

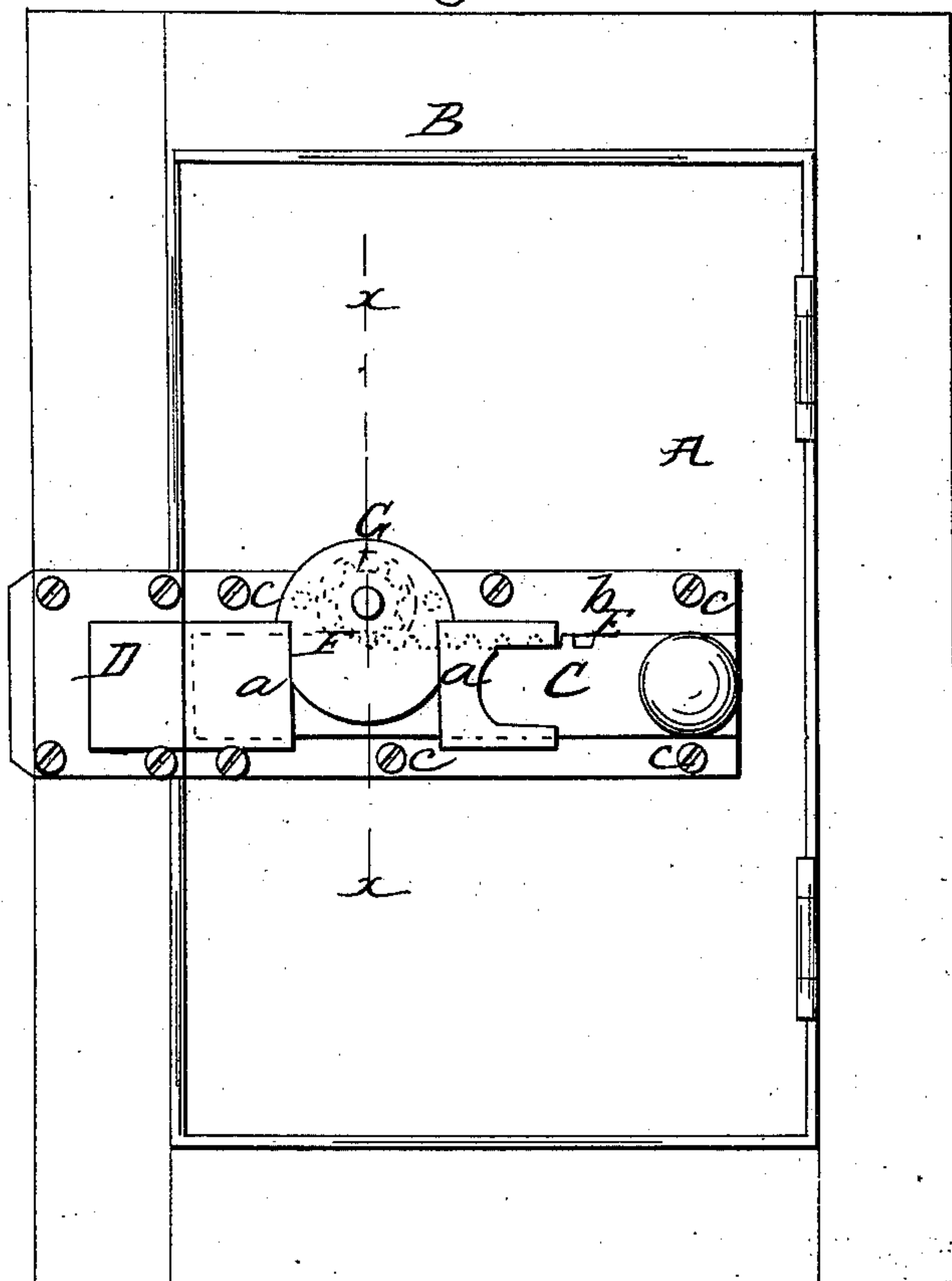
*G. Nashburn,*

*Lock Bolt.*

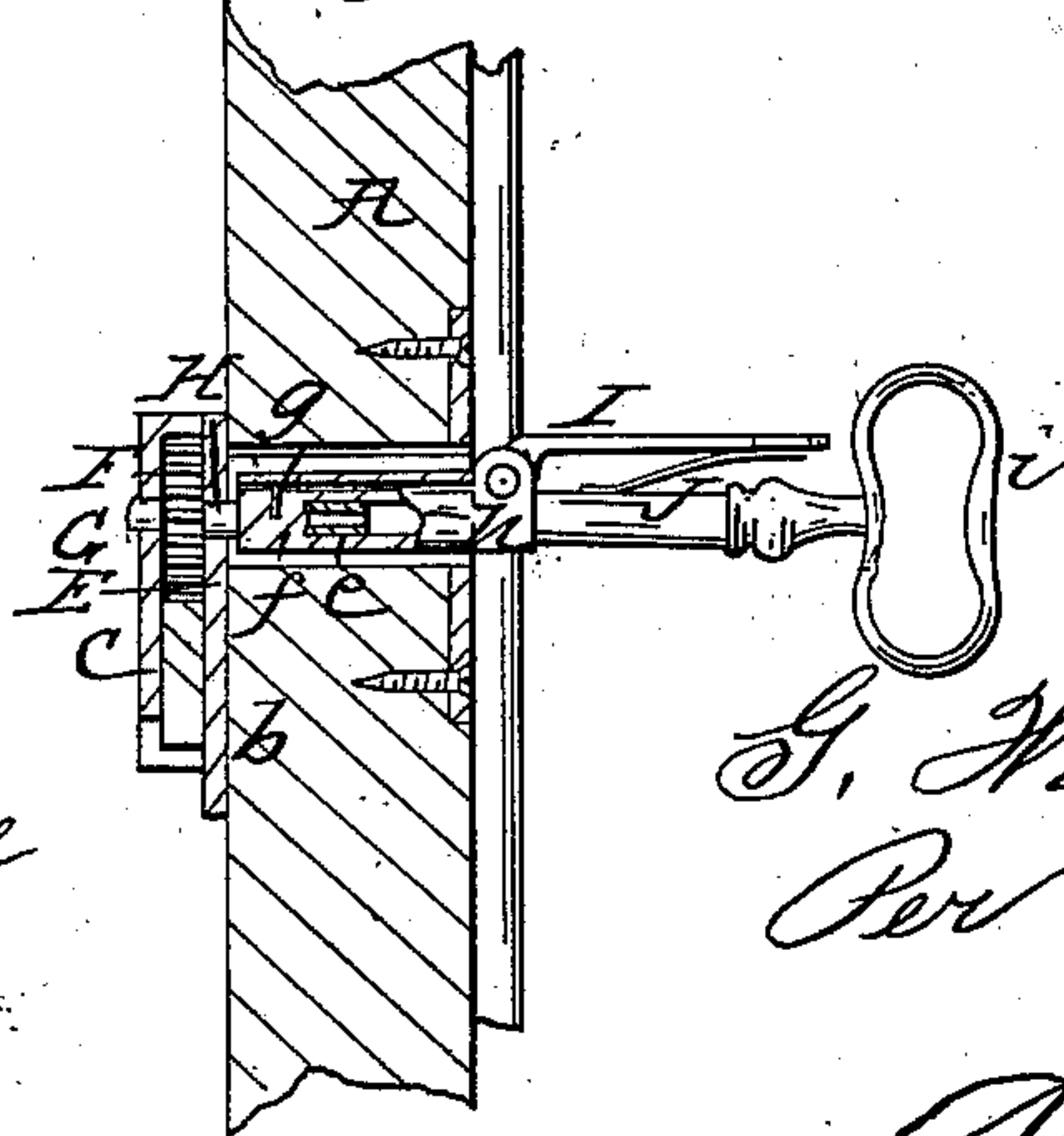
*N<sup>o</sup> 79,879.*

*Patented July 14, 1868.*

*Fig. 1*



*Fig. 2*



*Witnesses:*

*Thos. Insche  
Wm. Freeman*

*Inventor:*

*G. Nashburn  
Per Munn & Co  
Attorneys*

# United States Patent Office.

GEORGE WASHBURN, OF NEW YORK, N. Y.

*Letters Patent No. 79,879, dated July 14, 1868; antedated June 27, 1868.*

## IMPROVED LOCK-BOLT:

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, GEORGE WASHBURN, of the city, county, and State of New York, have invented a new and improved Lock-Bolt; and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvement, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim, and desire to have secured to me by Letters Patent.

This invention consists in applying a locking-mechanism to a slide-bolt in such a manner that the bolt may be operated by a key from the outer side of the door.

The invention is designed to supersede the ordinary key-latches and similar fastening now applied to doors, and which are very unreliable on account of their liability to get out of repair, and the facility with which they may be picked and illegitimately opened.

In the accompanying sheet of drawings—

Figure 1 is a view of my invention applied to a door.

Figure 2, a transverse section of the same, taken in the line *x x*.

Similar letters of reference indicate like parts.

A represents a door, and B the casing or frame thereof. C is a slide-bolt, which is fitted and allowed to slide freely in guides *a*, attached to a plate *b*, the latter being secured to the inner side of the door by screws *c*.

To one of the side pieces or jambs *d* of the frame or case B of the door, a nosing, D, is secured, to receive the end of the bolt when the door is to be fastened or bolted.

In the upper edge of the bolt C there is a series of teeth which form a rack, E, into which a pinion, F, gears, the latter being enclosed by a cap, G, secured to the plate *b* by screws or otherwise.

This pinion F is provided with a shaft or axis, H, which passes through a hole in the plate *b*, and on the outer end of said shaft or axis there is placed a loose cylinder or ferrule, *e*, which is allowed to turn freely, so as to prevent the shaft or axis H, and consequently the pinion F, from being turned by the application of pliers or forceps from the outer side of the door.

In the shaft or axis H, between the pinion and thimble, there is made a hole, *f*, to receive a pin, *g*, on the inner end of a thumb-lever, I, attached to the key J, the latter being simply a tube, *h*, provided with a bow, *i*, at its outer end, as shown clearly in fig. 2. The pin *g* of the key passes through a hole in the tube *h*, and into hole *f* of the shaft or axis, when the key is inserted in the key-hole of the door, the tube *h* of the key receiving the shaft or axis.

It will be seen that the pin *g* causes a connection to be formed between the key and the shaft or axis H, which admits of the pinion F being turned by the key, the pinion moving or sliding the bolt. The arrangement is extremely simple and efficient; there are no springs to get out of order, and the bolt cannot be illegitimately operated upon from the outer side of the door.

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

1. The combination and arrangement of the slide-bolt C, provided with the rack E, the case G, pinion F, and shaft H, provided with the bolt *f* and collar *e*, all operating as described, for the purpose specified.

2. The key J, provided with the thumb-lever I, having the pin *g* attached, in combination with the shaft or arbor H of the pinion F, said shaft having the hole *f*, substantially as and for the purpose specified.

G. WASHBURN.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.