

(No Model.)

G. ARTER.  
BURGLAR ALARM.

No. 411,632.

Patented Sept. 24, 1889.

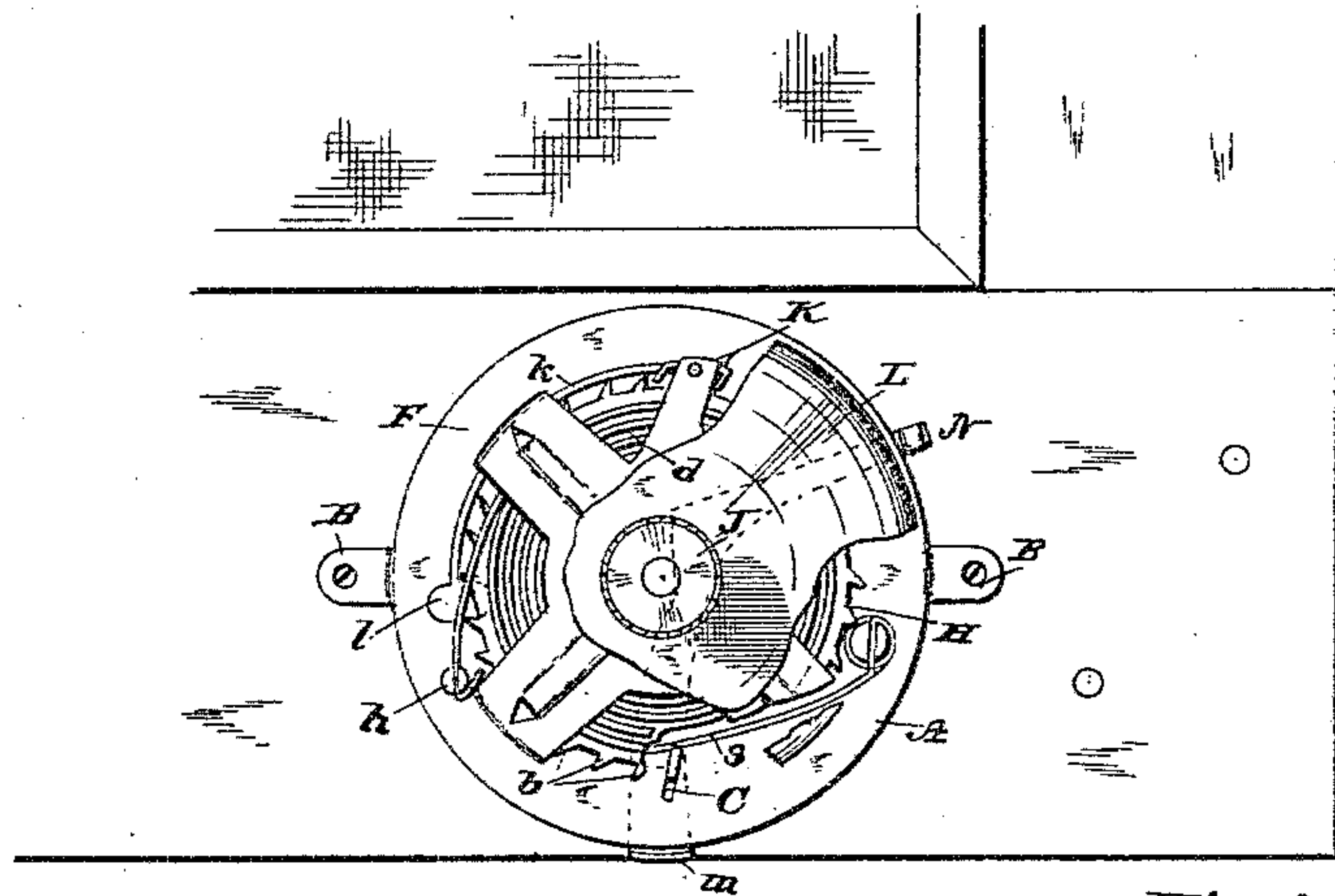


Fig. 3.

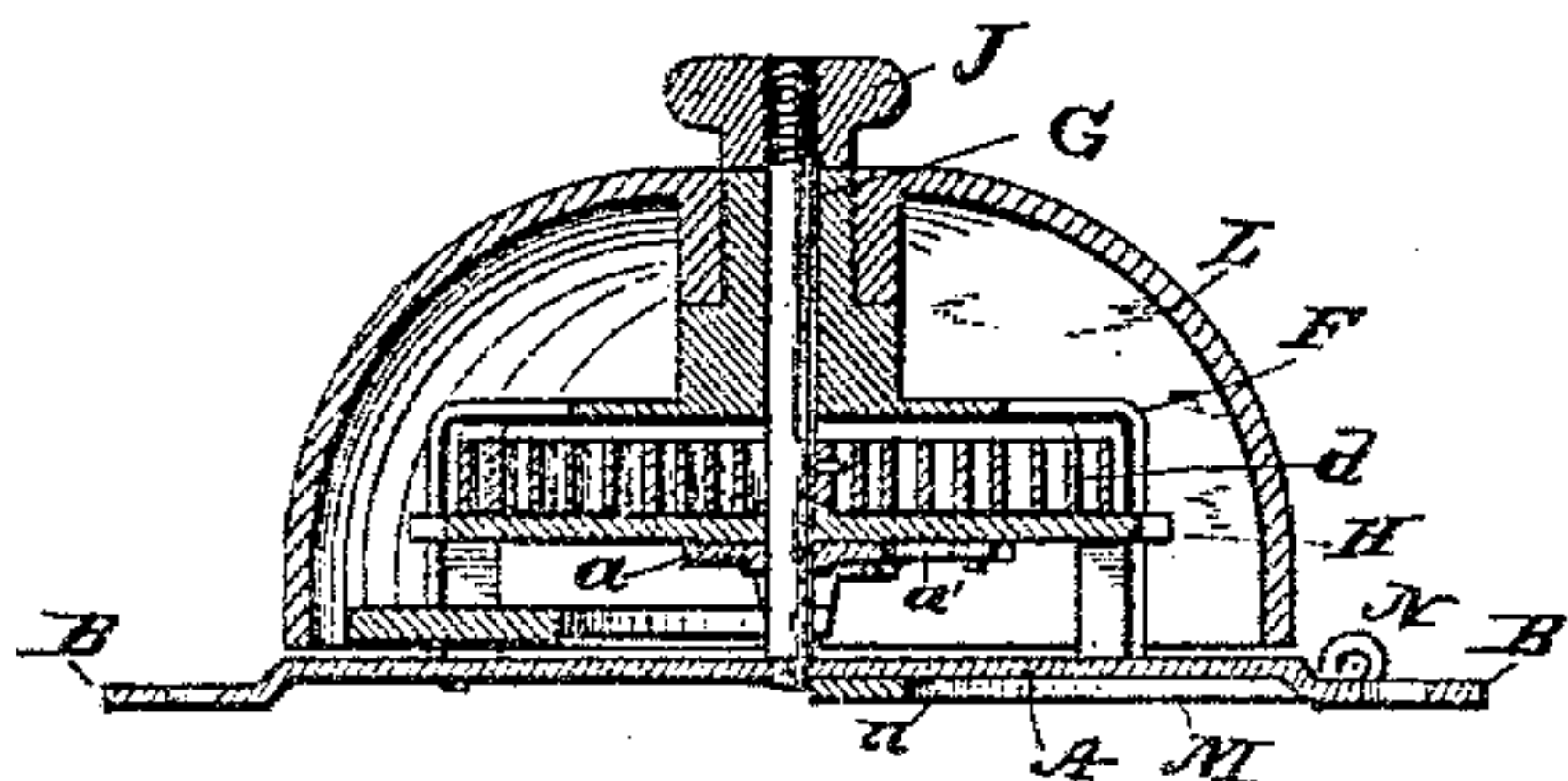


Fig. 2.

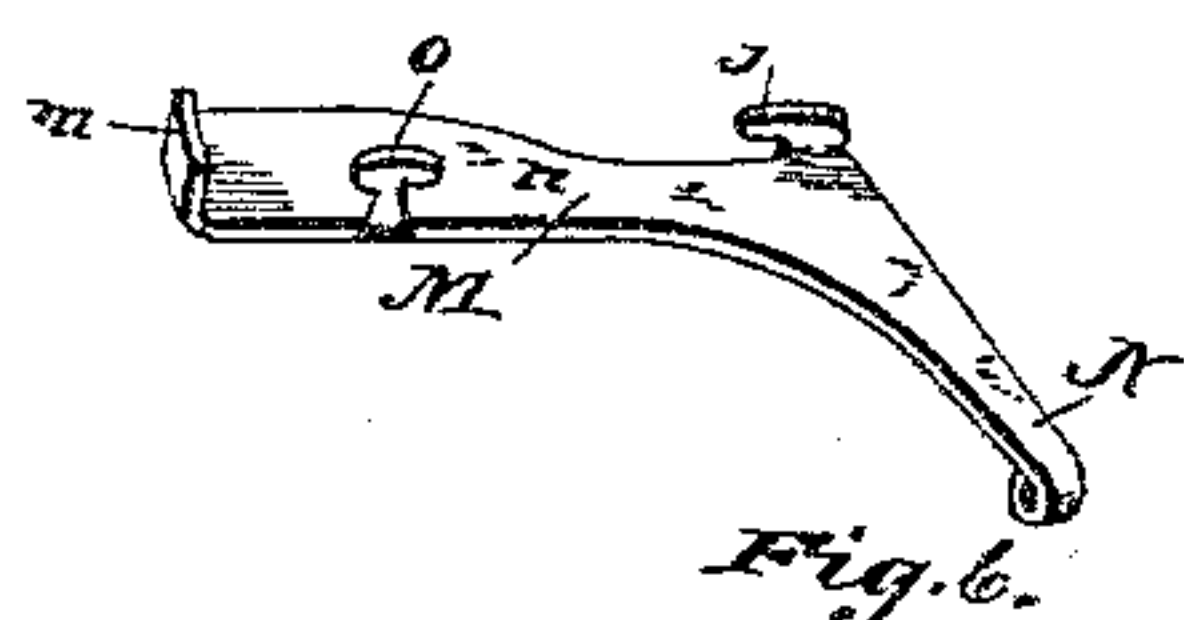


Fig. 6.

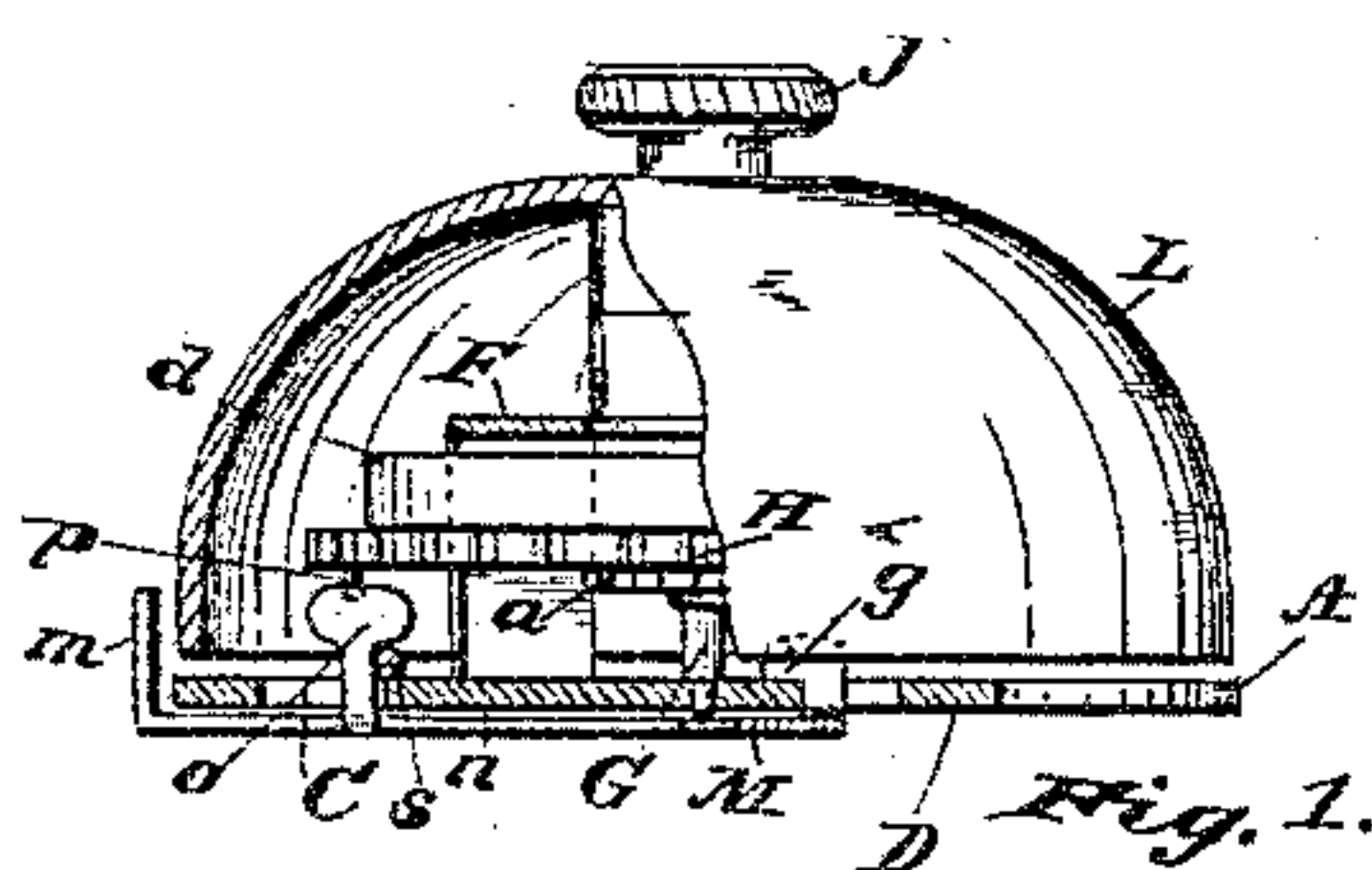


Fig. 1.

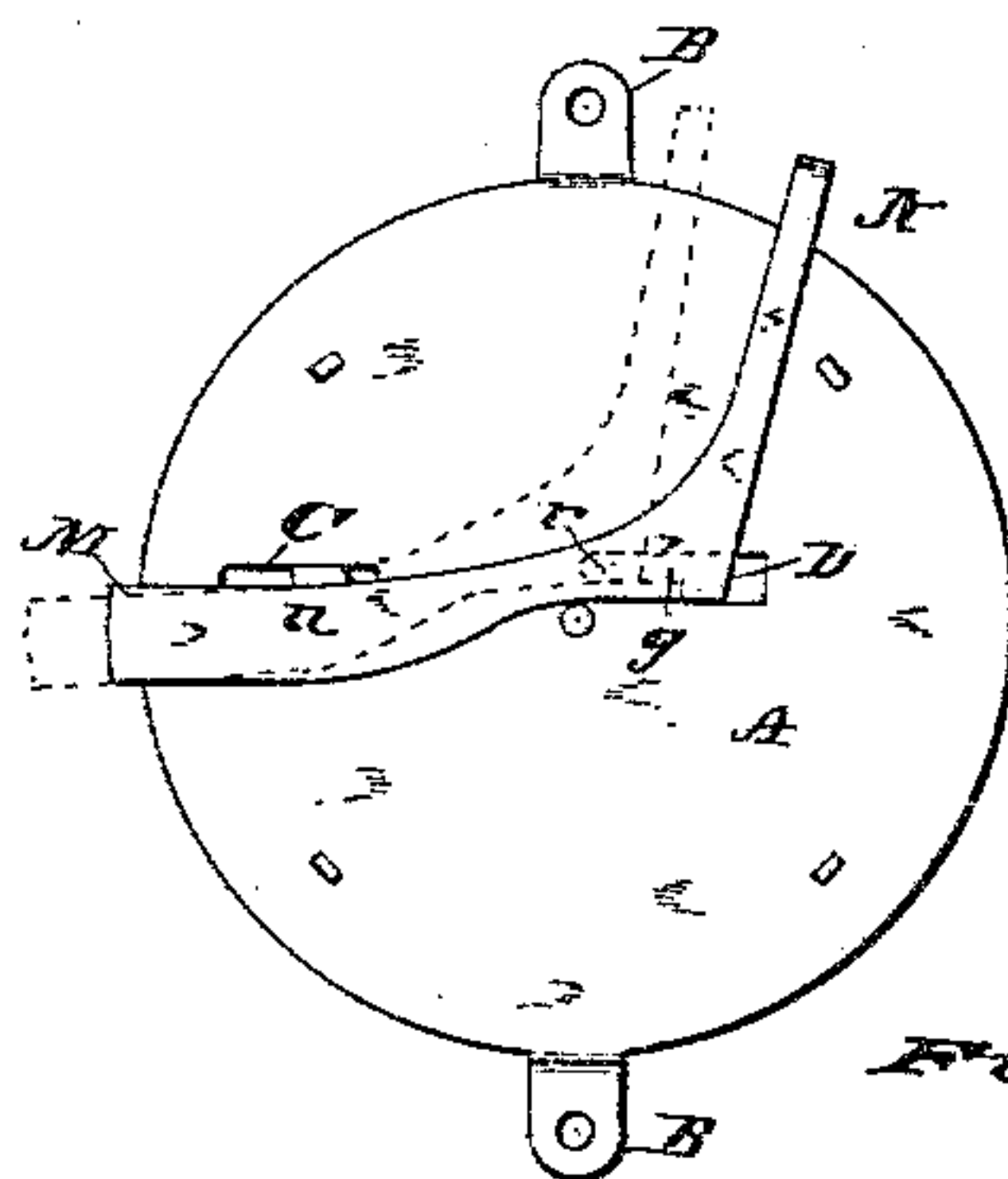


Fig. 4.

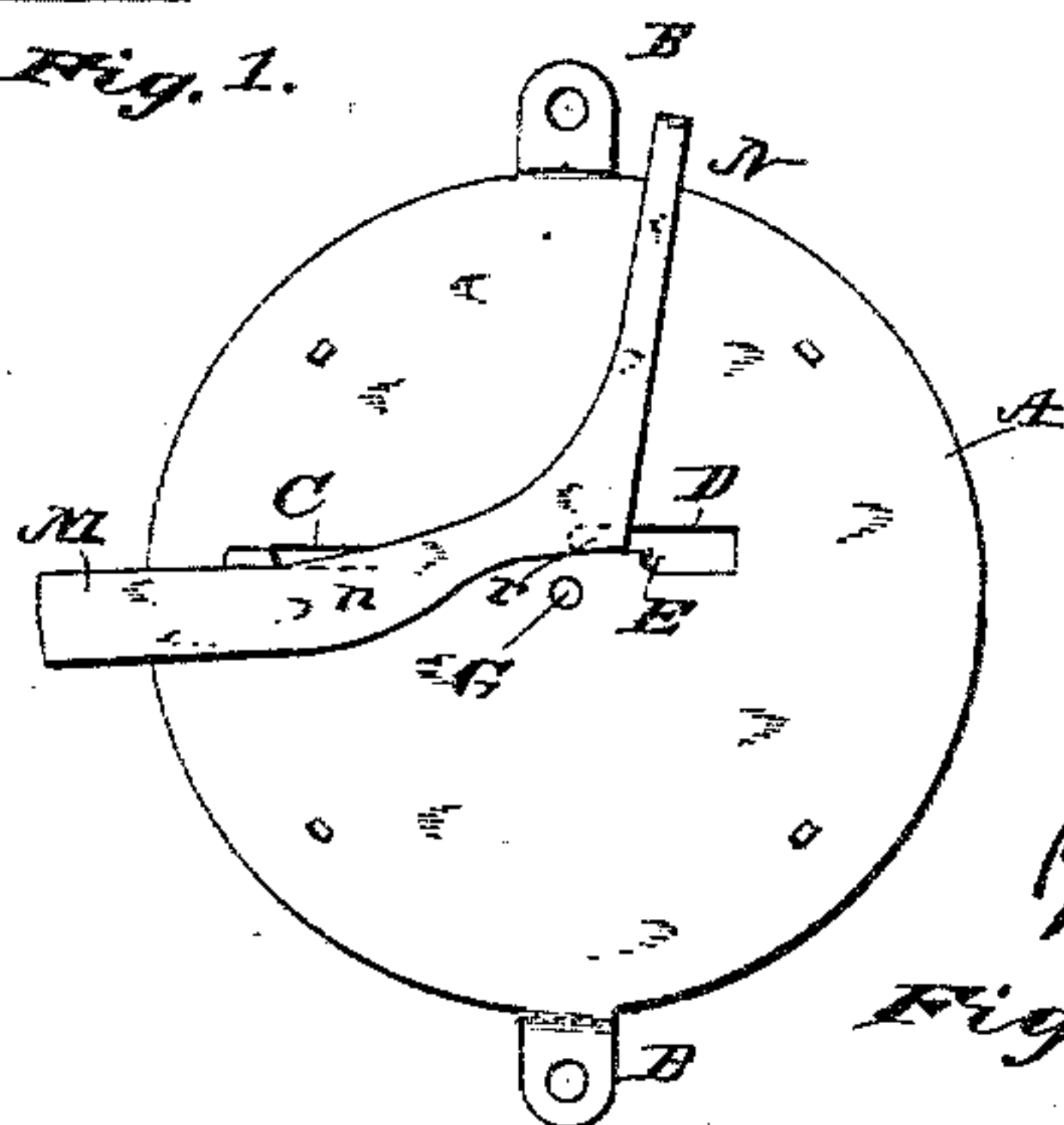


Fig. 5.

Witnesses

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# UNITED STATES PATENT OFFICE.

GEORGE ARTER, OF CLEVELAND, OHIO.

## BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 411,632, dated September 24, 1889.

Application filed March 25, 1889. Serial No. 304,713. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ARTER, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, State of Ohio, have invented a new and useful Improvement in Burglar-Alarms, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to an improvement in burglar-alarms, more particularly to the alarm patented to A. C. Tonner, of Canton, Ohio, bearing number 338,319, and date May 23, 1886, consisting of a base plate or frame, a gong, a hammer, escapement mechanism, a spring to actuate the same, and a locking-bar.

The object of this invention is to provide improved devices for locking and releasing the escapement-movement and for winding the actuating-spring.

With these ends in view my invention relates to certain features of construction and combinations of parts, as hereinafter described, and set forth in the claims.

Figure 1 is a side elevation of a burglar-alarm illustrating my invention, (part of bell removed;) Fig. 2, a vertical sectional view; Fig. 3, a plan view, (part of bell removed;) Fig. 4, a plan view of base-plate with locking-bolt in position to lock the escapement mechanism. Fig. 5 is a similar view of same parts, showing the bolt released to allow the escapement to sound the alarm; and Fig. 6 is a perspective of the locking-bolt.

In the drawings, A represents a base-plate, which may be made of any suitable material, and is provided with downwardly and outwardly projected leg portions B and elongated apertures, as C and D, the latter enlarged at one of its ends to form a shoulder E. To the base A is secured a spider-frame F, by which the gear is supported. The center post G is substantially of the form shown in Fig. 2, and turns in suitable bearings in the base-plate A and the spider F. To this post is secured a ratchet-wheel *a*, as shown in Figs. 1 and 2, and on the post G is loosely mounted a wheel, as H, having peripheral teeth *b*, as shown in Fig. 3, and to the under side of said wheel is pivotally secured a

spring-actuated pawl *a'*, adapted to engage the rack *a*.

One end of an actuating-spring *d* is secured to the post G, and the other end to a post *h*, as shown in Figs. 2 and 3, and to the upper end of post G is secured a button-head portion J, the object of which is to wind up the spring H about the post G, thus forming what is known as a "stem-winder," and dispensing with a loose key. The escapement K, as shown in Fig. 3, is arranged to engage the teeth *b* of wheel H. To the escapement is a hammer-arm *k*, having in its free end a hammer *l*, by which the alarm is sounded on the bell L; and to arrest the movement of the escapement and the action of the hammer a spring-actuated locking-bolt M is provided, which may be made in various forms; but for the purpose of this case I have shown one form in Fig. 6, the head *m* of the bolt being turned at right angles with body *n*, said body having a T-shaped portion, as *o*, that is passed through the perforation C, as shown in Fig. 1, the neck portion parallel with the side walls of the perforation, and the head portion turned to cross the perforation to hold the front portion of the bolt in position, and when the bolt is pressed in, as shown in Fig. 1, to engage a pin, as *p*, projected downwardly from the hammer-actuating wheel H, by which engagement the rotary movement of the wheel H will be arrested. Said bolt is also provided with a hook portion, as *g*, turned up from the body of the bolt, which is passed through the narrow portion *r* of the slot D, and turned over the edge of the plate A, as shown in Fig. 1, by which the rear portion of the bolt is loosely secured to the plate. The bolt is also provided with a handle, as N, which may be of the form shown in Fig. 6, thrown off obliquely to the body portion of the bolt, or, if preferred or occasion require, the handle portion may be projected rearwardly, on a line parallel with the body; and, if preferred, the perforation D may be curved into a semicircle, as the desired movement and object are to allow the bolt a longitudinal and transverse movement, to be free at one end of the slot to move longitudinally over the plate A, and to be locked to said plate at the other end against such movement.



By the use of the handle portion N the bolt may be drawn into a locking engagement with the plate, the T portion of the bolt M engaging the pin on wheel H to arrest the movement thereof, the neck of the hook *g* resting on the shoulder E, and when thrown out engagement by the said handle the bolt will be thrown forward by the spring *s* against the door or window-jamb, and when released by opening the door or raising the window-sash, if the alarm is put to such use, the spring *s* will throw the bolt forward, disengaging the upright portion *o* from the pin *p*, to allow the wheel H to rotate and sound the alarm. The spring *s* is so situated that the energy thereof is exerted to throw the bolt longitudinally at its front portion and transversely at its rear portion.

I would not limit myself to the precise form of locking bolt or plate perforation, as the same results may be attained by other forms or shapes; but

What I do claim, and desire to secure by Letters Patent, is—

1. The combination, in an alarm-sounder, of the plate A, a bolt M, loosely secured thereto, having its ends *m* and N projected outside of the diameter of said plate, its front end adapted to rest against an opposing ob-

ject, the rear end portion N to form a handle by which said portion of the bolt may be thrown into or out of engagement with the retaining-shoulder E, and a spring to throw the bolt longitudinally and transversely and to hold it out of engagement with the movement and the shoulder, substantially as described, and for the purpose set forth.

2. The combination, in an alarm, of the plate A, having a perforation C on one side of its central portion and a perforation D on the other side, diametrically opposite, or thereabout, the latter having a retaining-shoulder E, and a bolt M, having its ends *m* and N projected outside of the diameter of the plate A, said bolt adapted at its front portion for a longitudinal movement and at its rear portion for longitudinal and transverse movement, projected portions *o* to engage the movement, and portion *g* to engage the shoulder E to hold the portion *o* in engagement with the movement, substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto set my hand this 16th day of March, A. D. 1889.

GEORGE ARTER.

Witnesses:

N. W. CHAMBERLAIN,  
W. L. HEMSTREET.