

(No Model.)

F. H. NUTTER.

CIRCUIT CHANGING DEVICE FOR BURGLAR ALARMS.

No. 388,438.

Patented Aug. 28, 1888.

Fig. 1.

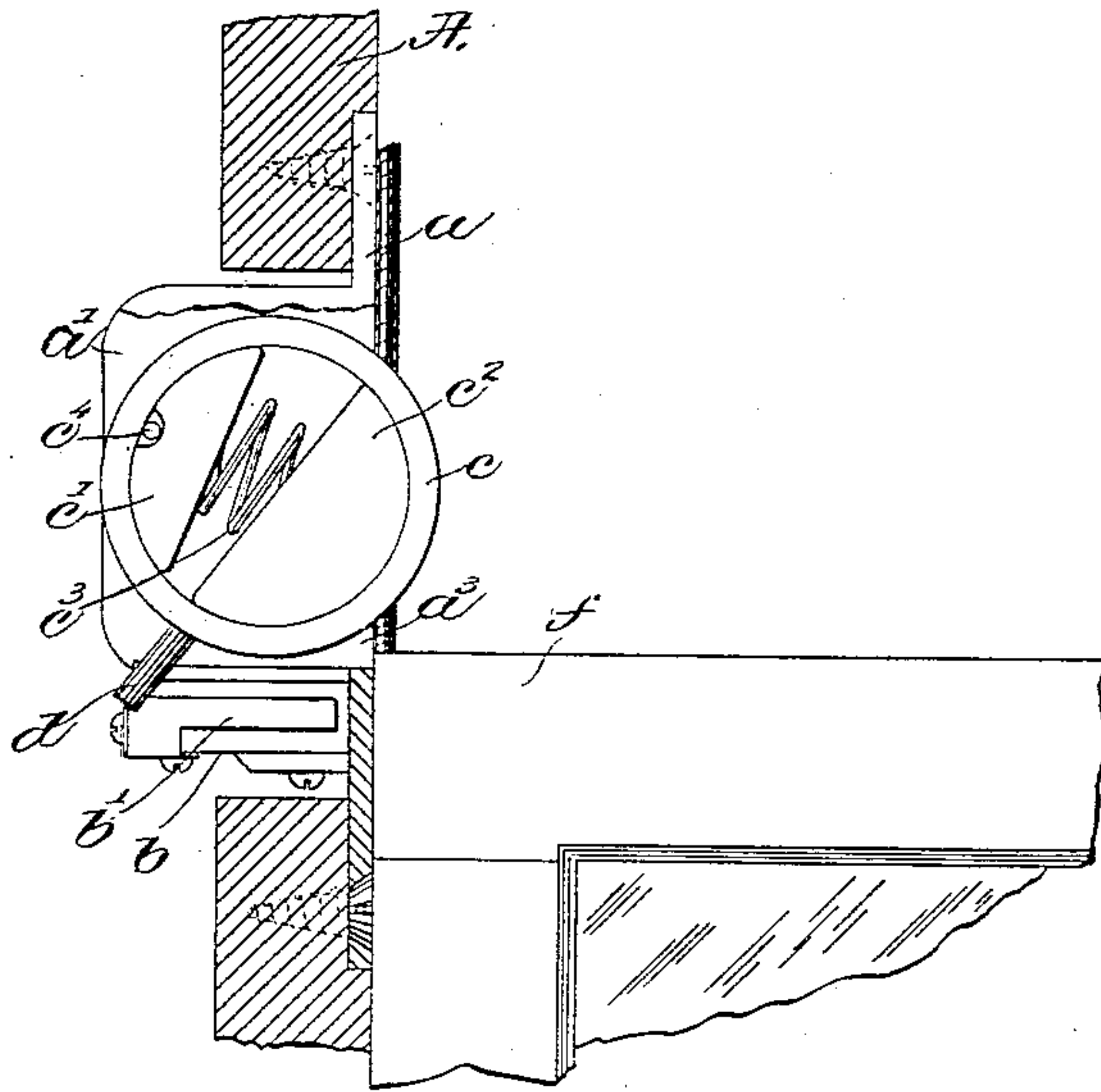
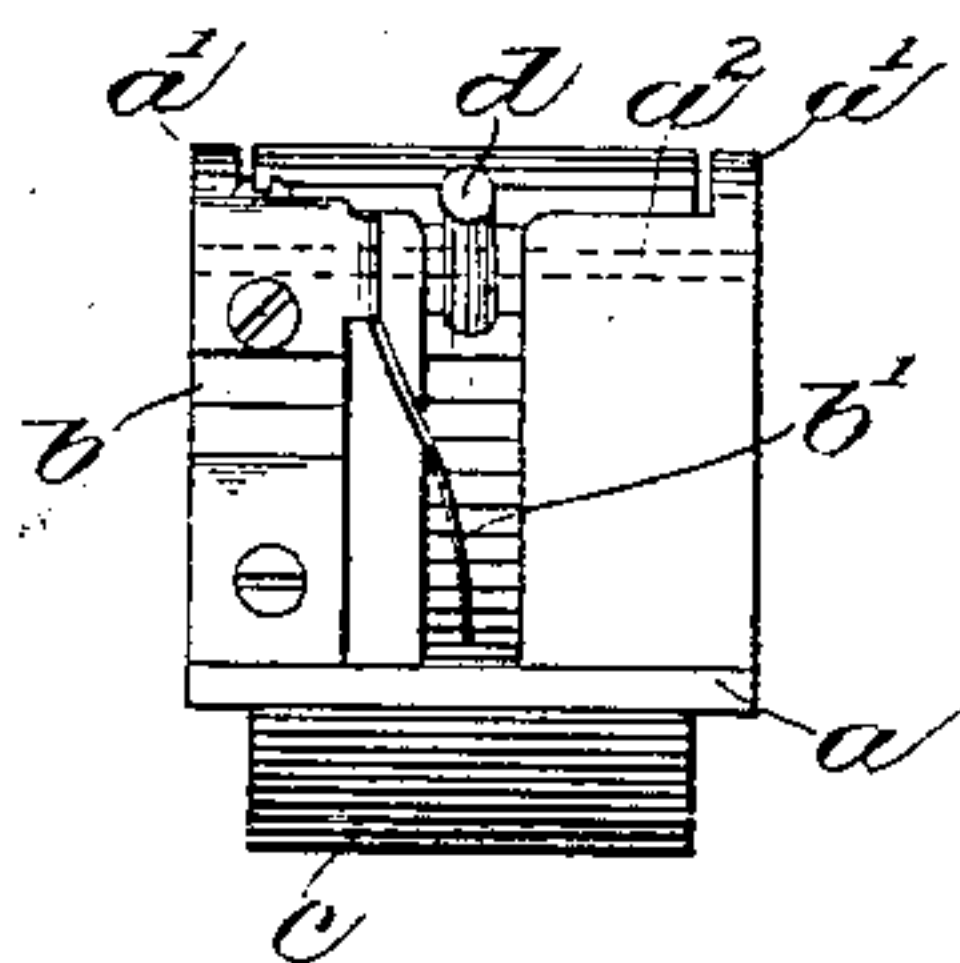


Fig. 2.



Witnesses.

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CIRCUIT-CHANGING DEVICE FOR BURGLAR-ALARMS.

SPECIFICATION forming part of Letters Patent No. 388,438, dated August 28, 1888.

Application filed June 25, 1888. Serial No. 278,174. (No model.)

To all whom it may concern:

Be it known that I, FRANK H. NUTTER, of Malden, county of Middlesex, State of Massachusetts, have invented an Improvement in Circuit-Changing Devices for Burglar-Alarms, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object to construct a circuit-changing device to be used as a burglar-alarm for windows and the like.

This invention consists in the combination, with a fixed contact-spring and a suitable support thereof, of a rotatable and laterally-movable support and a contact arm or pin carried by it.

In carrying out this invention the fixed contact spring or piece is attached to a support or frame secured in a mortise formed in one side of the window-frame, and the rotatable and laterally-movable support or frame consists of an open ring or ferrule, in which are placed two half-round blocks normally held separated one from the other by a spring. A pin fixed in the frame, which is secured in the mortise formed in the window-frame, passes through the ring or ferrule and bears against the interior of said ring and one of the said half-round blocks, said pin serving as a pivot upon which the ring or ferrule may revolve, and acting, also, as a bar or a button, so that the said half-round block may be pressed against it by pressure upon the ring at that side opposite the said pin. A pin or arm passes through the material of the ring or ferrule and enters the other half-round block, so that as the ring or ferrule is revolved the said pin or arm will move into and out of engagement with the fixed contact spring or pen.

Figure 1 shows in side elevation a circuit-changing device embodying this invention, it being shown in position in a window-frame which is shown in section. Fig. 2 is an under side view of the circuit-changing device shown in Fig. 1, it being removed from the window-frame.

The main supporting-frame consists of the plate *a*, having the rearwardly-extended side pieces, *a'*, and end pieces, *a''*. The plate *a* has a hole through it at *a'''*, and the rearwardly-extended side pieces are adapted to enter the mortise formed in the window-frame.

A. A block or support, *b*, of insulating ma-

terial is secured to the main frame or support, to which is fixed the contact spring or pen *b'*. An open ring or ferrule, *c*, is placed between the side pieces, *a'*, from the rear side, so as to protrude slightly at the opening *a'''* in the plate *a*, as shown in Fig. 1. Two half-round blocks, *c'* *c''*, are placed within the ring or ferrule *c*, being separated and held against opposite sides of the said ring or ferrule by a spiral spring, *c'''*. A pin, *c''''*, is fixed into the side plates, *a'*, it passing through the open ring or ferrule *c* between the ferrule and the block *c'*. This pin *c''''* is arranged, as shown, eccentric to the axis of rotation of the ring or ferrule. Another pin or arm, *d*, which serves as the contact pin or arm, passes through a hole bored in the ring or ferrule *c* and into the block *c''*. This pin or arm *d* is adapted to be moved as the ring or ferrule rotates into and out of engagement with the contact spring or pen *b'*. The window-sash *f*, as it is raised and lowered, bears against and passes over the protruding ring or ferrule, turning it by friction, so that the pin *d* will engage the contact-pen *b'*, and also moving it laterally to permit the sash to pass by, the spring *c'''* being compressed and the blocks *c'* *c''* approaching each other at such time.

By this construction of circuit-changing device all the working parts, including the spring, are protected and yet are easily accessible. The device is self-adjusting, and in operation a frictional or rubbing contact is obtained.

I claim—

1. In a circuit changing device for burglar-alarms, the fixed contact-spring and its support, combined with the open ring or ferrule, having within it two independently-movable spring-controlled blocks, *c'* *c''*, and the pin *c''''*, upon which the said ring or ferrule moves, substantially as described.

2. The ring or ferrule *c*, and the blocks *c'* and *c''*, placed therein and normally held separated by the spring *c'''*, combined with the pin *c''''*, upon which the ring or ferrule moves eccentrically on the main frame, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK H. NUTTER.

Witnesses:

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