J. M. de CÉLIS.

Automatic Fire-Alarm.

No. 201,167. Patented March 12, 1878.

Fig: 1.

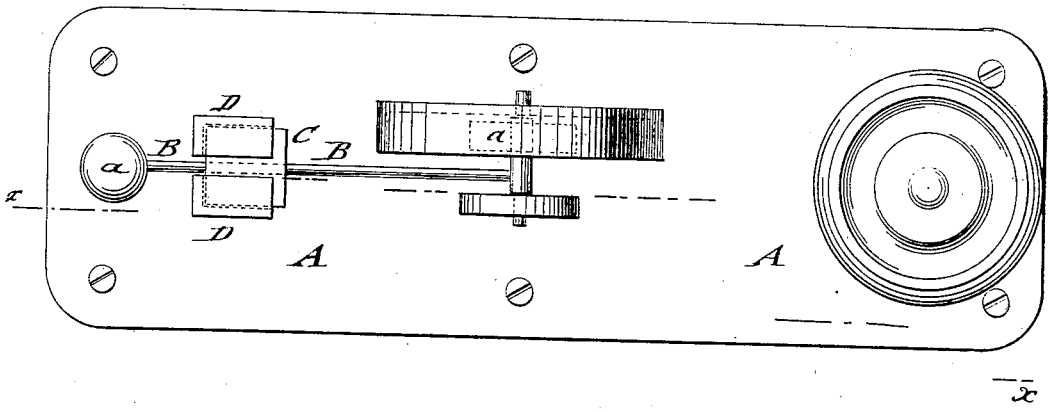
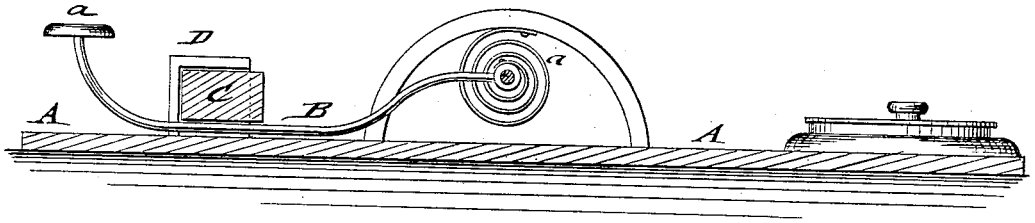


Fig: 2.



WITNESSES:

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JOSÉ M. DE CÉLIS, OF NEW YORK, N. Y.

IMPROVEMENT IN AUTOMATIC FIRE-ALARMS.

Specification forming part of Letters Patent No. **201,167**, dated March 12, 1878; application filed February 8, 1878.

To all whom it may concern:

Be it known that I, JOSÉ MIGUEL DE CÉLIS, of the city, county, and State of New York, have invented a new and Improved Automatic Fire-Alarm, of which the following is a specification:

In the accompanying drawings, Figure 1 represents a front elevation; and Fig. 2 a horizontal section on line *x x*, Fig. 1, of my improved automatic fire-alarm.

Similar letters of reference indicate corresponding parts.

This invention has reference to a self-acting device that may be used in connection with an electric gun or other alarm whenever the temperature rises above a certain degree, so as to indicate the presence of fire.

The invention consists of a spring-acted arm with end button or hammer that is retained by a block of wax, tallow, or other material, melting at a certain temperature, the block being supported in a slotted cup in front of the arm, so that the same is released whenever the melting-temperature of the block is reached, and thereby the arm thrown into connection with the alarm device.

By referring to the drawings, A represents the base-plate of my improved automatic alarm device, which plate is attached by screws or otherwise to the wall, sidewise, below or above an electric gun or other alarm. To suitable bearings of plate A is hung an arm, B, that is connected at its swinging point to a coiled band-spring, *a*, so as to be readily thrown from its position at one side of its pivot to a position on the other side of the same. The arm B is provided at its outer curved end with a button or hammer, *a*, that forms contact with an electric or other alarm when being thrown by the spring around its pivot. The arm is retained on the plate at the side diametrically opposite to the alarm device by a block, C, formed of tallow, sperm-aceti, white or yellow wax, or other equivalent materials that melt at a temperature of comparatively low degree, the block being supported in a slotted casing or box, D, so that the spring-arm cannot escape until the block is melted at a temperature corresponding to its melting-point.

The different substances used for forming the block melt at temperatures ranging between 92° and 155°, which is sufficiently high to indicate the presence of fire.

The release of the arm by the melting of the block causes the sudden throwing over of the arm onto the alarm device, so as to either close the electric circuit and ring the bell-alarm or explode a gun, or give any other suitable alarm.

The device is of very simple construction, and may be used with advantage in protecting dwellings, warehouses, factories, and other places against danger of fire.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with arm B, hung in bearings of plate A, of a button at one end, a coiled band-spring at the other, and a retaining-block of tallow or equivalent in a box, D, as and for the purpose specified.

2. The combination, with an electric or other alarm, of a hinged and spring-acted arm, retained at a position at that side of its pivot opposite to the alarm device by a block of wax or other materials melting at a low temperature, the block being seated and supported in a slotted casing or box, substantially as and for the purpose described.

JOSÉ MIGUEL DE CÉLIS.

Witnesses:

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