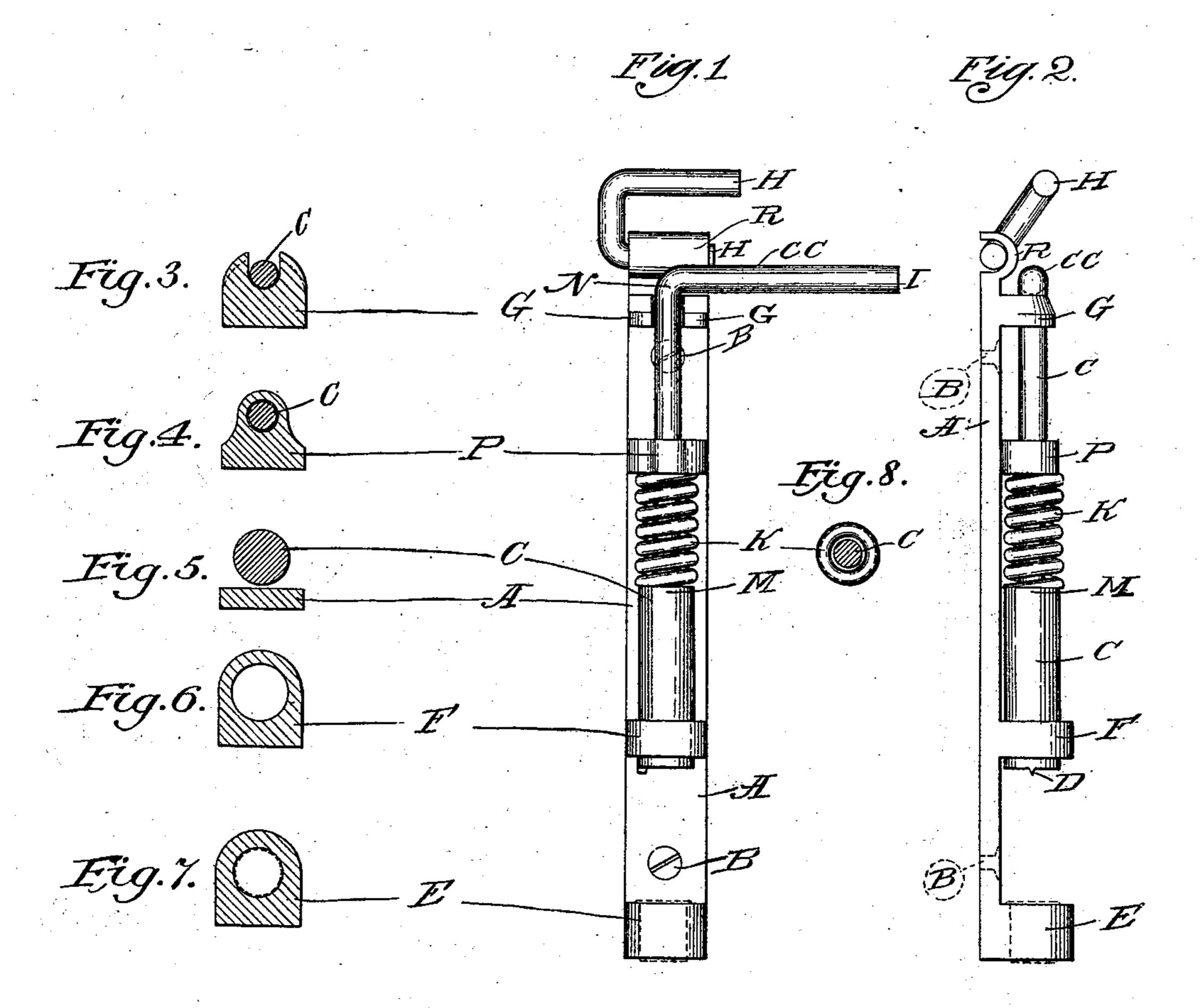
(No Model.)

## S. D. SILVER. DETONATING BURGLAR ALARM.

No. 531,428.

Patented Dec. 25, 1894.



Witnesses: Jaw Key Jone M. Selver.

Sam Douglas Silver

## United States Patent Office.

SAM DOUGLAS SILVER, OF IDAHO SPRINGS, COLORADO.

## DETONATING BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 531,428, dated December 25, 1894.

Application filed March 24, 1894. Serial No. 505,002. (No model.)

To all whom it may concern:

Be it known that I, SAM DOUGLAS SILVER, a citizen of the United States, residing at Idaho Springs, in the county of Clear Creek and State of Colorado, have invented a new and useful Burglar-Alarm, of which the following is a specification.

My invention relates to improvements in burglar alarms in which a firing-pin is secured movably in a frame which holds a cartridge; and the objects of my improvement are to provide a burglar alarm that, first, will be operated by opening or moving sash, doors or any other inclosings; second, that will be easily attached; and third, when operated will fire a cartridge that will frighten a person opening such protected inclosure and alarm others in its vicinity. I attain these objects by mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the entire machine. Fig. 2 is a side elevation of the entire machine. Figs. 3, 4, 5, 6, 7 and 8 are sections as indicated by lines drawn to corresponding parts.

Similar letters refer to similar parts throughout the several views.

The plate A and the collars or bearings E, F, P, and the lugs G, G constitute the frame 30 work of the machine. The collar E holds a cartridge or primed shell. The shaft C is surrounded by a coil spring K confined between the shoulder M and the collar or bearing P. The shaft C is bent at N to a right angle.

The guard H is preferably of metal bent substantially to form the three sides of a parallelogram and can easily be shifted from one side to the other, and is supported by friction between the hollow in the frame A at R and its backing.

B, B show two screws for securing the machine to the door frame, sash or other desired place for use.

As shown in Fig. 1 the machine is set to operate. The end of shaft C at I if moved forward by a door or window would be rotated so that the horizontal arm C C would pass between the lugs G, G when the spring K would force the firing pin against the cartridge, thereby causing an explosion.

To set the alarm the arm C C is lifted and l

turned over the lug G until the end I rests against the sash, door or other opening; and a cartridge inserted in holder E".

To prevent accidental discharge the guard H may be moved forward and down and the arm C C moved around safely without throwing the firing-pin.

I amaware that prior to my invention bur- 60 glar alarms have been made depending for their value on a hammer, a firing-pin and cartridge. I therefore do not claim such a combination broadly; but

What I do claim as my invention, and de- 65 sire to secure by Letters Patent, is—

1. In an alarm, the combination of the frame having at one end an integral perforated lug forming a cartridge holder, and also having in line with the cartridge holder, bearings for 70 the firing pin, and a fixed slotted lug which is adapted to be engaged by said pin, the firing pin situated in the aforesaid bearings and having a right-angled arm which is adapted to engage the fixed lug as described, 75 and a drive spring enveloping the pin between its bearing and operating to impart an endwise movement thereto when its arm is released, substantially as described.

2. In a burglar alarm, the combination of 80 the frame having at one end a cartridge-holder and in line therewith bearings for the firing-pin, the firing-pin located in said bearings and having a right-angled arm which is adapted to engage a fixed lug on the frame 85 by the partial rotation of the pin, and a drive-spring enveloping the pin and operating to impart an endwise movement thereto when the firing-pin arm is released, and a guard having the form of three sides of a parallelogram and loosely engaging the hooked end of the frame, substantially as described.

3. In a burglar alarm, the combination of the frame having at one end a cartridge holder, and in line therewith, bearings for the 95 firing pin, the spring-provided firing pin having an angular arm, and a guard having the form of three sides of a parallelogram and loosely engaging the hooked end of the frame, substantially as described.

SAM DOUGLAS SILVER.

Witnesses:

JAMES M. HAWKES, WM. M. SILVER.