

No. 753,244.

PATENTED MAR. 1, 1904.

C. H. DE VOLL.
BURGLAR ALARM.
APPLICATION FILED FEB. 16, 1903.

NO MODEL.

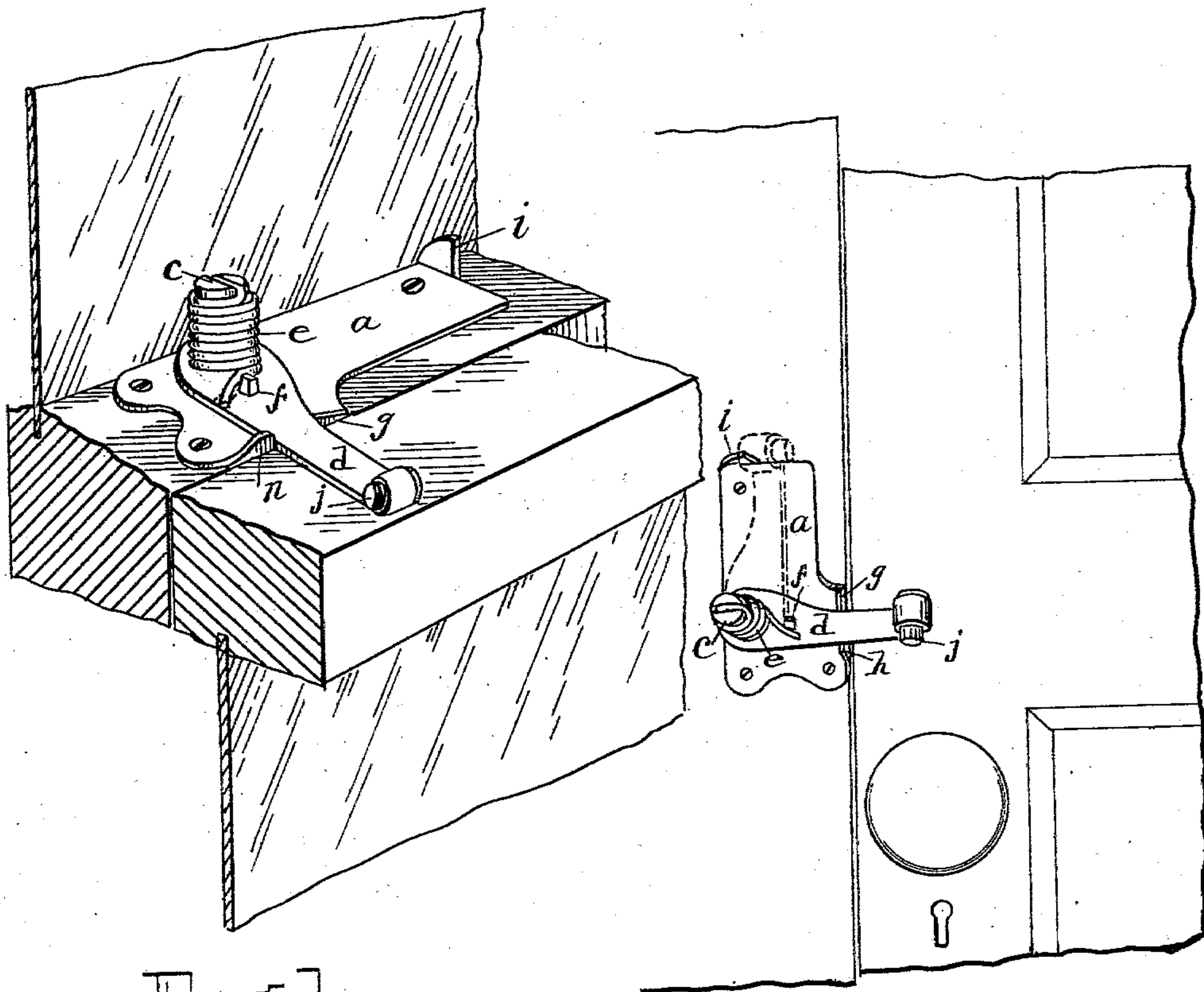


Fig. 1.

Fig. 2.

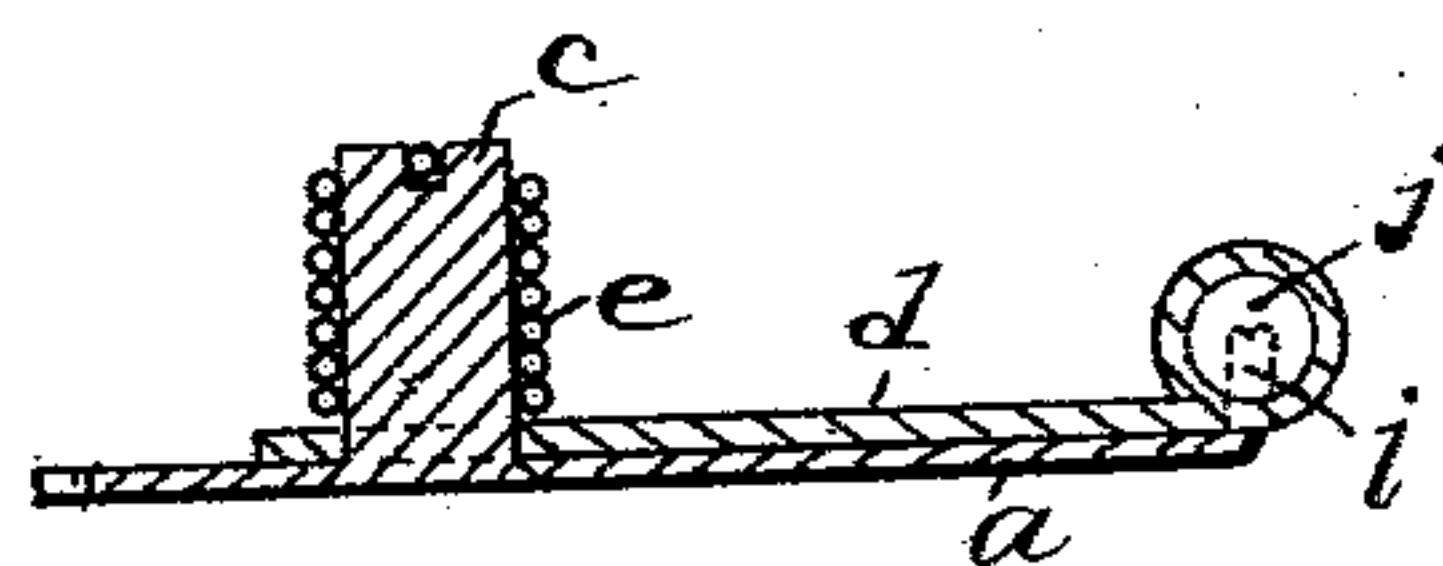
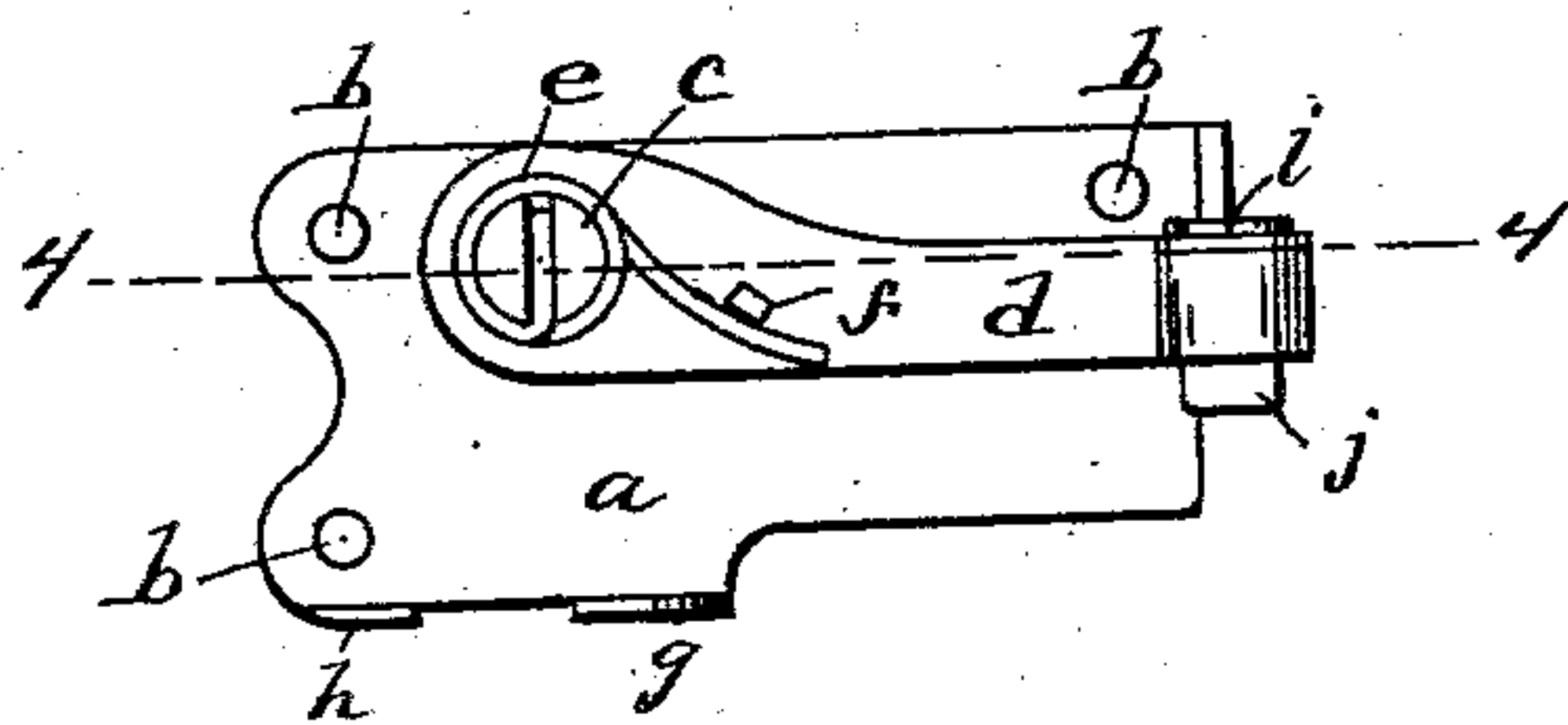


Fig. 3.

Fig. 4.

WITNESSES:
C. B. Barzinger.
M. M. Struble.

INVENTOR.
Charles H. De Voll
BY
Murrel S. Wright
his ATTORNEY.

UNITED STATES PATENT OFFICE.

CHARLES H. DE VOLL, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR, BY
MESNE ASSIGNMENTS, TO HENRY S. HOWLAND, OF NEW YORK, N. Y.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 753,244, dated March 1, 1904.

Application filed February 16, 1903. Serial No. 143,474. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. DE VOLL, a citizen of the United States, residing at San Francisco, county of San Francisco, State of California, have invented a certain new and useful Improvement in Burglar-Alarms, of which the following is a specification, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object a novel burglar-alarm; and it consists of the construction, combination, and arrangement of devices hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view of the same shown applied to a window-sash. Fig. 2 is a view thereof shown applied to a door-frame. Fig. 3 is a detail view of the device. Fig. 4 is a view in transverse section through the post carrying the oscillatory arm on the line 4-4, Fig. 3.

My invention is designed and adapted more particularly as a burglar-alarm for windows and for doors, the same being of superior simplicity and efficiency, while also it may be easily applied and operated.

I carry out my invention as follows: As illustrated in the accompanying drawings, *a* represents a base-plate constructed to be secured upon a window-sash or a door-frame in any suitable manner, the same being shown provided with screw-holes *b* for that purpose. The base is preferably elongated, as shown, provided toward one end thereof with a post *c*, upon which is mounted an oscillatory arm *d*, a spring tension being given to said arm by means of a spring *e* upon said post arranged to exert its tension upon said arm. I have shown for this purpose a coil-spring having one end thereof engaged with the post, as shown, the arm being constructed with an upturned shoulder *f*, against which the opposite end of the spring is engaged. As shown in full lines in Figs. 1 and 2, the arm is in set position ready to be operated, in which position it is held between lugs or upturned shoulders *g* *h*, the arm being constructed to ride over one of said shoulders and to be engaged therebetween. One end of the plate is also provided with an upturned shoulder *i* to serve

as a stop for the oscillatory arm when the alarm is set off, the shoulder *f* also serving as a hammer or anvil against which the adjacent end of said arm may strike. The outer end of said arm is constructed to engage a blank cartridge, (indicated at *j*,) the head of the cartridge when the arm is set free or when it goes off striking against the stop *i*, whereby the blank cartridge is discharged. To this end the outer end of the arm may simply be turned over to form a loop, as shown, to receive the cartridge. When the alarm is set off, the arm is set free from its location between the adjacent shoulders of the base by being elevated or lifted out therebetween, the spring throwing the arm into position longitudinally of the base-plate, so that the cartridge carried by the arm will strike against the shoulder *i*, whereby the cartridge is exploded. The oscillatory arm is thus in the nature of a firing-hammer holding the cartridge, said arm or hammer when the alarm is set being ready for action. The dotted lines in Fig. 2 show the position of the arm or hammer when not in use or when the said hammer has been set off.

The device is made to fit any ordinary window-sash and is intended to be secured upon the lower rail of the upper sash of the window, the firing hammer or arm when in set position extending over the upper rail of the lower sash, so that when an attempt is made to lift the lower sash said hammer will be elevated out of its set position, when the alarm will be sounded by the explosion of the cartridge. The device may also be fitted to any door-frame or door, the firing-hammer when the device is fitted to a door-frame extending over the adjacent face of the door, the base-plate being secured to the door-frame. It will be evident that when thus applied an attempt to open the door will set off the hammer-arm and the blank cartridge will be exploded. The device obviously can be easily applied, and there is nothing liable to get out of order. The device is also evidently durable. When applied and in operative position upon a door or window, the door or window cannot be opened without firing the blank cartridge. The device thus affords a double alarm. The

burglar will naturally think he has been detected and is being shot at, while at the same time the household will be awakened by the discharge of the cartridge. The firing-hammer may be easily set at night upon retiring and may readily be released in the morning without setting off the cartridge, when it is desired to unlock the doors and windows, by simply holding the firing-hammer from swinging around into position when not in use to prevent the cartridge striking the shoulder with force necessary to explode the cartridge.

It is evident that the shoulder *h* might be dispensed with; but its use serves to limit the movement of the hammer-arm when brought into position. I prefer that the shoulder *g* should be beveled on its upper surface, so that said arm may ride freely thereover when brought into set position.

It will be evident that in order to disengage the arm from the retaining-shoulder *g* the outer end of the arm has a limited movement at right angles to the base in order that it

may be lifted over said shoulder, the spring *e* yielding to permit such movement. 25

What I claim as my invention is—

An alarm comprising a flat metallic base, and a spring-actuated oscillatory arm mounted at its inner end upon said base to oscillate in a plane parallel with the base, said base constructed at one of the lateral edges thereof with an integral upturned shoulder to engage the arm intermediate the ends thereof and hold the arm in a set or open position, and with an integral upturned stop against which the outer end of said arm may impinge when released from its set position, the outer end of the arm turned to form a loop to hold a cartridge. 30 5

In testimony whereof I have signed this specification in the presence of two subscribing witnesses. 40

CHARLES H. DE VOLL.

Witnesses:

N. S. WRIGHT,

LOUIS J. LIESEMER.