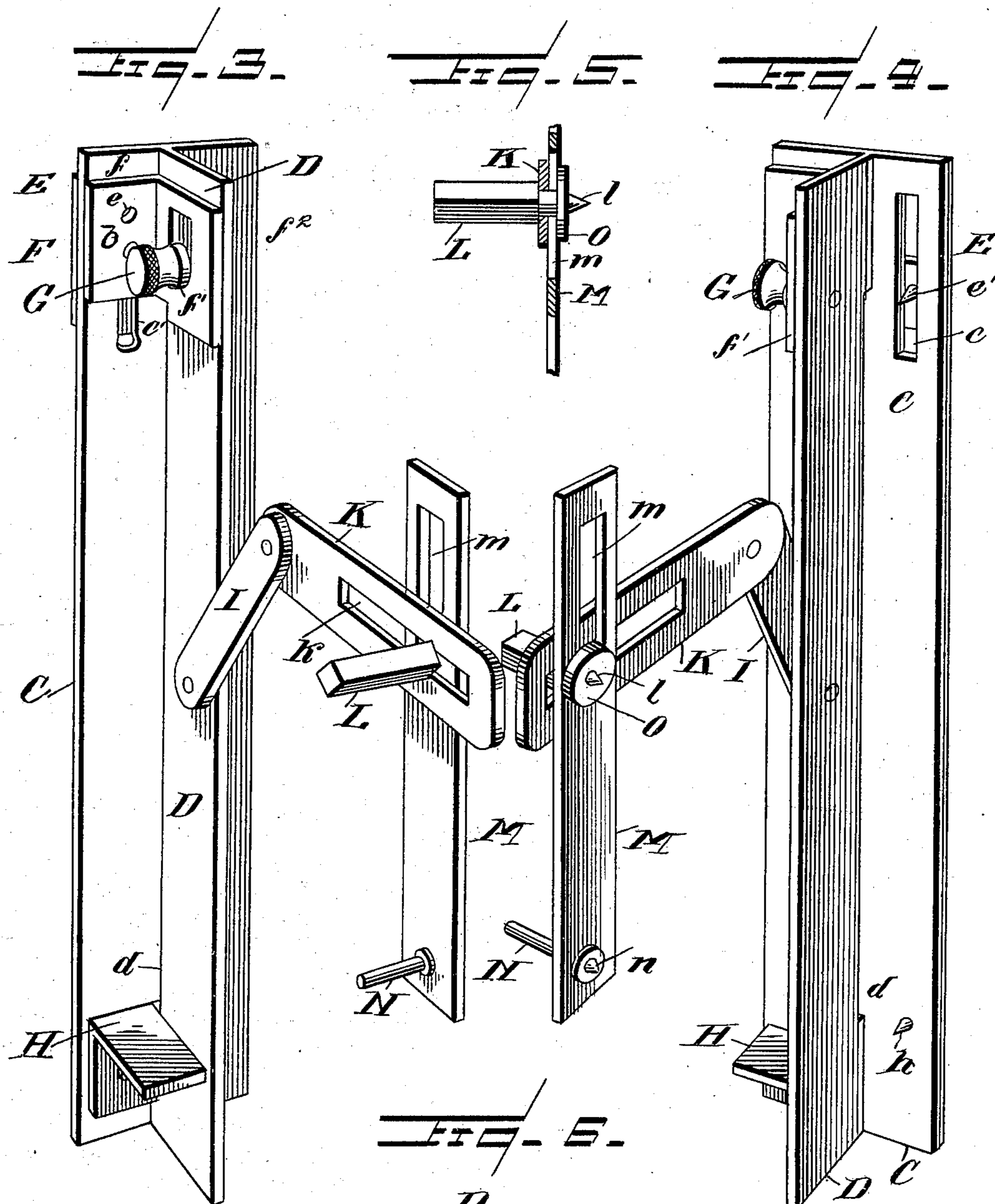
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UNITED STATES PATENT OFFICE.

WILLIAM EMORY LOUGH, OF FARMINGTON, WEST VIRGINIA.

GAGE AND MARKER.

SPECIFICATION forming part of Letters Patent No. 757,132, dated April 12, 1904.

Application filed December 2, 1903. Serial No. 183,473. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM EMORY LOUGH, a citizen of the United States of America, residing at Farmington, in the county of Marion and State of West Virginia, have invented certain new and useful Improvements in Gages and Markers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to gages and markers for setting mortise-locks, and has for its object the provision of means for accurately marking upon the edge of a door the upper and lower lines of the mortise for the face-plate of the lock and for simultaneously marking the position of the keyhole and the hole for the knob-bolt.

In carrying my invention into effect I provide a gage which is adapted to fit against and embrace the edge and part of the side of a door and which gage is provided with adjustable marking devices by means of which the gage is adapted to be used in conjunction with mortise-locks of different sizes, so that whatever may be the size of the lock or its face-plate and the position of its keyhole and bolt-hole the gage can be adjusted to accurately mark the upper and lower lines of the mortise which is to be cut for the reception of the face-plate and also adjusted to accurately mark the centers for the keyhole and bolt-hole which are to be bored in the door.

My invention consists in the provision of a gage of novel form and construction having means for marking on a door the points at which the door is to be cut away and bored for the reception of a lock; and my invention further consists in the novel constructions, combinations, and arrangements of parts hereinafter described.

In the accompanying drawings, in which like reference-letters designate corresponding parts in the several figures, Figure 1 is a perspective view of my improved gage, a mortise-lock, and part of a door to which the gage and lock are applied in operative position. Fig. 2 is a similar view of part of a door, showing the marks made by the gage to indicate the positions of the mortise for the face-plate and the keyhole and bolt-hole.

Fig. 3 is a perspective view looking at the gage from one point of view. Fig. 4 is a similar view showing the opposite side to that shown in Fig. 3. Fig. 5 is a sectional view of that part of the gage which marks the position of the bolt-hole. Fig. 6 is a sectional detail view of part of the gage and the adjustable marker for the upper edge of the mortise.

A designates the edge of the door, and B the face thereof.

The gage and marker, which is shown applied to the edge of the door in Fig. 1, is composed of a flat plate C, of suitable length and width, at or about the center of which and at right angles thereto is fixed another plate, D, of the same length as plate C. The inner edge of plate D next to plate C is cut away, as shown at *d* in Figs. 3 and 4, for the reception of the edge of the face-plate of the lock, as will be hereinafter described. Two parallel slots *c' c* are cut through the plate C near its upper end, and a movable plate E is arranged on the front of plate C over the slots *c c'*, and rivets *e e* are fixed in the plate E and passing through the slot *c* serve to attach to said plate E a plate F, which is bent at right angles, one arm, *b*, of said plate F bearing against the back of plate C, while the other arm, *f'*, bears against the side of the plate D. The arm *f'* of plate F is formed with a slot *f''*, through which passes a threaded stud *g*, carrying a thumb-nut G, by means of which said plate F is fixed in any position to which it may be adjusted. A marking-pin *e'*, carried by plate E, projects through the slot *c* and serves to mark the position of the upper edge of the mortise for the face of the lock. Near the bottom and upon the inner side of plate C an angle-plate H is fixed, the upper surface of said plate being on a line with the lower end of the slot on the inner edge of plate D, and a marking-pin *h* is fixed in the back of plate C on a line with the lower edge of said slot, this pin serving to mark the point for the lower line of the mortise of the face-plate of the lock.

At a point about midway of the plate D a link I is pivoted at one end to plate D and at the other end is pivoted to a link K, which is slotted at *k* for the passage of a square bolt

L, by means of which link K is pivotally attached to a link M, which is slotted at *m* for the passage of said bolt L and carries at its lower end a pin N, which has its inner end sharpened, as shown at *n*, said sharpened end constituting a marking-pin for the keyhole. The inner end of the bolt L is sharpened, as shown at *l*, and said sharpened point forms a marking-pin for the bolt-hole of the lock, and the said bolt is held in position in the links K and M, and the said links are pivotally attached on said bolt by means of a washer O, attached to the bolt by screwing it thereon, soldering it thereto, or affixing it in any other suitable manner inside the point *l* of the same.

In operation the lock which is to be put on the door is applied to the gage in the following manner: The links K M are adjusted one on the other until the bolt L and the pin N coincide to the position of the bolt-hole and the circular portion of the keyhole of the lock. The bolt L is then inserted in the bolt-hole and the pin N in the keyhole, and the face-plate of the lock is brought up against the back of plate C, the edge of the face-plate being pushed into the slot *d* at the rear of plate D, the lower edge of the face-plate resting on the block H. The plates E and F are now adjusted until the lower edge of arm *f* of plate F rests upon the upper edge of the face-plate. The gage, with the lock attached, as above described, is then applied to the door, as shown in Fig 1, and the pins *e'* and *h* on the plate C are pressed into the edge A of the door, and the pins on the inner ends of bolt L and pin N are pressed into the side of the door, leaving marks or indentations *e''*, *h'*, *l'*, and *n'*, which, as shown in Fig. 2, indicate the upper and lower edges of the face-plate and the centers for the bolt-hole and keyhole.

The device described provides a simple and efficient means for expeditiously and accurately marking the points at which the door is to be mortised and bored and obviates the slow and uncertain method of determining these points heretofore practiced.

Having described my invention, I claim—

1. A gage and marker for doors having marking-points adapted to indicate on the edge of the door the position of the mortise for the face-plate, and marking-points arranged at right angles to the first-named points and adapted to indicate on the side of the door the position of the keyhole and knob-bolt.

2. An adjustable gage and marker for marking doors to receive mortise-locks, having an adjustable marking-point and a stationary marking-point adapted to indicate on the edge of a door the upper and lower edges of the mortise and having adjustable marking-points arranged at right angles to said first-named marking-points and adapted to indicate on the side of the door the positions of the keyhole and knob-hole.

3. A gage and marker for marking doors, comprising a plate adapted to rest against the edge of the door, marking-points on said plate to indicate the position of the mortise of a lock, pivoted links attached to said plate, a bolt adapted to enter the bolt-hole of a lock, a marking-point on the inner end of said bolt, a pin adapted to enter the keyhole of the lock and a marking-point on the inner end of said pin.

4. A gage and marker for marking doors comprising a plate adapted to be applied to the edge of the door, marking-points on said plate, a plate secured at right angles to the first-named plate and adapted to be applied to the side of the door and having a slot for the reception of the face-plate, of a lock, a bolt and a pin having marking-points, adjustable links upon which the bolt and pin are carried and a link connecting one of said adjustable links to the said slotted plate.

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

WILLIAM EMORY LOUGH.

Witnesses:

JOHN A. BOCK,
JAMES B. FOX.