

No. 662,534.

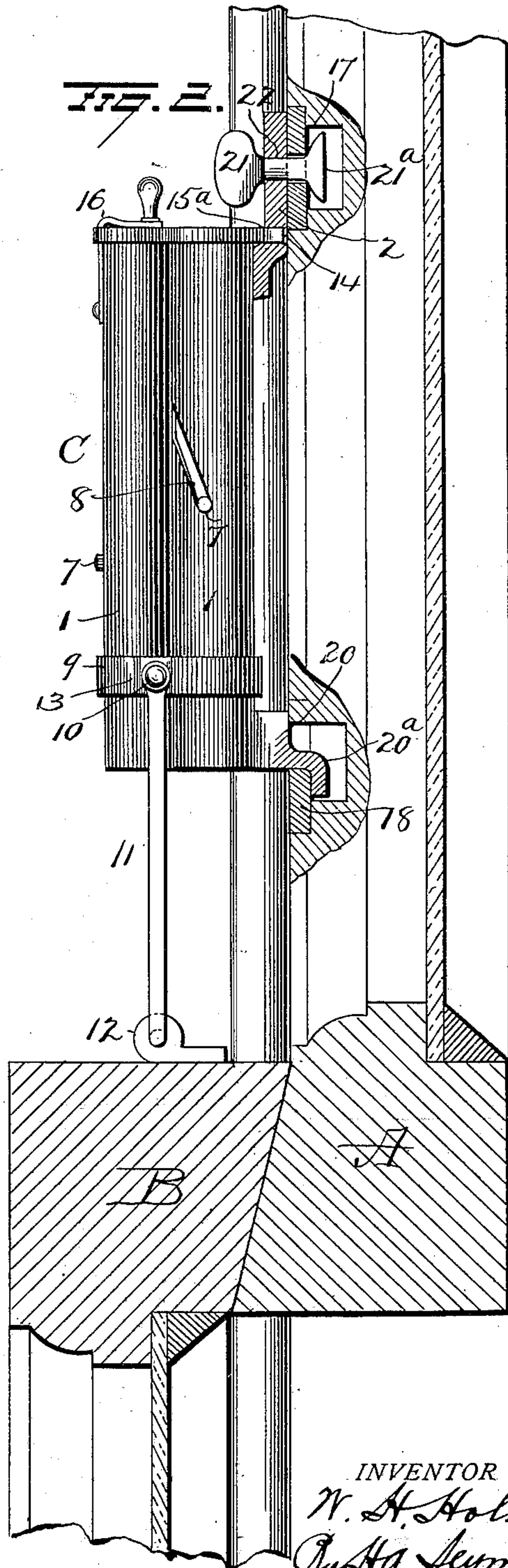
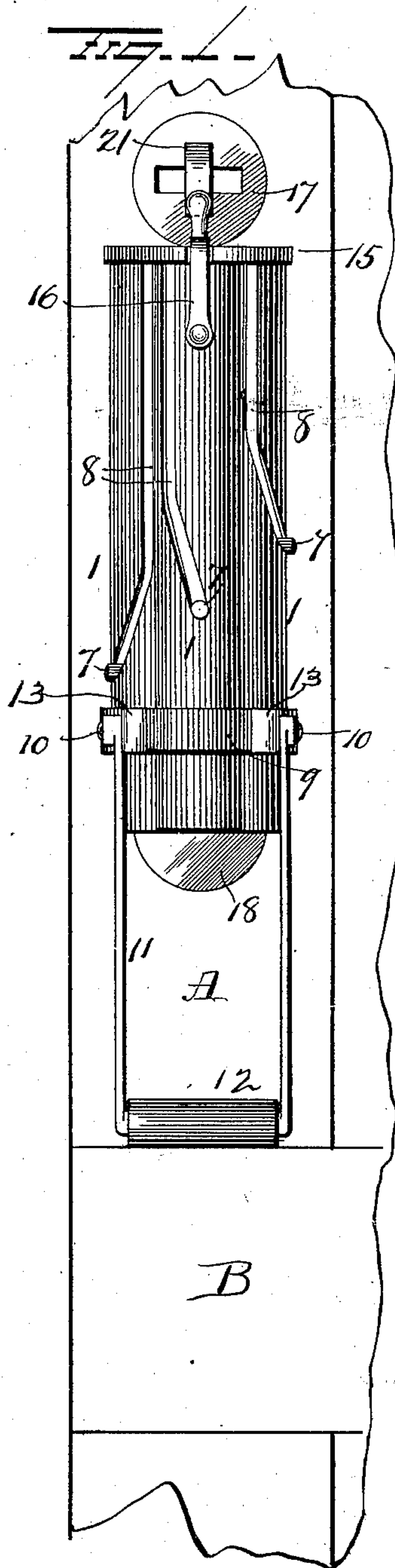
Patented Nov. 27, 1900.

W. H. HOLMES.
BURGLAR ALARM.

(Application filed Mar. 23, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES
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2 Sheets—Sheet 2.

Fig. 3—

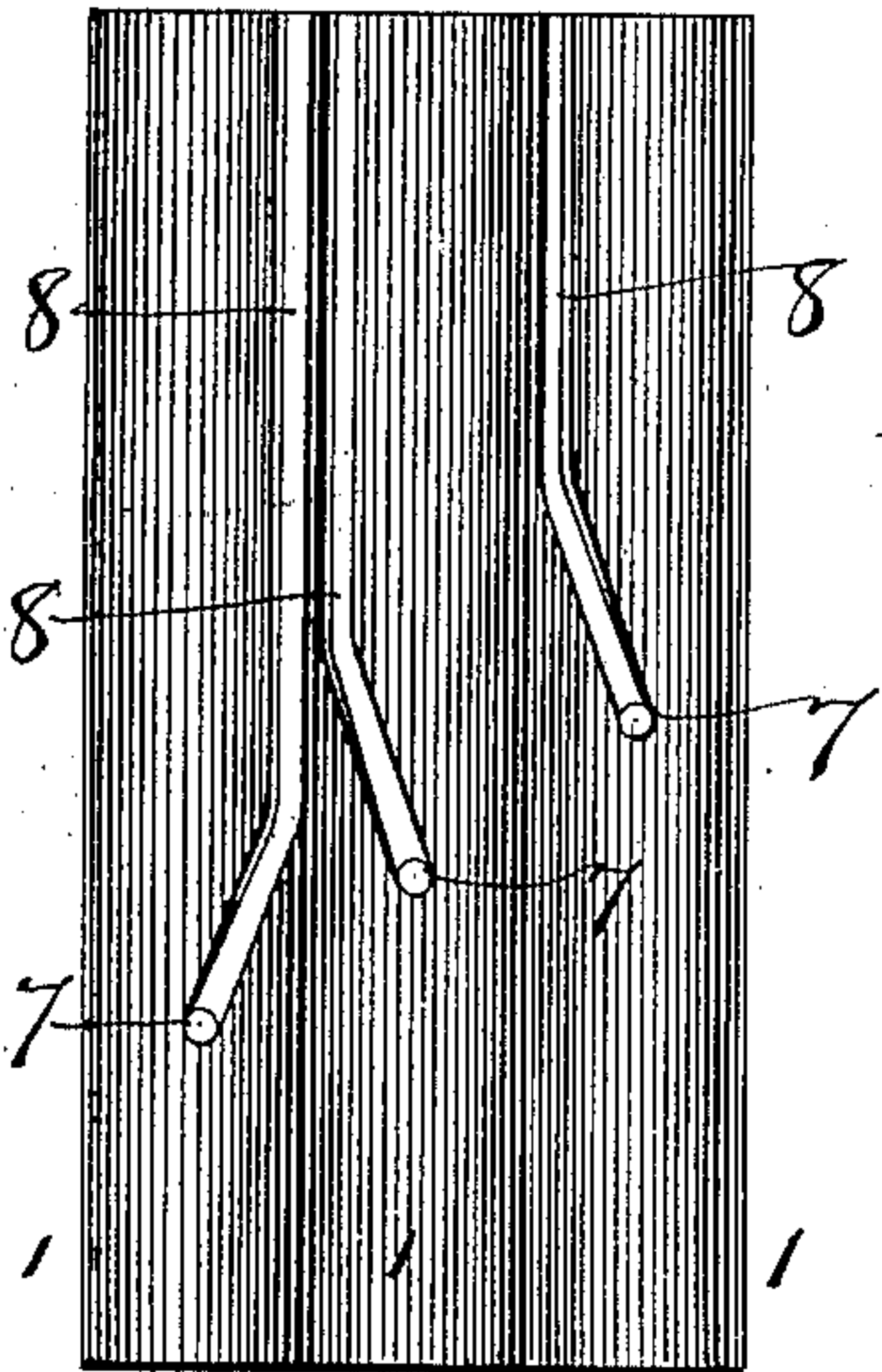


Fig. 4—

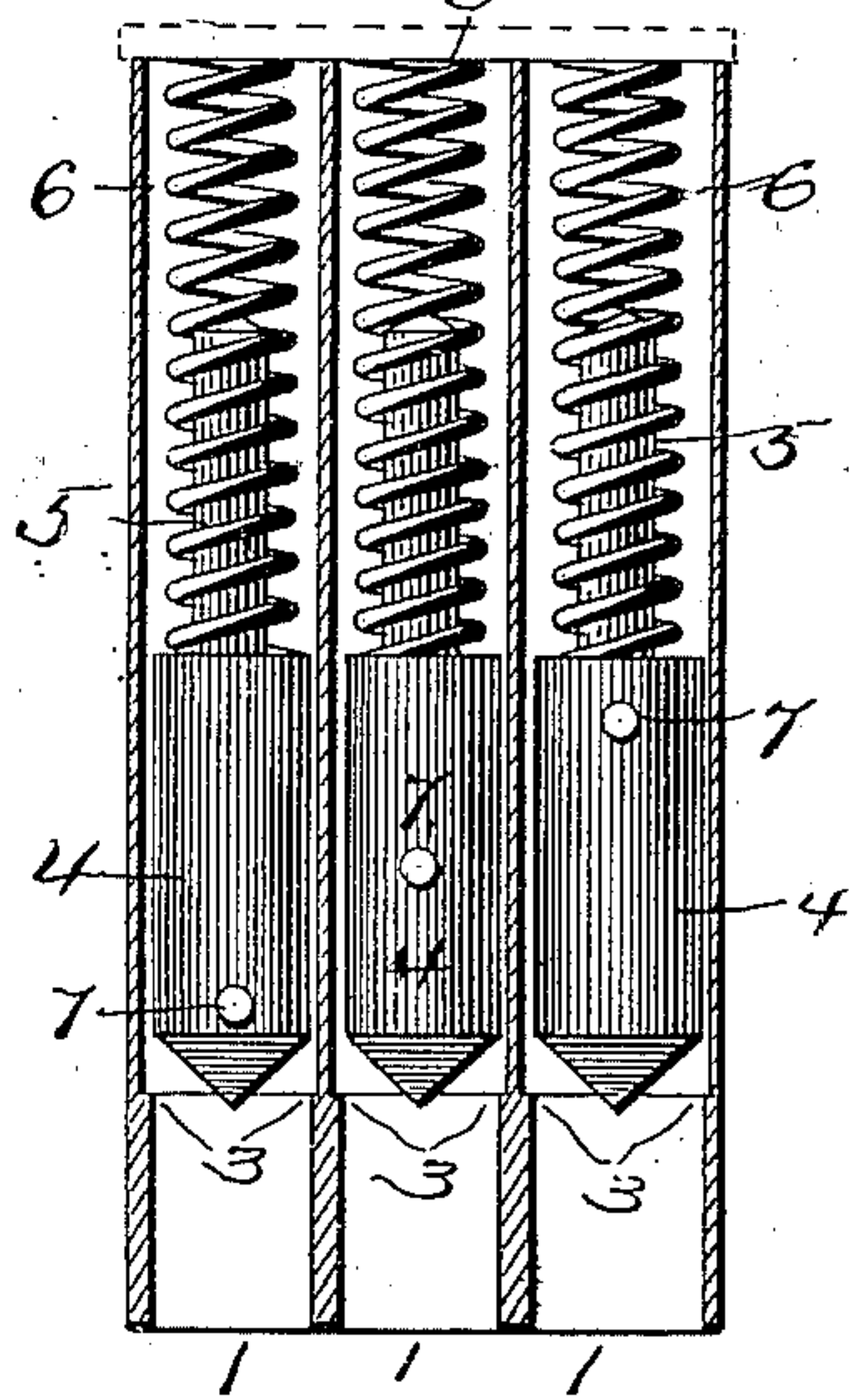


Fig. 5—

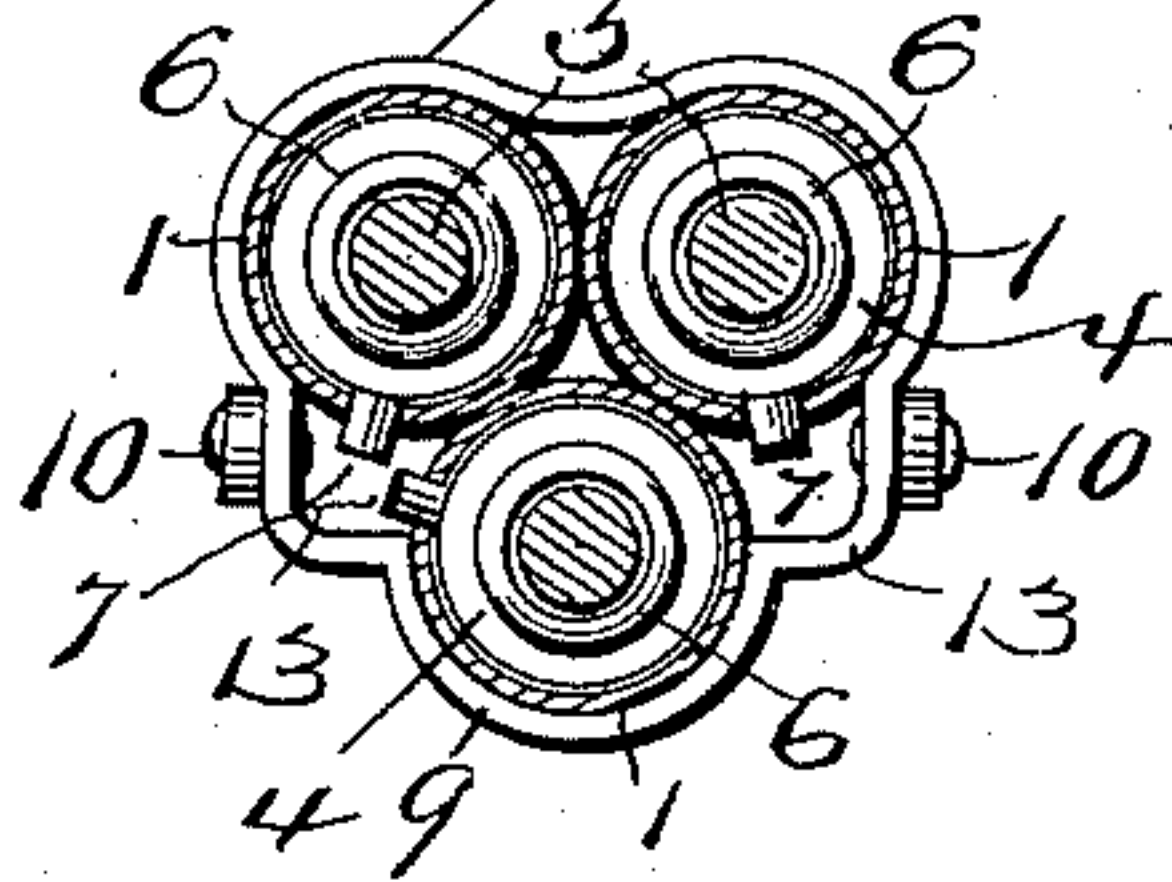


Fig. 6—

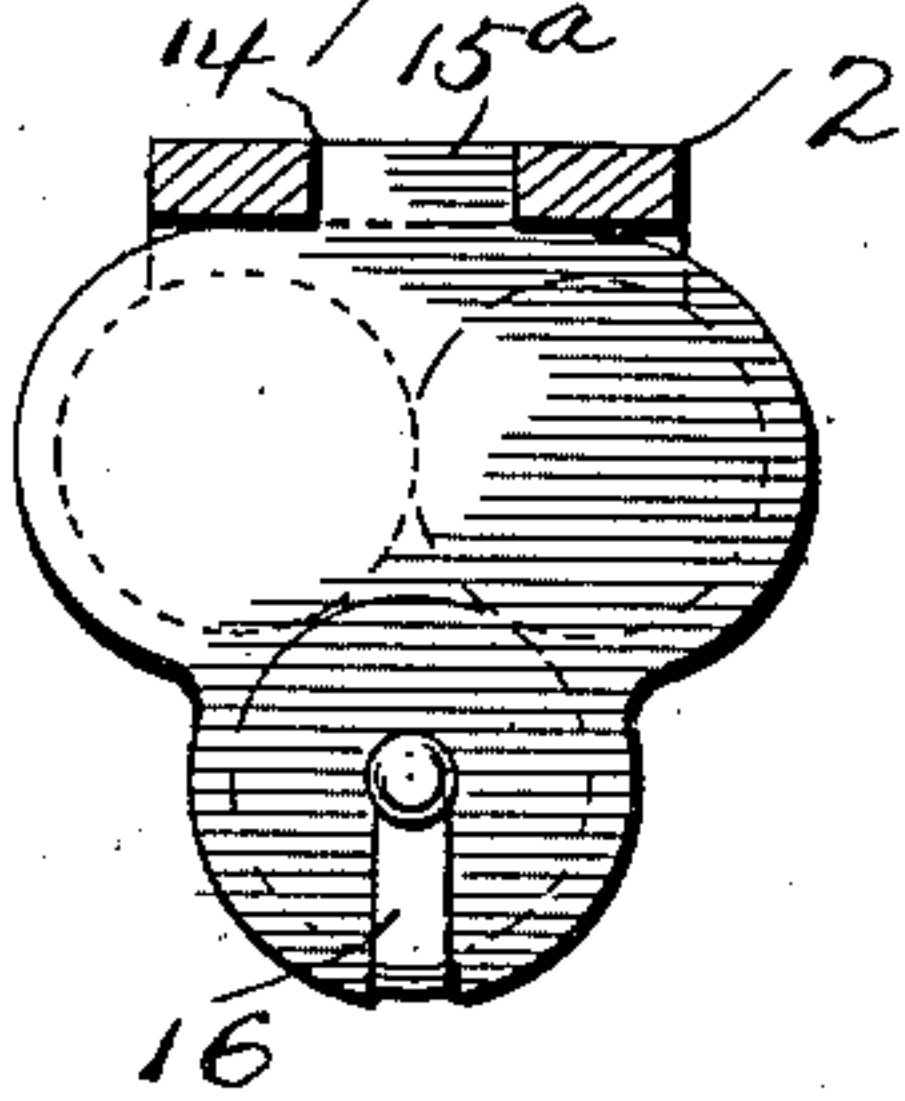


Fig. 7—

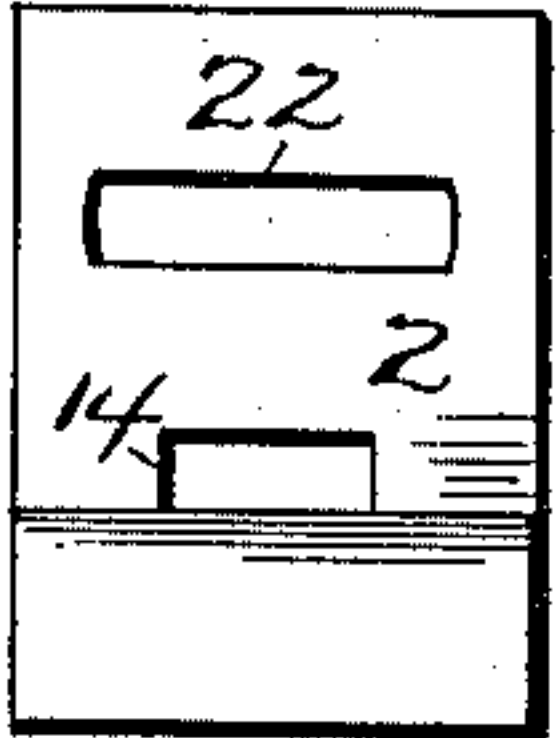


Fig. 8—

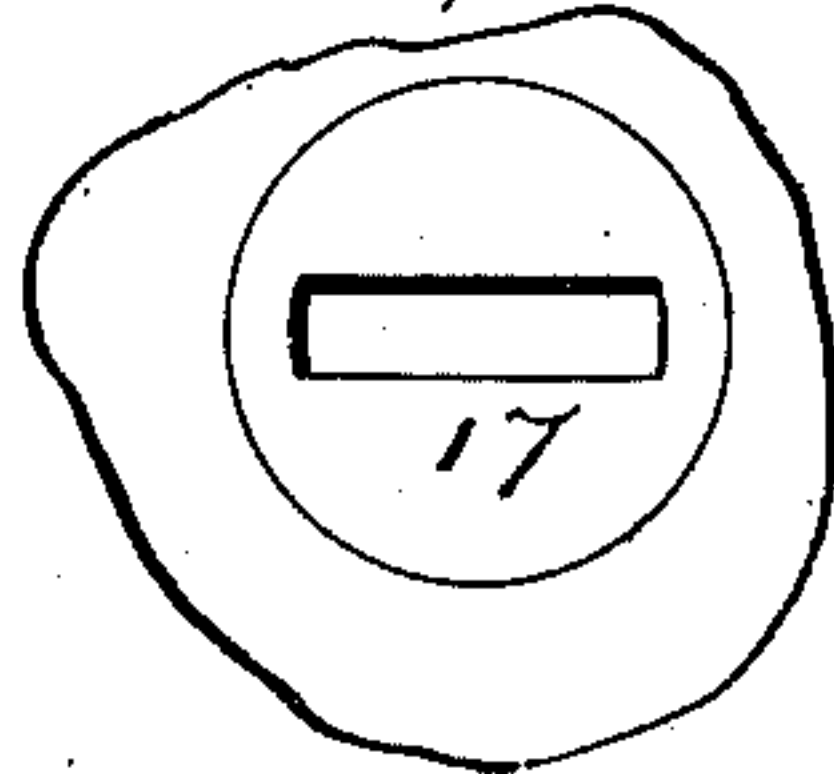
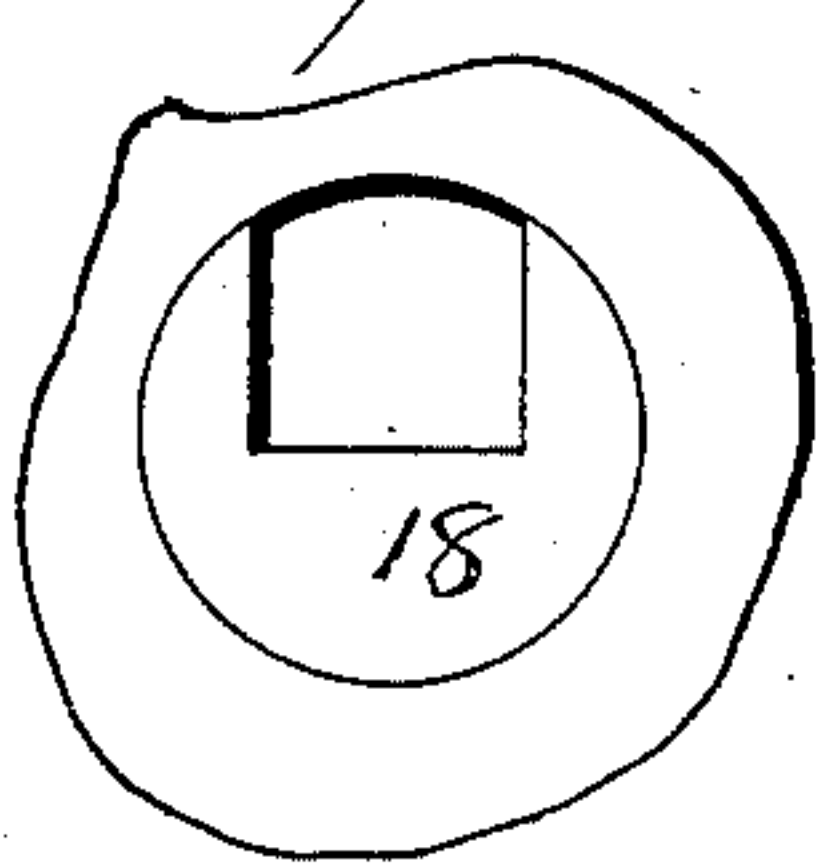


Fig. 9—



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UNITED STATES PATENT OFFICE.

WHEELER H. HOLMES, OF PITTSTON, PENNSYLVANIA.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 662,534, dated November 27, 1900.

Application filed March 23, 1900. Serial No. 9,837. (No model.)

To all whom it may concern:

Be it known that I, WHEELER H. HOLMES, a resident of Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Burglar-Alarms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in burglar-alarms, the object of the invention being to provide a device of the above-mentioned character which can be secured to a window and which will discharge several blank cartridges in quick succession when either sash is opened but a few inches.

With this object in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view illustrating my improvements attached to a window. Fig. 2 is a side view, partly in section, of the same. Fig. 3 is a view in elevation of the cylinders placed side by side. Fig. 4 is a view in section of Fig. 3. Fig. 5 is a view in horizontal section, showing the position of the band; and Figs. 6, 7, 8, and 9 are views of details of construction.

A and B represent the upper and lower sashes of a window, and C my improved burglar-alarm attached thereto. The alarm C comprises a series of cylinders 1 (preferably three) secured in triangular form, and each cylinder 1 is provided near its lower end with an internal shoulder 3 to support a blank cartridge and with a plunger 4, having a rod 5 thereon on which is mounted a coiled spring 6, adapted to force the plunger downward and explode the cartridge, as will more fully hereinafter appear. The plungers 4 are provided with lugs 7, extending through slots 8 in the cylinders, said lugs being arranged at different heights on the plungers and the slots 8 in the cylinders made of different lengths, so as to hold the plungers in proper position. A band 9 encircles the cylinders and is provided on opposite sides with lugs 10, to which are pivotally mounted the respective ends of a bail 11, and the lower end of the latter is piv-

otally connected to a bracket 12, secured to the lower sash B. The band 9 is made to conform to the contour of the nested cylinders, so as to engage the lugs 7 and raise the respective plungers, and is made at each side with an outwardly-flaring portion 13, which will when the plungers are raised to a predetermined height or, in other words, to a point where the slots 8 extend upward in a vertical line release the lugs and permit the plungers to be forced down by the springs and fire the cartridges. A plate 2 is secured to the upper end of the nested cylinders and is provided with a notch 14, into which a lug 15^a on a plate 15 projects, said plate 15 being of the desired shape and size to cover the open upper ends of the cylinders and act as an abutment for the springs, and a spring 16 is secured to one of said cylinders and is disposed against the top of the plate 15 to hold it in place.

In the upper sash A are secured two hollow casings 17 and 18, the latter provided with a suitably-shaped opening in its outer wall to receive an L-shaped lug 20^a on a block 20 at the lower end of the inner face of the cylinders, and the other casing 17 is provided in its outer wall with an elongated slot for the reception of a conical enlargement on the shank 21^a of a flat-headed button 21, revolvably supported in the casing 17. The slots 8 extend to the top of the respective cylinders, and it will be seen that when it is desired to recharge the device it is simply necessary to turn the button 21 until its head is in alignment with the slot 22 in the plate 2, when the cylinders can be swung down, the bail 11 serving as a hinge or fulcrum therefor. The plate 15 is now removed and the springs and plunger will drop out of the cylinders and permit the insertion of fresh cartridges, when the parts can be readily replaced and secured in position to the sash.

The operation of my improvements is as follows: When the lower sash is raised or the upper sash lowered, the band 9 will engage the lowest lug 7 and carry it and the plunger to which it is secured upward, and in so doing will owing to the incline of the slot 8 force the lug to one side until it is in alignment with the flaring portion 13 of the band 9, which will permit the lug to escape and the plunger will be forced downward with

sufficient power to explode the cartridge. Each lug will be engaged and the cartridges exploded in rapid succession, thus effectually sounding an alarm and frightening the burglar away, and it will be seen that when the last plunger is operated the lower sash will engage the cylinders and prevent any upward movement of the sash, thus serving as a lock to prevent any hasty plundering of the premises before the inmates can answer to the alarm.

My improvements can also be secured to a door, and various other slight changes might be resorted to in the general form and arrangement of these several parts described without departing from the spirit and scope of my invention, and hence I would have it understood that I do not wish to limit myself to the precise details set forth, but consider myself at liberty to make such slight changes and alterations as fairly fall within the spirit and scope of my invention.

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

1. A burglar-alarm comprising a series of cylinders, a plunger in each cylinder, means for supporting a cartridge in each cylinder, springs for forcing the plungers against the cartridges and a sliding collar embracing said cylinders and constructed and arranged to compress the springs and then release the plungers successively when the collar is slid on the cylinders.

2. The combination with a cylinder having a slot therein and means in said cylinder for supporting a cartridge, of a plunger in said cylinder, a spring adapted to force the plunger against the cartridge, a lug on the plunger disposed in the slot in the cylinder, and means acting to successively engage the lug and force the plunger away from the cartridge, compress the spring and release the lug when moved to a predetermined position.

3. The combination with a support adapted to be removably connected to one sash of a window, of a cylinder on said support, means in said cylinder for supporting a cartridge, a plunger in said cylinder, a spring adapted to force the plunger against the cartridge, a lug on the plunger projecting through a slot in the cylinder, a band encircling the cylinder and adapted to be connected to the other sash, said band having a flaring portion thereon to permit the lug to escape when the band is moved to force the lug and plunger away from the cartridge.

4. The combination with a cylinder adapted to support a cartridge and means for removably connecting the cylinder to a window-sash, of a plunger in said cylinder, a lug on the plunger projecting through a slot in the cylinder, a removable plate adapted to cover the open end of the cylinder, a spring disposed between the plate and plunger to force the latter against the cartridge and means connected with the other sash constructed and arranged to first withdraw the plunger and compress the spring and then release the plunger, to explode the cartridge.

5. The combination with the upper and lower sashes of a window, of a series of cartridge-carrying cylinders connected with the upper sash, devices in each of said cylinders for exploding a cartridge, and a collar connected with the lower sash and embracing the series of cylinders for operating said devices successively to explode the cartridges one after the other in rapid succession, when either sash is opened.

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

WHEELER H. HOLMES.

Witnesses:

KEN. MILLER,

EDWARD M. HOLMES.