

(No Model.)

F. K. ETHERINGTON.
DOOR LOCK MARKING GAGE.

No. 527,600.

Patented Oct. 16, 1894.

Fig. 1.

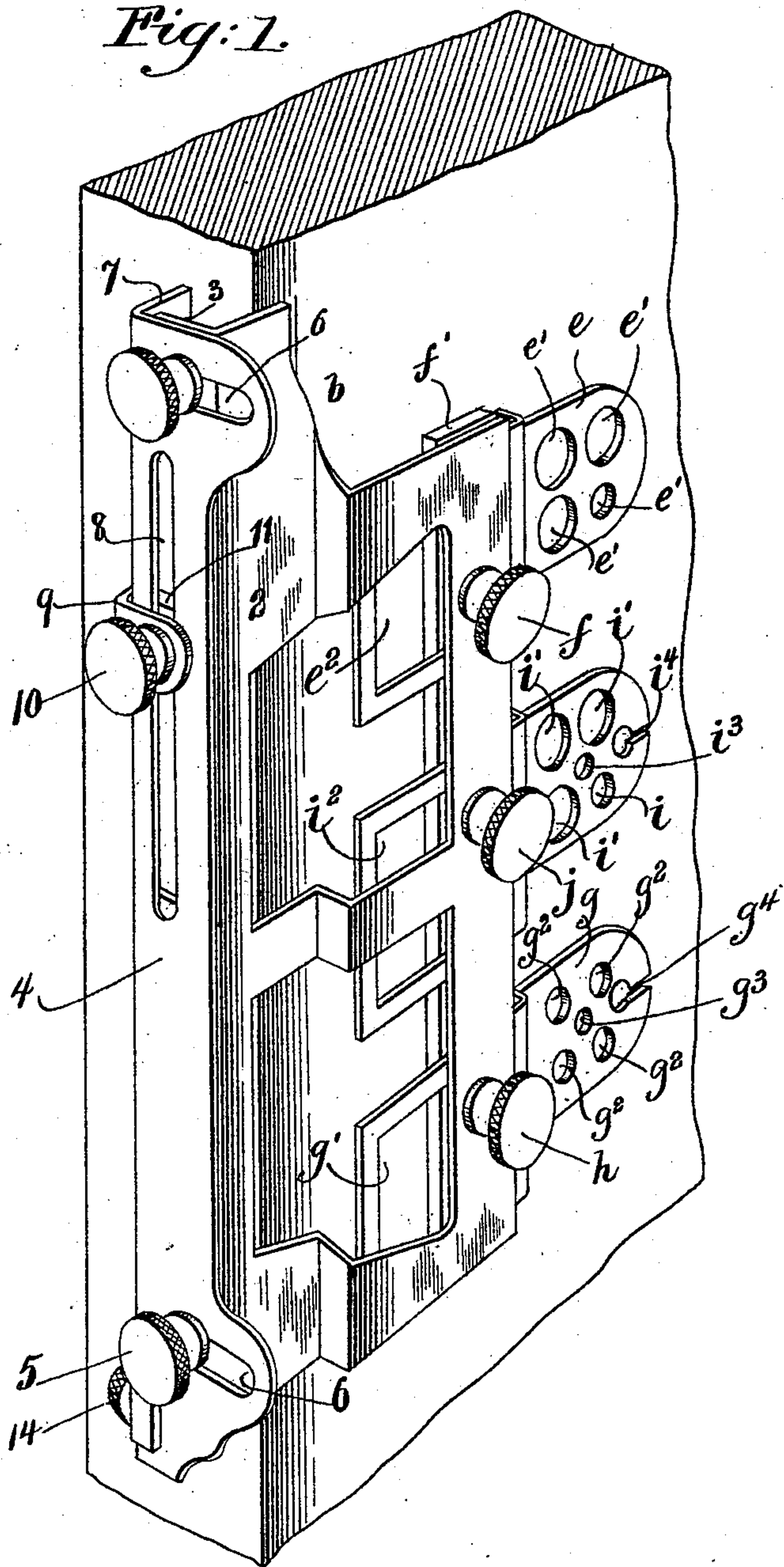
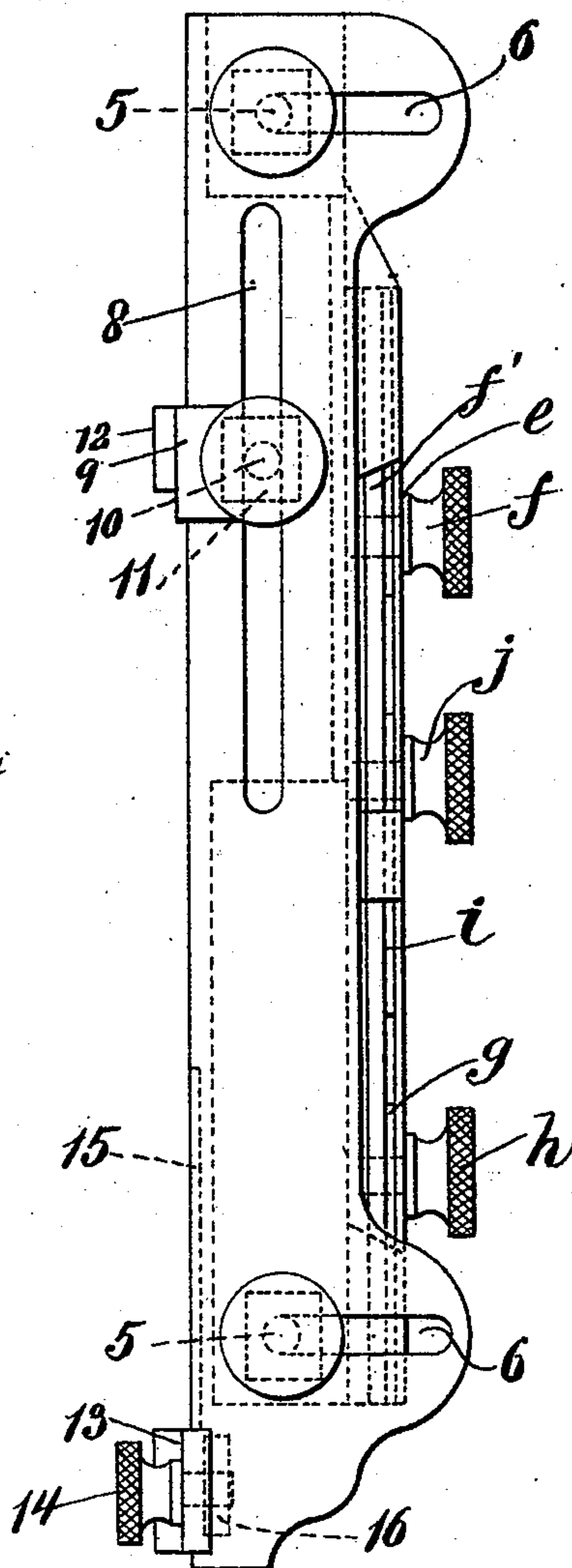


Fig. 2.



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UNITED STATES PATENT OFFICE.

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DOOR-LOCK-MARKING GAGE.

SPECIFICATION forming part of Letters Patent No. 527,600, dated October 16, 1894.

Application filed November 20, 1893. Serial No. 491,419. (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 an end view of the marking device.

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

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 boring 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 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. An adjustable gage-strip 4 is attached to the flange 3 by means of thumb-screws 5 which are fastened in said flange and extend through slots 6 in said strip and the latter is provided with an inwardly projecting lip 7 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 7 with relation to the sides of the door is determined by adjusting the gage-strip 4 and fixing it in place by tightening the screws 5.

The gage-strip 4 is provided with a longitudinal slot 8 extending throughout approximately one-half of its length from the middle toward one end, and a gage 9 is attached to the strip by a thumb-screw 10 which passes through the slot 8 and a nut 11 on the inner end of said screw. This gage 9 extends over the lip 7 and has a foot 12 which serves to determine the upper end of the mark when the device is used right-handed. By means of a similarly formed gage 13 supported by a screw 14, engaging a slot 15 in the flange or lip 7, and a nut 16 on said screw, the upper end of the mark is determined when the device is employed left-handed.

The side portion 2 of the frame *b* is provided with an adjustable plate *e* having orifices *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 *e²* 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. When the plate *e* is properly adjusted, an orifice *e'* enables the operator to mark the spot on the side of the door which is to be bored for the reception of the knob spindle, the operator inserting a pencil or other device in the orifice, and making a circular mark on the side of the door.

g designates 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

orifices g^2 so arranged that two circular marks made by a marking tool inserted in two of 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 , having orifices i' arranged like the orifices 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 gage-strip 4 and the gages 9 and 13 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 7 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 9 or 13 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 9 or 13. The operator then makes a mark from the gage 9 or 13 downwardly along the lip 7, 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 , or the plates e g and i , thus making the marks which indicate the posi-

tions 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.

The plates g and i are provided respectively with small auxiliary holes g^3 g^4 , and i^3 i^4 for the purpose of determining the location of a circular recess for a Yale lock in case such a lock is used, the holes g^3 i^3 indicating the centers and g^4 i^4 the circumferences of circles to be made on the door preparatory to forming such recesses.

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 to bear on one side of the door, a gage-strip adjustably secured to said frame and having a lip formed to bear on the edge of the door, a gage adjustable in a slot of said strip to determine the upper end of the mark when the device is applied on one side of the door, and a gage adjustable in a slot of the lip to determine the upper end of the mark when the device is applied on the other side of the door.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 18th day of November, A. D. 1893.

FRANK K. ETHERINGTON.

Witnesses:

GEO. H. MORSE,
FRED A. MORSE.