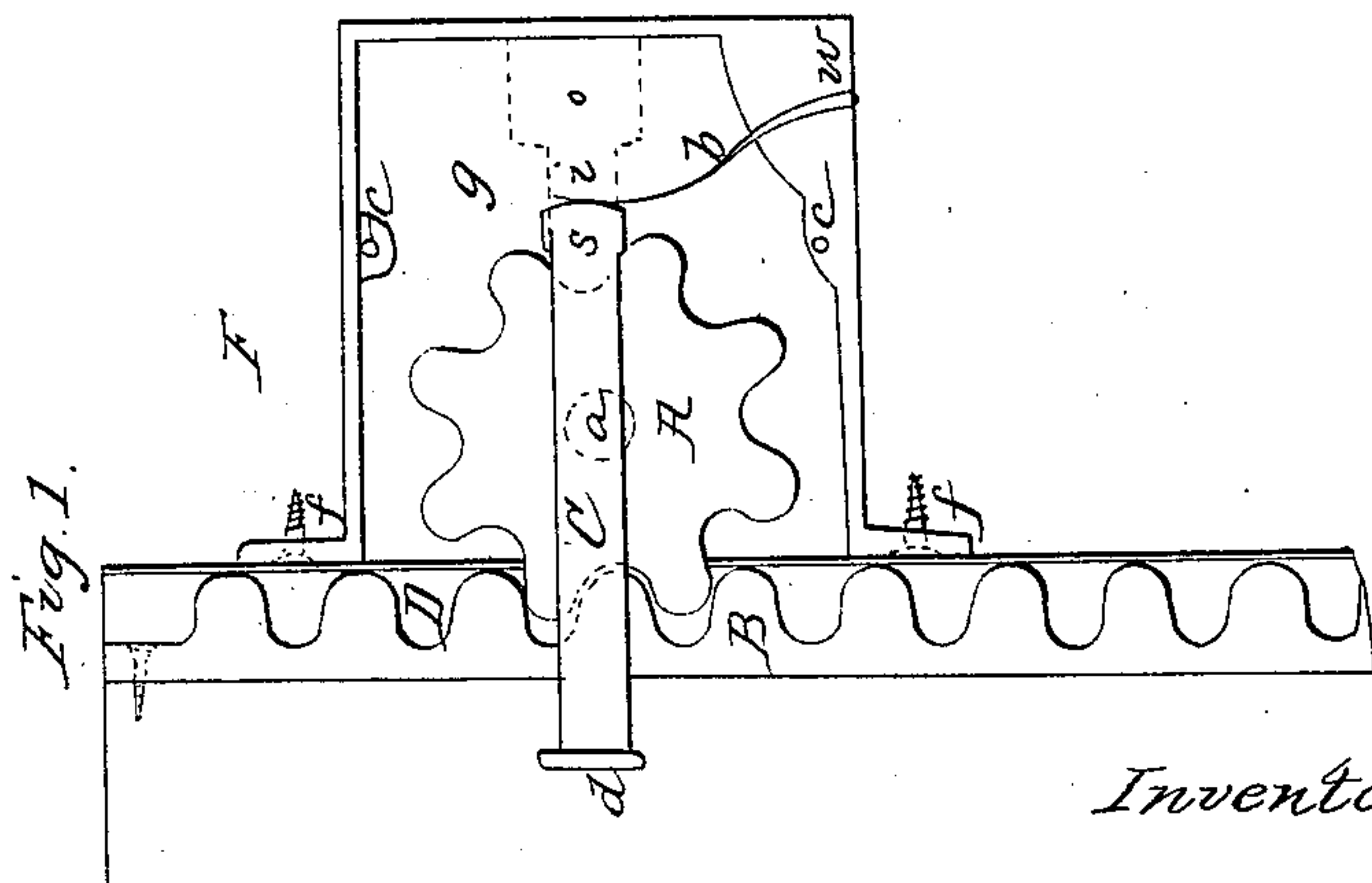
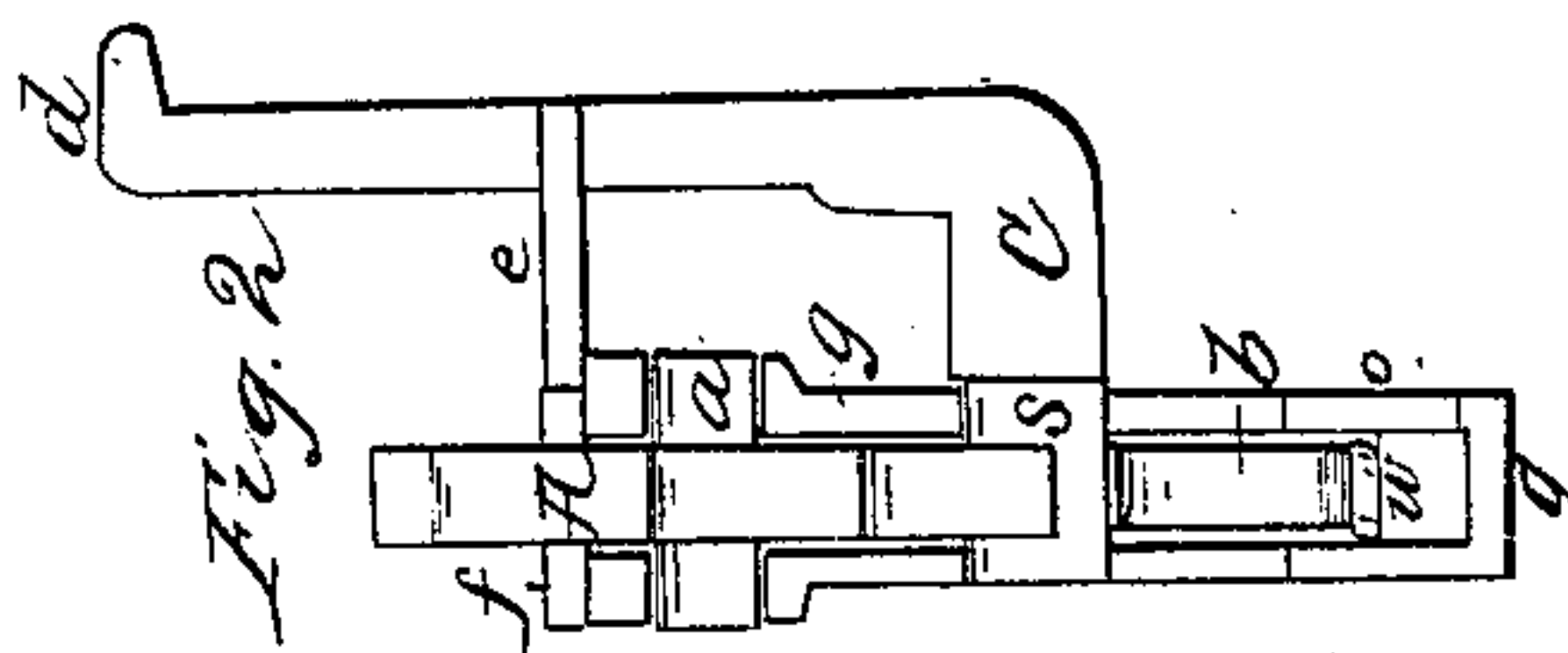
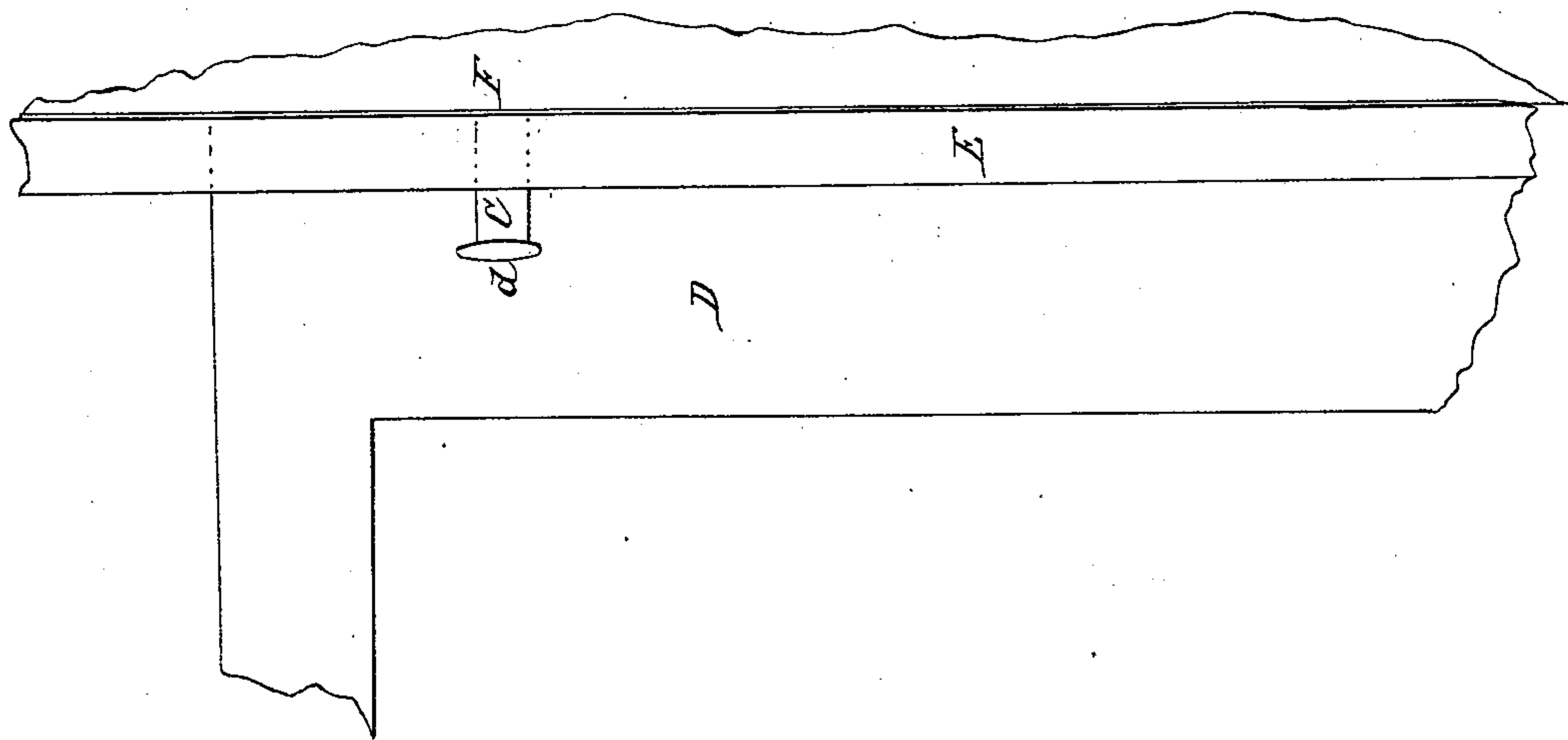


*W. Shaw,
Sash Balance.*

N^o 33,666.

Patented Nov. 5, 1861.



Witnesses:

*Alex. S. Bowley
Philo Plank*

Inventor:

William Shaw

UNITED STATES PATENT OFFICE.

WILLIAM SHAW, OF HUDSON, NEW YORK.

MODE OF SUPPORTING AND LOCKING WINDOW-SASHES.

Specification forming part of Letters Patent No. 33,666, dated November 5, 1861.

To all whom it may concern:

Be it known that I, WILLIAM SHAW, of the city of Hudson, in the county of Columbia and State of New York, have invented a new and useful Device for Supporting and Locking Window-Sashes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a longitudinal section, Fig. 2 is a transverse section, and Fig. 3 an exterior front elevation, of a portion of the window, exhibiting all that can be seen and the position of the lock when in place.

Letter A is the pinion mortised into the frame or jamb.

Letter B is the rack attached to sash.

Letter C is the spring-key.

Letter D is the window-sash.

Letter E is the stop-bead.

Letter F is the window casing or jamb.

Letter *a* is the pinion-shaft.

Letter *b* is the lever-spring.

Letters *c c* are two pins to rivet on the top of the box inclosing the lock.

Letter *d* is the head or thumb-piece of key.

Letter *e* is projecting support for key.

Letter *f* is two flanges through which the lock is fastened in the casing.

Letter *g* is metallic case or box inclosing lock.

Letter *i* is slot in cover of box to allow key to operate.

Letter *o* is larger aperture into which the slot in bottom of box opens to allow key to be taken out.

Letter *w* is wedge to fasten spring in place.

Letter *s* is the key guard or chuck to hold pinion.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I inclose or partially inclose the several parts of the lock in a small metallic case or box *g* having a cover sliding in a groove or being riveted on by means of the two rivets *c c*. For windows of ordinary size this box is about two and a half inches square by half an inch deep. Through the top side or cover is a slot *i*, in which the guard or locking end *s* of key C slides back and forth. Through the op-

posite side or bottom there is a corresponding slot. This latter opens into a larger aperture *o*, made for removing the key when necessary. The key C is grooved at its guard end or supplied with shoulders so as to slide in the slot *i* without coming out. If, however, it is pressed back to the aperture *o* (which can only be done by removing the spring *b*) it may then be withdrawn. The spring *b* is fastened in a channel or groove cast in one corner of the case *g* (which is made heavier for that purpose) by means of the wedge *w*. The stem of the key is steadied by the projection or support *e*, attached to the front margin of the bottom of the base or box *g*. The guard or locking end *s* of the key is of such length as to allow the lock to be inserted in or near the middle of the sashway or groove of the casing. The rack B, in which the pinion A, operates is let into the edge of the sash, as shown in Fig. 1, by plowing a groove therein for that purpose, and to such depth as to have the fronts or edges of the cogs flush or even with the sash on either side. The lock-case is mortised into the casing or jamb edgewise (see Fig. 1) near the top of the lower or near the bottom of the upper sash, according as the one or the other is to be locked, or both, and to such depth that the cogs of the pinion will project. This, however, is regulated by the flanges *f f* at upper and lower edge and through which the lock is fastened in the mortise, they being let in just flush or even with the jamb.

This lock is operated by placing the thumb on the knob *d* of key C and pressing it back whenever it is desired to move the sash up or down. It may perhaps more properly be said to operate when at rest and when no pressure is applied, for whenever this pressure is withdrawn the sash is locked wherever it may be, so that if it is desired to lock the lower sash at any point of elevation or the upper one at any point of depression it may be instantly and permanently effected by removing the thumb from the knob *d*. This arrangement is simple, not likely to get out of order, easily repaired if ever necessary, and more easily operated than any other in use, and, like the old-fashioned thumb spring or catch so long used for supporting sash, nothing of the device appears outside, except about half an inch of the thumb-piece or head of

the key when used on the lower sash, and nothing when used for the upper sash, as the head of the key is inserted in the parting-strip so as to be flush or even with its front edge. The rack and pinion are old devices for this purpose. I do not, therefore, claim these, nor do I claim the spring-key when used alone or as heretofore long used as a sash-supporter; but

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. Employing the spring-key C in combination with the pinion A and spring b, when the guard or stop s operates on the side of the pinion opposite to the rack B, substantially as and for the purpose set forth.

2. Constructing the case or box g substantially in the manner and for the purpose set forth.

WILLIAM SHAW.

Witnesses:

ALEX. S. ROWBY,
PHILO PLANK.