

J. O. FOWLER, Jr.  
Thermostatic and Electrical Fire-Alarm.

No. 207,510.

Patented Aug. 27, 1878.

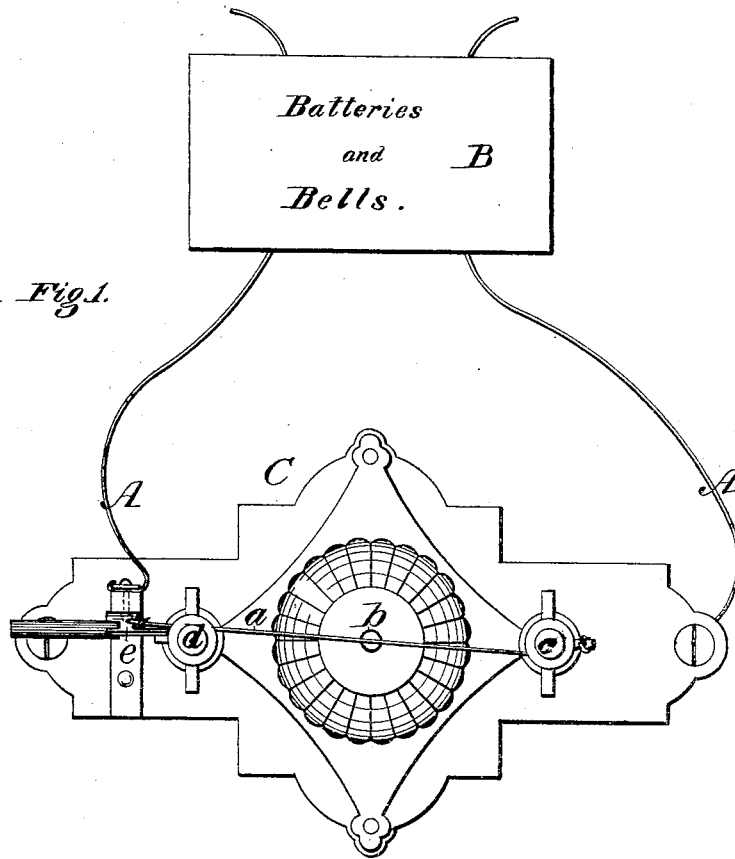


Fig. 1.

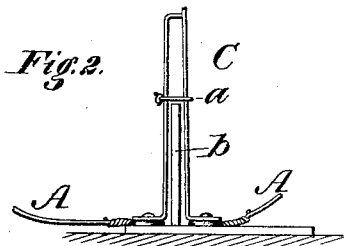


Fig. 2.

Witnesses:  
Will M. Dodge,  
Donn P. Twitchell.

Inventor:  
J. O. Fowler, Jr.  
By his Atty.  
Dodge & Son

# UNITED STATES PATENT OFFICE.

JONATHAN O. FOWLER, JR., OF NEW YORK, N. Y.

IMPROVEMENT IN THERMOSTATIC AND ELECTRICAL FIRE-ALARMS.

Specification forming part of Letters Patent No. **207,510**, dated August 27, 1878; application filed October 4, 1877.

*To all whom it may concern:*

Be it known that I, JONATHAN O. FOWLER, Jr., of New York, in the county of New York and State of New York, have invented certain Improvements in Electrical Fire-Alarms, of which the following is a specification:

My invention consists in the combination, in a fire-alarm, of a closed electric circuit, an alarm or alarms located in said circuit, and one or more circuit-breaking devices held shut by a combustible material, and provided with a hot-air match, the ignition of the match causing the consumption of the combustible material, and, in consequence, the breaking of the circuit and sounding of the alarm.

Figure 1 represents a plan view of my alarm; Fig. 2, a view showing a modified form of the circuit-breaker.

A represents the wire of a closed electrical circuit; B, the battery and bell, or other instrument for sounding the alarm; and C, the circuit-breaking device, held shut by the cord *a*, and provided with a hot-air match, *b*. The match, being ignited by any great increase in the temperature of the surrounding air, destroys the cord, which then permits the device C to break the main circuit, and thereby cause the sounding of the alarm by the instrument at B.

The circuit-breaking device shown in Fig. 1 consists of a base-plate provided at its ends with upright metal posts *c d*, and at its middle with a socket to receive the hot-air match, and of an upright insulated lever, *e*, arranged so that it may be brought into contact with the post *d*, but so weighted that when released it will fall back therefrom. The circuit-wire connects with the base-plate and with the lever *e*, and the circuit is closed by swinging the lever against the post *d*.

In order to maintain the circuit, a combustible cord, *a*, is connected to the post *c* and lever *e*, to hold the latter up to the post *d*. The

cord extends above and in close proximity to the match, so that it will be ignited with certainty and quickness. When the cord is severed the lever falls back and the alarm is sounded.

The circuit-breaker represented in Fig. 2 consists merely of two spring conducting-arms, held in contact with each other by means of a combustible cord or loop, and of the air-match located between the arms.

The construction of the circuit-breaker may be modified as desired, provided it contains the hot-air match applied in such manner as to insure its opening.

By my combination I am enabled to construct an alarm which will be extremely sensitive, and at the same time certain in its action, without the employment of the usual expensive and troublesome instruments.

I am aware that various automatic alarms have been hitherto devised, and that circuit opening and closing devices of different forms and hot-air matches have been used in different places, and therefore I make no claim to either of said features separately.

Having thus described my invention, what I claim is—

1. In a fire-alarm, the combination of a closed electric circuit, connected with an alarm, a circuit-breaking device located in the circuit and held shut by a combustible cord or its equivalent, and a hot-air match arranged to ignite said material and permit the opening of the circuit.

2. The automatic circuit-breaker consisting of the conducting-post, the weighted conducting-lever, the combustible cord, and the hot-air match.

JONATHAN O. FOWLER, JR.

Witnesses:

P. T. DODGE,

W. W. DODGE.