

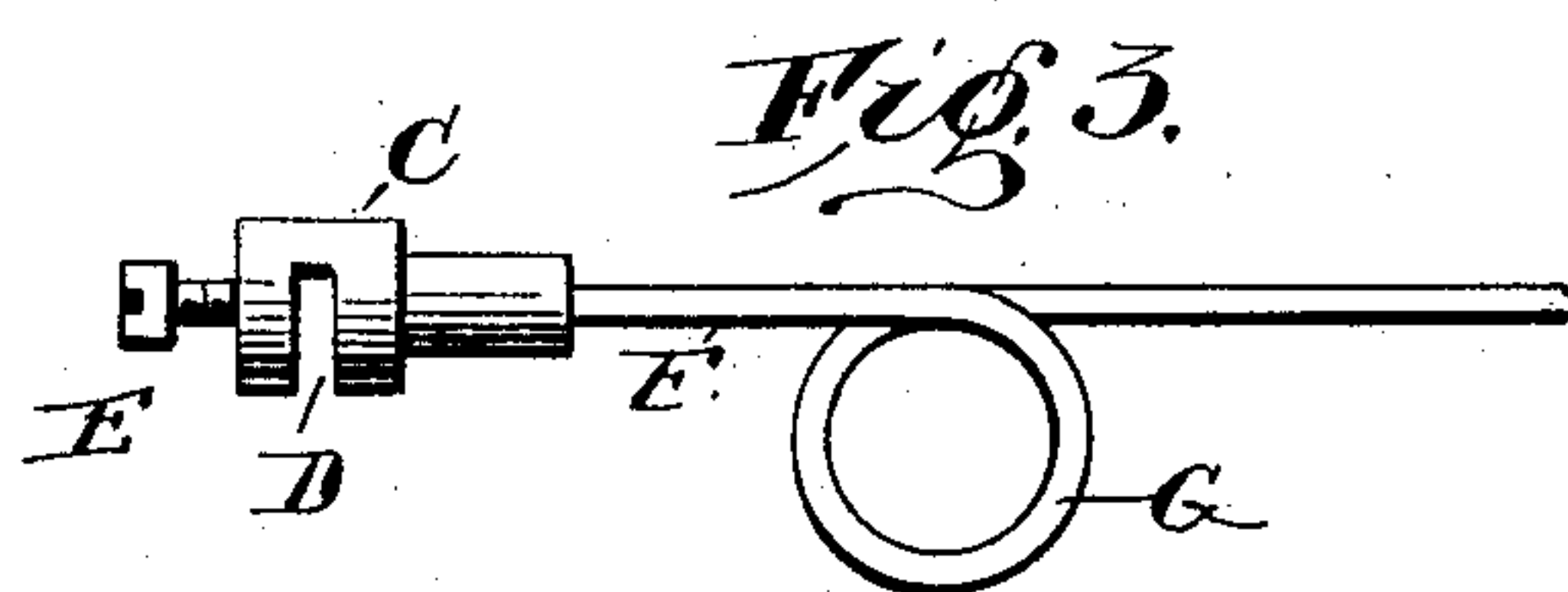
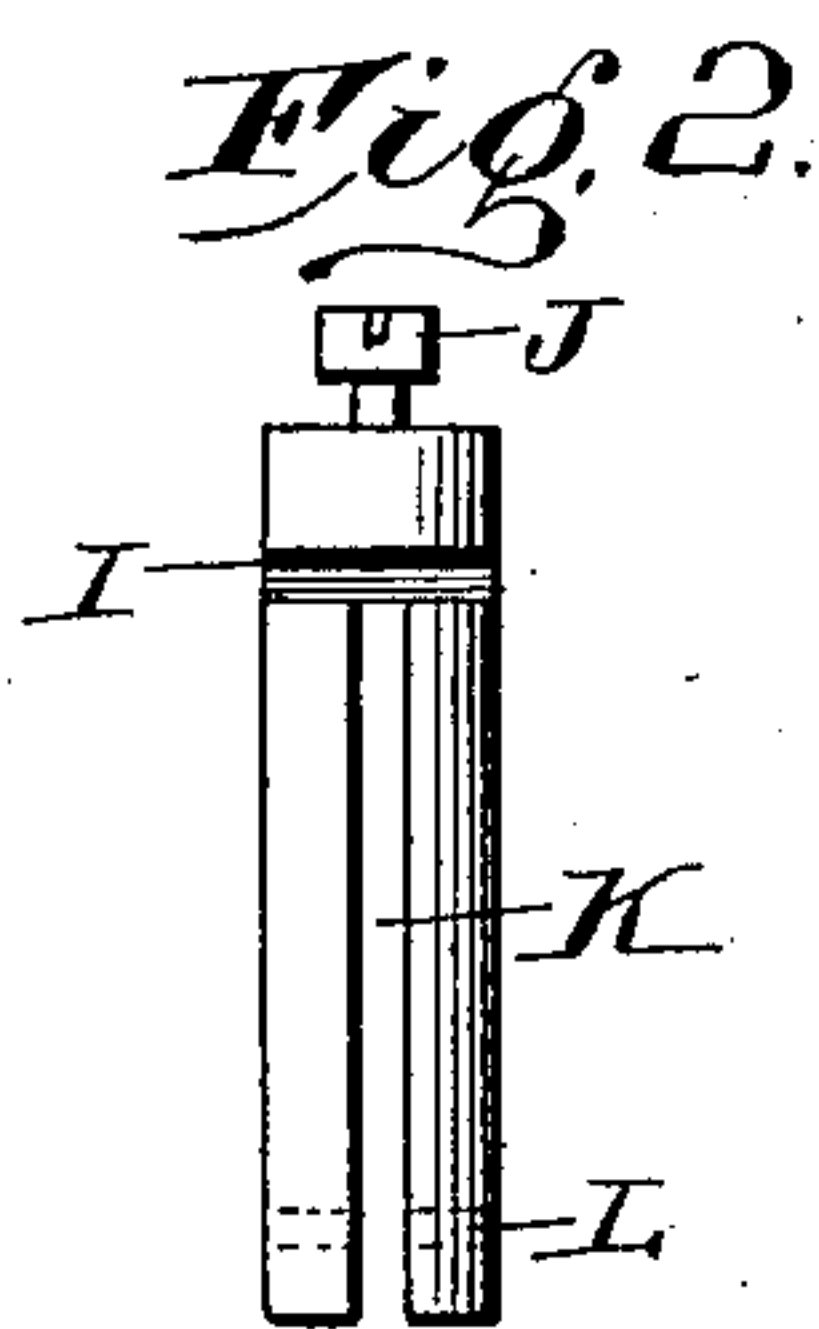
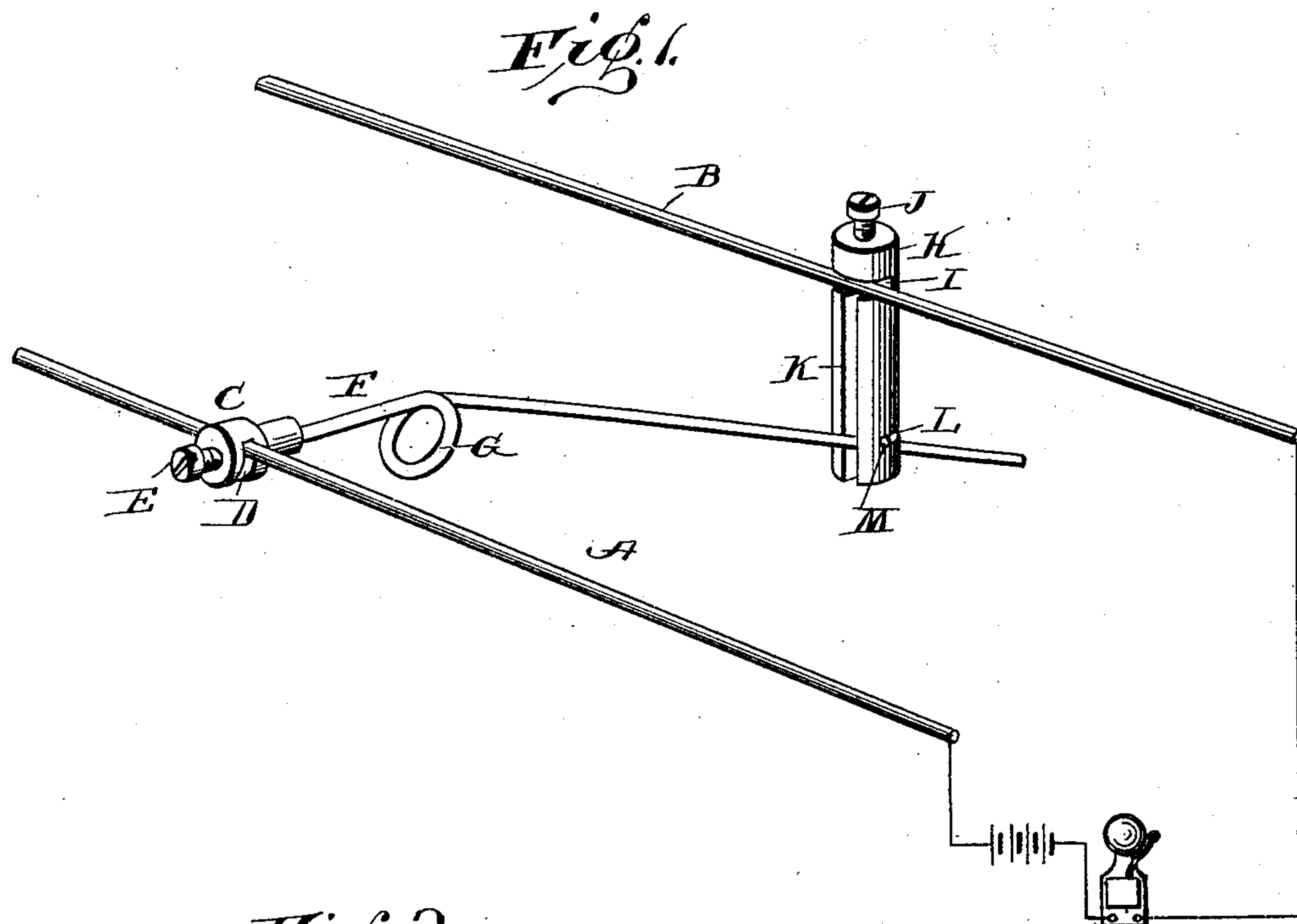
No. 645,599.

Patented Mar. 20, 1900.

C. LAW.
AUTOMATIC FIRE ALARM.

(Application filed May 29, 1899.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

CHARLES LAW, OF PITSTON, PENNSYLVANIA.

AUTOMATIC FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 645,599, dated March 20, 1900.

Application filed May 29, 1899. Serial No. 718,707. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LAW, a citizen of the United States, residing at Pittston, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Automatic 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 appertains to make and use the same.

This invention relates to an automatic fire-alarm, and more particularly to that class adapted to be attached to the terminal wires.

One object of this invention is to provide such a device which may be used in connection with any suitable alarm and one adapted to act automatically whenever the temperature rises above a certain degree, so as to indicate the presence of fire.

Another object of the invention is to provide an exceedingly cheap and simple form of an automatic fire-alarm, one which may be easily and quickly attached or removed and will efficiently perform all of its intended functions.

With these objects in view my invention consists in the particular construction of the various parts and in the novel manner of combination or arrangement of said parts, all of which will be more fully described hereinafter and specifically pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of the complete device attached to the terminals. Fig. 2 is a detail view of the connector and spring-arm. Fig. 3 is a detail view of the binding-post.

Referring by letters to the drawings, A and B represent the terminals, adapted to receive and support my invention, which consists of a connector C, having a notch D, adapted to receive the terminal A, which is held therein by the thumb-screw E. The connector is provided with an arm F, oppositely disposed with respect to the thumb-screw E and bent upon itself, so as to form a spring G, the object of which will be hereinafter explained.

Secured to the terminal B is a wooden binding-post H, provided with a notch I, adapted to receive the terminal, which is held therein by a thumb-screw J. This post is further provided with a longitudinal slot K, communi-

cating with the notch I and also with a second notch L, which is adapted to receive a fusible-metal plug M.

The free end of the spring-arm F engages the slot K in the binding-post H and is held down by the fusible-metal plug M, supported in the notch L. The plug is adapted to melt at a certain temperature. Thus when the melting-point of the plug is reached the arm is released and the spring forces it up in contact with the terminal B, thereby closing the circuit and giving the alarm.

I deem the foregoing explanation sufficiently plain that the improvement will be readily understood by all conversant in such matters, the extreme simplicity rendering an elaborate description unnecessary.

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

1. In an automatic fire-alarm, a connector having a spring-arm integral therewith, a binding-post having a slot and notches, of the arm engaging the slot, and a fusible-metal plug in one of the notches adapted to compress the arm, substantially as shown and described.

2. In an automatic fire-alarm, a connector having a spring-actuated arm integral therewith, a binding-post having a slot and notches therein, of the arm engaging the slot, and a fusible-metal plug in one of the said notches adapted to retain the arm in a compressed position, substantially as shown and described.

3. In an automatic fire-alarm, the combination, of a connector having a notch therein adapted to receive one of the terminals, a thumb-screw for retaining the said terminal in place and a spring-arm, of a binding-post having a notch approximately near each end, a longitudinal slot connecting the said notches, of a thumb-screw for securing the other terminal in the upper notch, of a fusible-metal plug in the lower notch, of the said arm engaging the said slot, and adapted to be held down by the said plug, substantially as shown and for the purpose set forth.

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

CHARLES LAW.

Witnesses:

C. GRATTAN,
I. W. HOWELL.