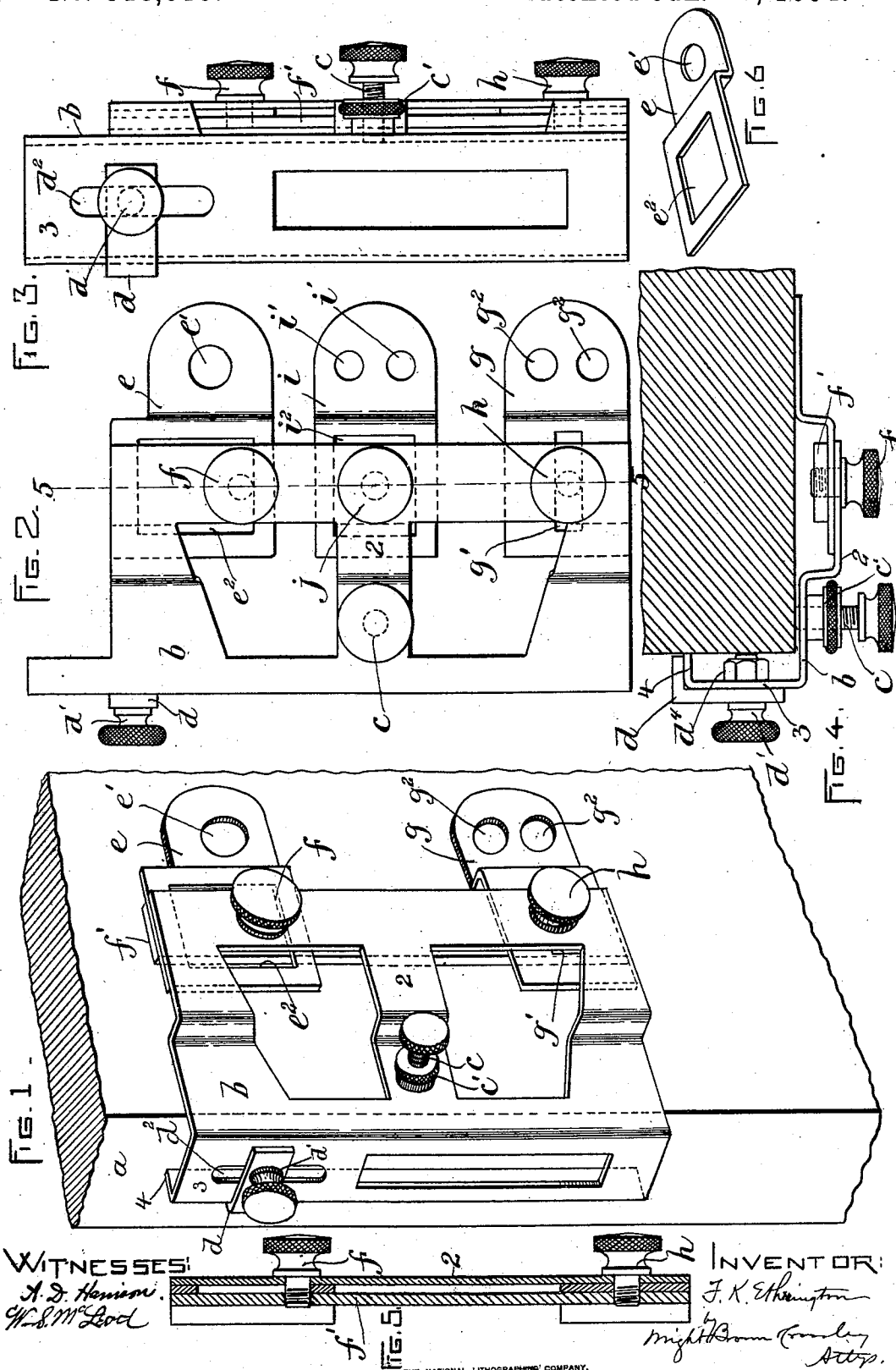


(No Model.)

F. K. ETHERINGTON.
DOOR LOCK MARKING GAGE.

No. 513,313.

Patented Jan. 23, 1894.



UNITED STATES PATENT OFFICE.

FRANK K. ETHERINGTON, OF CAMBRIDGE, MASSACHUSETTS.

DOOR-LOCK MARKING-GAGE.

SPECIFICATION forming part of Letters Patent No. 513,313, dated January 23, 1894.

Application filed March 13, 1893. Serial No. 465,740. (No model.)

To all whom it may concern:

Be it known that I, FRANK K. ETHERINGTON, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Door-Lock Marking-Gages, of which the following is a specification.

This invention has for its object to provide a gage or marking device adapted to be conveniently used by carpenters in making a vertical mark on the center of the outer edge of a door to indicate the position of the center of the mortise to be made for the reception of the lock, and also marks on the side of the door to indicate the proper position for holes which require to be made in the door for the reception of the knob spindle and of the key or keys used with the lock.

The invention consists in the improved gage or marking device which I will now proceed to describe and claim.

Of the accompanying drawings forming a part of this specification—Figure 1 represents a perspective view showing a portion of the door with my improved marking device in the position it occupies on the door when in use. Fig. 2 represents a side view of the marking device. Fig. 3 represents an end view of the same. Fig. 4 represents a top view. Fig. 5 represents a section on line 5, 5 of Fig. 2. Fig. 6 represents a perspective view of a portion of the device.

The same letters and numerals of reference indicate the same parts in all the figures.

In the drawings—*a* represents the outer or swinging edge of a door which is to be provided with a mortise lock.

Preparatory to making the mortise in the edge of the door, and the transverse holes in the side of the door for the knob spindle and key or keys, it is customary to make a vertical mark at the center of the edge of the door to aid the operator in boring the holes at the ends of the mortise, and to make marks upon one side of the door, said marks indicating the points for the boring of the holes required in making said orifices.

In carrying out my invention I have constructed a device which is adapted to be placed upon the door and furnish guides fixed with relation to each other for making all the marks required so that the operator has only

to hold the device in its operative position on the door and make all the marks required without moving the device from its place. The said device includes a frame *b* preferably of sheet metal, comprising a portion 2 which bears upon the side of the door, and a flange 3 which projects over the edge of the door, the flange being substantially at right angles with the side portion 2. The flange is provided with an inwardly projecting lip 4 which when the device is in place constitutes a straight edge or guide for a marking tool, said lip extending vertically along the edge of the door midway between the sides thereof. The position of the lip 4 with relation to the sides of the door is determined by means of an adjusting screw *c* which is connected with the side portion 2, and bears at its inner end against one side of the door as shown in Fig. 4, said screw being provided with a locking nut *c'*, whereby it may be held at any desired adjustment so that the lip or guide 4 can be adjusted to doors of different thicknesses.

d represents a gage which is adjustably secured to the flange 3 by means of a set screw *d'* passing through the gage and through a slot *d²* in the flange 3, and a nut *d⁴*, engaged with a screw at the inner side of the flange 3. By loosening the screw *d'* the gage *d* may be moved vertically as far as the slot will permit. The gage *d* is intended to indicate the upper end of the mark made on the edge of the door, the operator making the mark from the gage *d* to the lower end of the lip 4 so that the length of the mortise is accurately determined.

The side portion 2 of the frame *b* is provided with an adjustable plate *e* having an orifice *e'*, said plate being secured to the frame *b* by means of a screw *f* and a plate *f'*, which has a threaded orifice receiving the screw, said screw passing through an enlarged slot or opening *e³* in the plate *e*. Said opening is of such size that when the screw *f* is loosened the plate *e* can be moved to a considerable distance in any direction, so that the position of the orifice *e'* may be varied to a considerable extent. When the plate *e* is properly adjusted, the orifice *e'* enables the operator to mark the spot on the side of the door where it is to be bored for the reception of the knob spindle, the opera-

tor inserting a pencil or other device in the orifice e^5 , and making a circular mark, on the side of the door.

g represents a plate similar to the plate e , and attached to the frame b by means of a screw h , said screw passing through a slot g' in the plate g , and being engaged with the plate f' to secure the plate g in any desired position. The plate g is provided with two orifices g^2, g^2 so arranged that two circular marks made by a marking tool inserted in said orifices and pressed against the side of the door will indicate the ends of the key hole to be made in the door.

When the door to be marked is to be provided with two key-holes, one for a night-key, I provide a third key-hole-marking plate i , which is similar in construction to the plate e , excepting that it has preferably two orifices, i', i' , arranged like the orifices g^2, g^2 of the plate g , the plate i being provided with a slot or opening i^2 , through which passes the screw j which secures the plate i to the frame b .

The operation of the device is as follows: The adjusting-screw c and the gage d being suitably adjusted, the device is placed against one side and the outer edge of the door, as indicated in Fig. 1, the outer edge of the lip 4 being at the vertical center of the edge of the door. The height of the upper end of the mortise to be formed in the door being determined, the device is so located that the gage d will coincide with the upper end of the proposed mortise. The plates e and g , also the plate i if the latter be employed, are adjusted so that their marking orifices occupy the proper positions relatively to the gage d . The operator then makes a mark

from the gage d downwardly along the lip 4 to the lower end of said lip, said mark indicating the center of the mortise and guiding the operator so that, in boring the auger-holes for the mortise, he can make one hole at the top and another at the bottom of said mark. Without moving the device, the operator inserts a marking-tool in the orifices of the plates e and g , of the plates e, g and i , thus making the marks which indicate the positions of the knob-spindle-hole and the key-hole or holes, all of which occupy a fixed relation to the marks made for the mortise. It will be seen, therefore, that the described device enables an operator to quickly and accurately make the different marks required.

I do not limit myself to the details of construction here shown, as the same may be variously modified without departing from the spirit of my invention.

I claim—

A door marking device comprising in its construction a plate or frame composed of a side portion to bear on one side of a door and a flange formed to bear on the edge of the door, said side portion being provided with means for adjusting the position of the flange on the edge of the door, and with universally adjustable marker guides arranged to bear on the side of the door, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 6th day of March, A. D. 1893.

FRANK K. ETHERINGTON.

Witnesses:

C. F. BROWN,
A. D. HARRISON.