

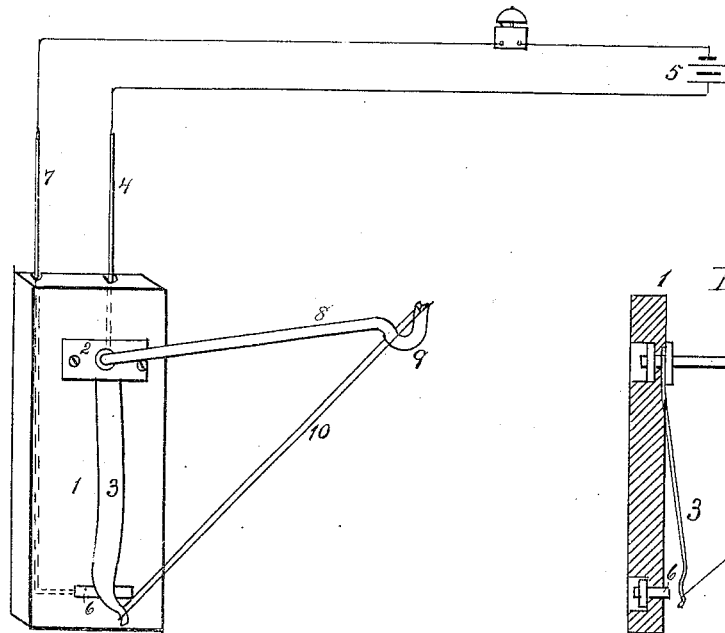
(No Model.)

M. M. BRAUN.  
ELECTRIC FIRE ALARM.

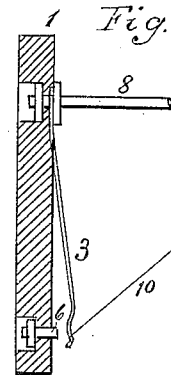
No. 453,723.

Patented June 9, 1891.

*Fig. 1*



*Fig. 2*



*Fig. 3*



Witnesses:  
*W. E. Harrison,*  
*Richard S. Harrison*

Inventor,  
*Michael M. Braun*  
By *C. D. Lewis*

*Attest.*

# UNITED STATES PATENT OFFICE.

MICHAEL M. BRAUN, OF ALLEGHENY, PENNSYLVANIA.

## ELECTRIC FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 453,723, dated June 9, 1891.

Application filed February 17, 1891. Serial No. 381,765. (No model.)

*To all whom it may concern:*

Be it known that I, MICHAEL M. BRAUN, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Electrically-Operated Fire-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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improvement in electric fire-alarms; and it consists in a spring-contact electrically connected to a battery, and an inflammable cord for holding the said spring away from a stationary contact secured in the frame, and a means for attaching the cord together in such a manner that a certain temperature will separate the same, as will be more fully set forth hereinafter.

In the accompanying drawings, Figure 1 is a perspective view of my improved fire-alarm, which is constructed in accordance with my invention. Fig. 2 is a sectional side elevation of the same. Fig. 3 is a plan view of the cord used for separating the two contacts.

To construct a fire-alarm in accordance with my invention, I provide a block 1, of insulating material, of a suitable size and form of construction, and attach thereto by means of a plate 2 and wood-screws a spring-contact 3, which is electrically connected by a wire 4 to a battery 5. Beneath the lower extremity of this spring 3 is a stationary contact 6, secured in the block 1, which is connected by a wire 7 to the other pole of the battery 5. Projecting at right angles from the plate 2 is an arm 8, having a hook 9 at its forward end. This hook 9 has a V-shaped groove on its upper end for connecting an inflammable cord 10, or other means, to the point of the spring

3 below. This cord 10 consists of a thread, the two ends of which are connected together by wax or other suitable material, which when subjected to a certain degree of heat will separate.

In operation a number of these devices are placed at different positions in a building and in such places or positions where fire is likely to occur. An electric bell is placed in the circuit. Should a fire take place in the vicinity of one of these devices, the wax holding the two ends of the cord together melts, thereby releasing the spring 3 and forming a contact with the piece 6, which completes a circuit to the battery. The circuit being completed, an alarm is sounded, which will attract attention and provide time for the fire to be extinguished before any damage is done.

Having thus described my invention, I claim—

The herein-described fire-alarm, consisting of a solid base of insulating material, a spring contact-arm secured to said base and adapted to be connected at its upper end with one pole of a battery, a stationary contact secured to the base beneath the free end of the arm and adapted to be connected with the other pole of the battery, an arm secured to the first contact-plate and projecting at right angles thereto, and a cord having its ends spliced and connected with wax, which joins the free end of the contact-arm and the rigid arm, and adapted to hold the spring-arm normally out of contact with the plate beneath it, as and for the purpose set forth.

In testimony that I claim the foregoing, I hereunto affix my signature this 9th day of February, A. D. 1891.

MICHAEL M. BRAUN. [L. s.]

In presence of—

M. E. HARRISON,  
C. C. LEE.