

(No Model.)

A. MEISENHEIMER.
AUTOMATIC FIRE ALARM.

No. 350,381.

Patented Oct. 5, 1886.

Fig. 1.

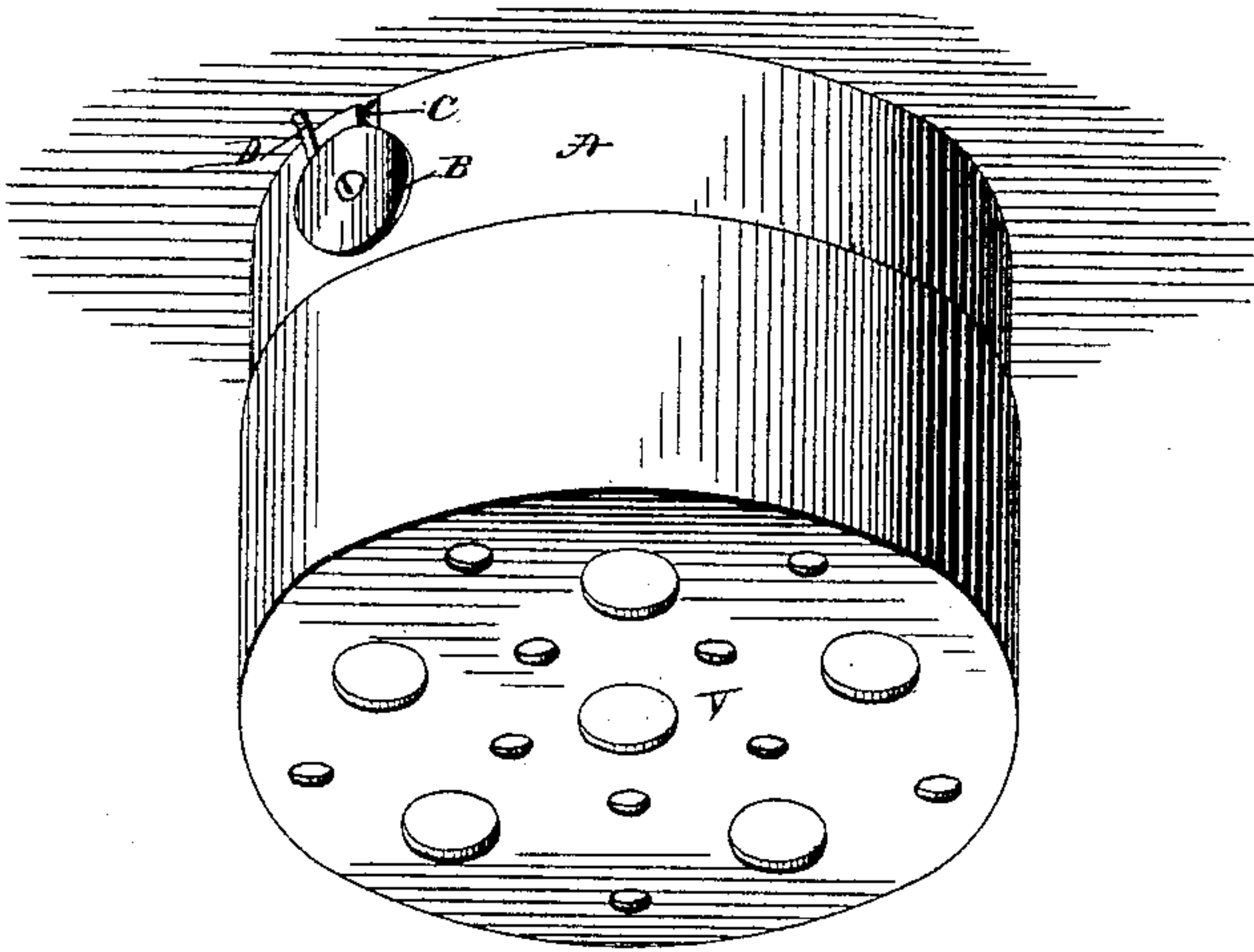


Fig. 2.

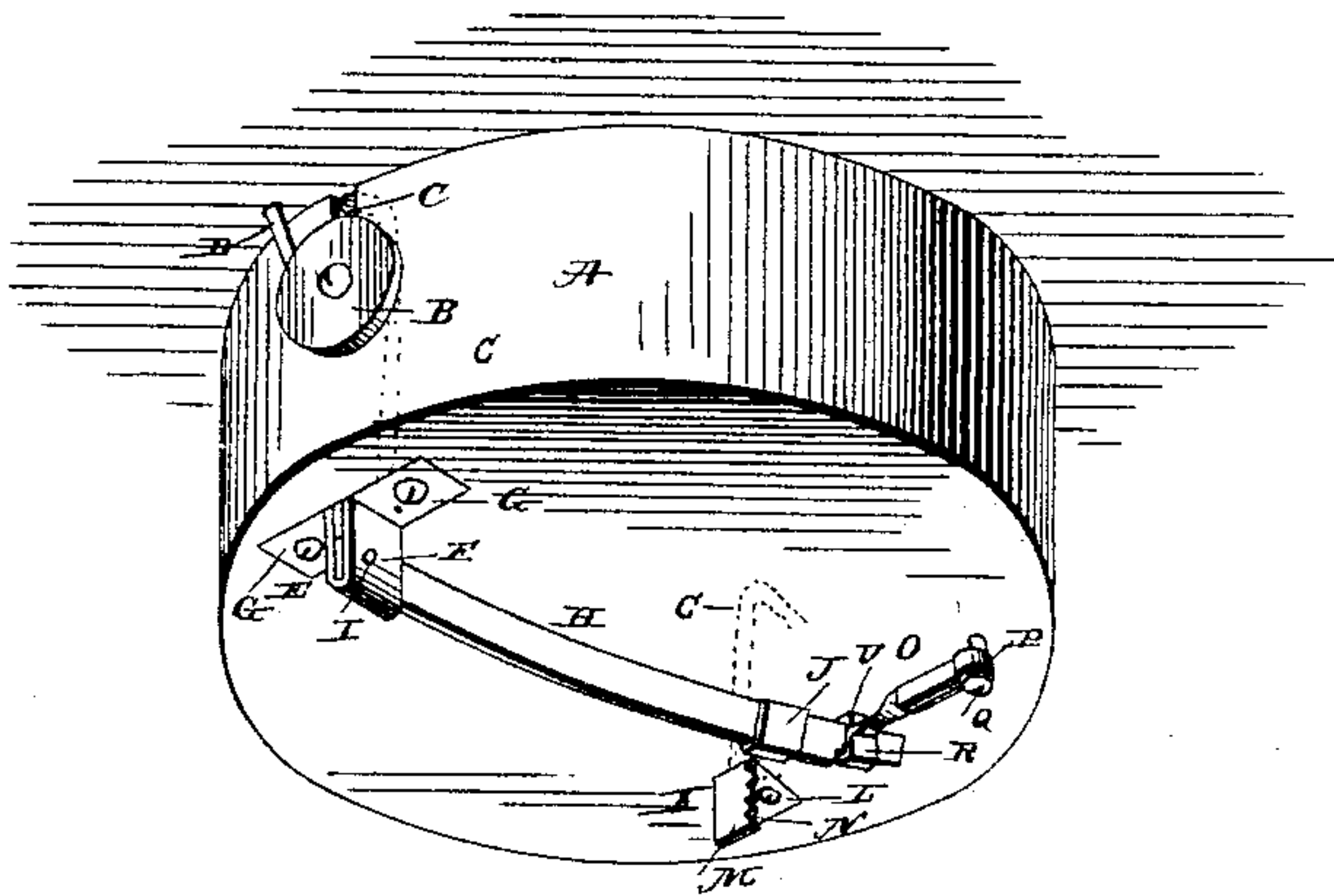
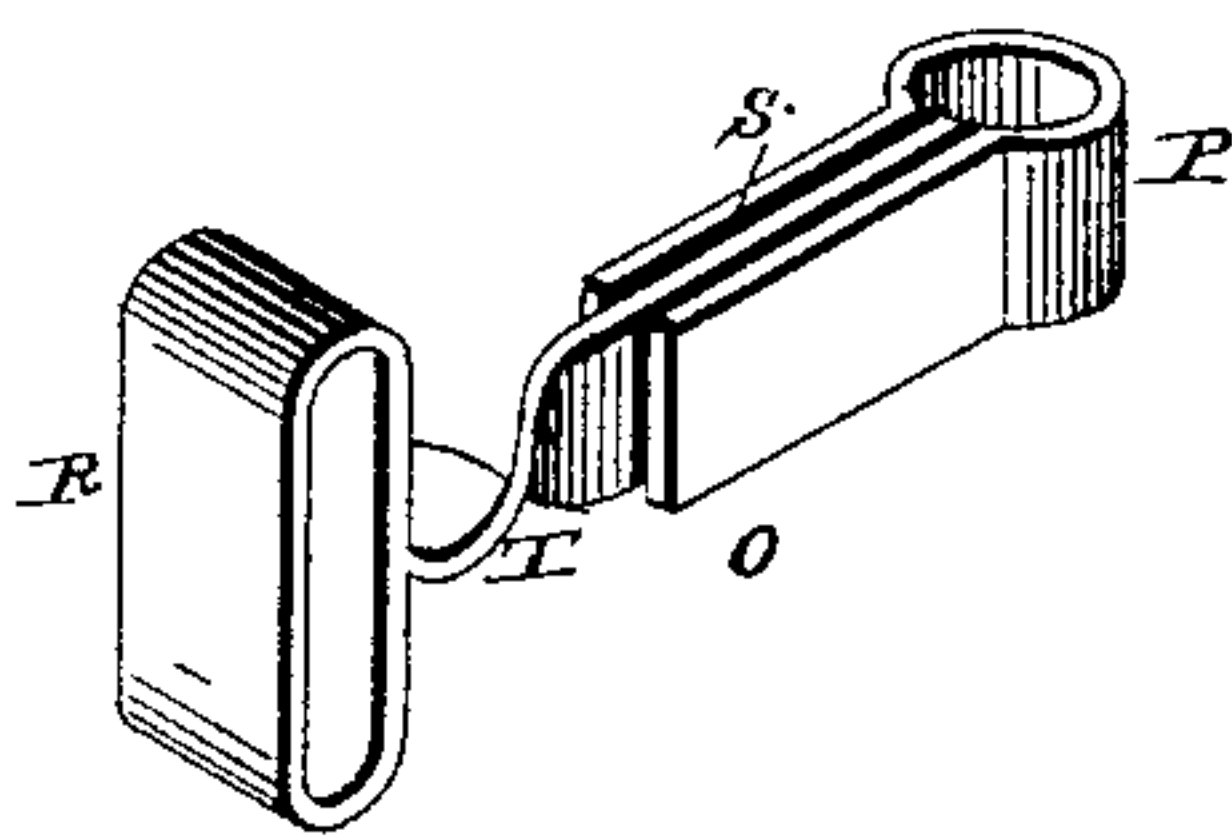


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

ADAM MEISENHEIMER, OF MILWAUKEE, WISCONSIN.

AUTOMATIC FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 350,381, dated October 5, 1886.

Application filed May 8, 1886. Serial No. 201,626. (No model.)

To all whom it may concern:

Be it known that I, ADAM MEISENHEIMER, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Automatic Fire-Alarms; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved automatic fire-alarm. Fig. 2 is a similar view with the perforated cover removed, and Fig. 3 is a detail view of the fusible link detached.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of automatic fire-alarms in which the fusion of metal at a certain degree of heat will release the alarm; and it consists in the improved construction and combination of parts of a device in which a spring having connection at one end with the wire of a circuit, is held at its free end by a fusible link, which on fusing will release the free end and bring it into contact with a post having the other wire of the circuit connected to it, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a block or base of wood or similar material having two binding posts or screws, B B, to which are secured insulated wires C C, passing through suitable perforations through the block, and to which posts or screws the wires D D of a circuit may be attached. The end of one of the insulated wires is connected to a post, E, formed by a strip of metal bent to form a doubled lip, F, and two diverging lips, G G, by which it is secured to the outer face of the block. A flat spring, H, is held clamped in the doubled lip at one end, having, preferably, a rivet, I, through it and the doubled portions of the lip for the purpose of securing it perfectly, and this spring is provided with a facing, J, of platinum, near the outer free end. A post, K, consisting of a strip of metal having a lip, L, secured to the face of

the block, and having an outwardly-projecting portion, M, is secured in contact with the other insulated wire, and the edge N of the outwardly-projecting portion of the post is serrated, and may come in contact with the platinum facing of the spring when the spring is released. A link, O, is formed with a doubled portion forming an eye, P, which fits freely upon a stud, Q, projecting from the face of the block and the end of a flat eye, R, is secured between the shanks of the doubled portion by means of a mass of solder, S, which is fusible at the degree of heat at which it is desired to give the alarm, the said shank, T, projecting from the middle of the flat eye, being twisted. The flat eye R fits upon the outer end of the spring, the upper edge of which is cut away to form a notch, U, extending to the outer end, the shoulder thus formed preventing the eye from slipping too far in upon the spring. It will be seen that this link will hold the free end of the spring away from contact with the serrated edge of the post, and when the temperature in the room or building in which the apparatus is secured—the apparatus being preferably secured at the ceiling or roof of the room or building—rises to the temperature at which the solder fuses, the link will separate, and the spring will by its elasticity spring toward the serrated post, forming a contact and closing the circuit in the wires, giving the alarm.

The device is preferably protected by a cap or cover, V, having its top perforated for the easier passage of the heated air, the cover protecting the spring and the link from being disengaged by any cause excepting by heat.

The solder may be composed of any easily-fused metal or composition which will fuse at a certain temperature at which it is desired to sound the alarm, and which is sufficiently strong to hold the spring back until fused.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In an automatic fire-alarm, the combination of a post formed of a strip of metal bent to form a doubled lip and two diverging lips, and having the diverging lips secured to the face of the block, and having contact with one wire of a circuit, a post connected to the other wire of the circuit and having a serrated edge,

a spring, the upper edge of which is cut away to form a notch, secured in one post and having a platinum facing near its outer end for coming in contact with the serrated edge of the post, 5 and a fusible link having one eye upon the free end of the spring and one eye upon a stud, and holding the free end of the spring away from the serrated post, as and for the purpose shown and set forth.

10 2. In an automatic fire-alarm, the combination of a block having binding posts or screws, and having two insulated wires passing from the posts or screws through the block, two posts connected with said wires, a spring secured at 15 one end to one of said posts and having a platinum facing near its outer end, and a shoulder formed upon the upper edge near the free

end, a stud projecting from the face of the block, a link consisting of a doubled eye fitting upon the stud and a flat eye upon the free end 20 of the spring, having its shank secured between the shanks of the doubled eye with easily-fusible solder, and a perforated cover fitting upon the block, as and for the purpose shown and set forth. 25

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of witnesses.

ADAM MEISENHEIMER.

Witnesses:

HENRY C. ROETHLISBERGER,
EDW. J. WAGNER,
ALBERT ARRAS.