

(No Model.)

L. PARSLEY.
DETONATING FIRE ALARM.

No. 479,837.

Patented Aug. 2, 1892.

Fig. 1.

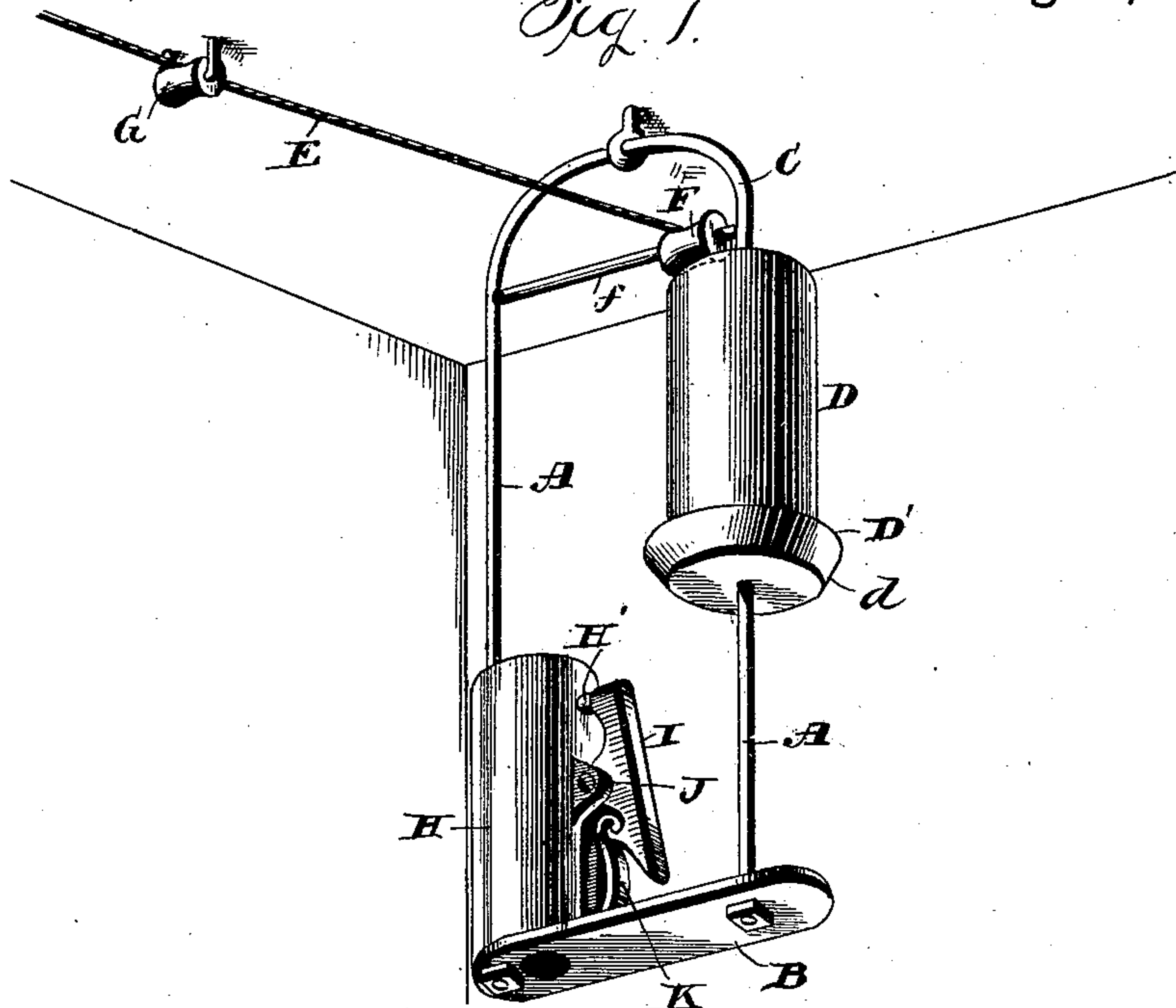
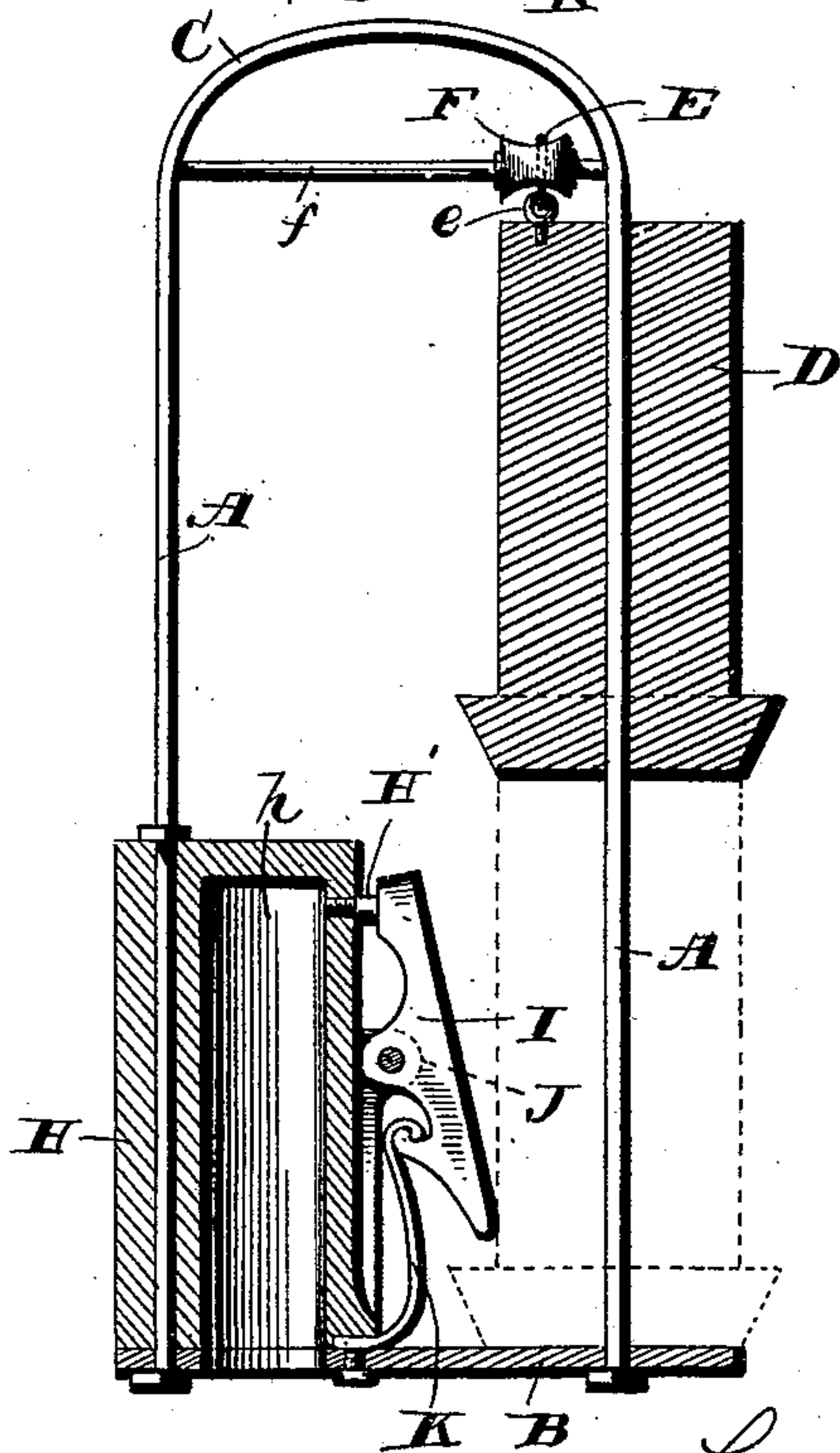


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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DETONATING FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 479,837, dated August 2, 1892.

Application filed April 18, 1892. Serial No. 429,653. (No model.)

To all whom it may concern:

Be it known that I, LEVI PARSLEY, a citizen of the United States, residing at Bengay, in the county of Sharp and State of Arkansas, have invented certain new and useful Improvements in Detonating Fire-Alarms; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in detonating fire-alarms; and it has for its object to provide a simple and inexpensive device of this character which may be placed at any convenient place within a building and which will serve to automatically indicate the breaking out of a fire at any point within the equipped building.

As the action of the alarm depends upon the breaking of a cord which suspends a weighted casting, the descent of which serves to actuate the alarm, it is at once evident that the device may be made to serve in the capacity of a burglar as well as a fire alarm, though I propose to use it principally as a means for indicating automatically the breaking out of fires.

To these ends and to such others as the invention may pertain the same consists in the peculiar construction and in the novel arrangement, combination, and adaptation of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is fully illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, like letters of reference indicating the same parts throughout the two views, in which drawings—

Figure 1 is a perspective view of my automatic alarm as it appears when equipped and in readiness for use. Fig. 2 is a central vertical section of the same.

Reference now being had to the details of the drawings by letter, A designates a heavy

wire or rod the ends of which are secured to the base-plate B, the body portion of the wire or rod being formed into a loop or arch C. The sides of this arch are vertical to a point near the upper end of the arch, as shown, and loosely sleeved upon one of these vertical portions of the wire is a casting D, the lower end of which is provided with a flanged outer rim D', the extreme outer edges of which rim portion are beveled inwardly, as shown at d.

The casting D is normally held suspended at a point near the upper end of the vertical portion of the rod, upon which it is sleeved, by means of a strong cotton cord E, which cord is attached to a metallic loop e upon the upper end of the casting, and from this point of attachment the said cord is passed over a pulley F, which is journaled upon a shaft f, which extends across the upper portion of the arch C, and from this pulley the cord may be carried in any direction throughout all exposed parts of the building, the cord being passed at intervals over suitable pulleys G at convenient or necessary points and the opposite end is attached to some fixed point. By this arrangement it is at once evident that the burning of the cord at any point will serve to release the casting D, which will fall by gravity.

H is the alarm proper and consists of a metallic cylinder of suitable size and form. This cylinder is in many respects similar to the barrel of a short and large-calibered pistol, the chamber having an outlet at the lower end through the base-plate, as shown; or, if preferred, the chamber may be cast integral with the base-plate. At a point near the upper end of the cylinder H is a cone or nipple H', which communicates with the chamber H, and upon this tube or cone is placed an ordinary percussion-cap.

I is the hammer used in discharging the cap. This hammer consists simply of a lever which at substantially its longitudinal center is pivoted between lugs or ears J upon the outer face of the cylinder. The lower end of this pivoted hammer or lever is normally thrown and held outward by means of a spring K, and when thus held the striking-face of the hammer will, as will be observed, be held against the end of the cap, while the lower end of the lever will be within the path of the

flanged extension D' at the lower end of the gravity-casting D.

The operation of the device is simple and will be readily understood. The chamber in the cylinder H is loaded with a sufficient amount of powder to sound an alarm when exploded. The cap is placed upon the cone H', and the gravity-casting D is raised to its highest point and there secured. The burning of the suspending-cord will serve to release the casting, which in falling will strike the lower end of the hammer-lever I, and as soon as the flanged extension D' passes the hammer the lower end of the hammer will be at once thrown outward, thus causing the striking-face of the hammer to impart a sharp blow upon the cap, thus firing the charge of powder and sounding the alarm.

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

1. In a detonating alarm of the character described, in combination, the gravity-casting, the suspending-cord therefor, and a system of pulleys over which the cord is passed, the chamber for containing the powder, said cylinder having an outlet at its lower end and at its upper end provided with a cone to receive the discharge-cap, a pivoted hammer held

normally by the tension of a spring in contact with the cap, and the lower end of the said lever inclined outwardly and in the path of the gravity-casting, substantially as described, and for the purpose specified.

2. The combination, with the base-plate, of the wire or rod having its ends attached thereto and formed into an arch with vertical sides, the gravity-casting sleeved upon one side of said arch, the lower end of the casting being provided with a beveled flange or extension, as described, the cord for suspending said casting, the pulleys over which the cord is passed, the cylinder H, having an interior chamber opening at its lower end through the plate B and at its upper end provided with a cone to receive the firing-cap, and the hammer pivoted at its center between lugs upon the outer face of the cylinder, with the lower end of the hammer held normally in the path of the gravity-casting by the action of a spring, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

LEVI PARSLEY.

Witnesses:

JNO. B. MCCAULEB,
JOSHUA WANN.