

F. KOUP.
 AUTOMATIC FIRE ALARM.
 APPLICATION FILED JUNE 19, 1912.

1,049,586.

Patented Jan. 7, 1913.

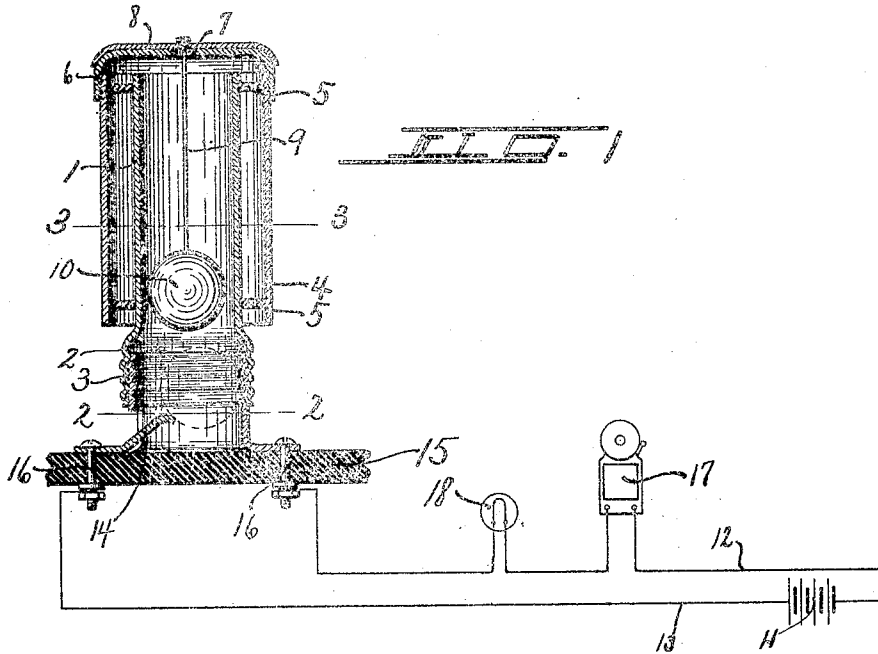


FIG. 2

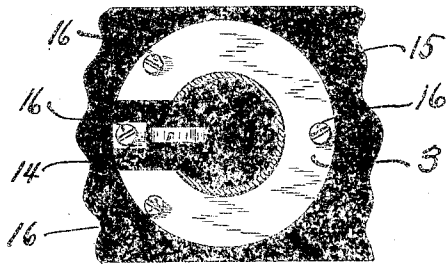
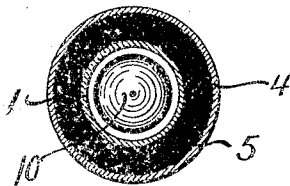


FIG. 3



Witnesses:
H. A. Thompson
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 By Attorney

UNITED STATES PATENT OFFICE.

FRANK KOUF, OF SYRACUSE, NEW YORK.

AUTOMATIC FIRE-ALARM.

1,049,586.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Application filed June 19, 1912. Serial No. 704,551.

To all whom it may concern:

Be it known that I, FRANK KOUF, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Automatic Fire-Alarms, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to automatic fire alarms and particularly that class operated by an electric current, the circuit being normally broken and adapted to be closed by a contact member held from circuit closing position by means of fusible material.

The object of my invention is to produce a device which shall be automatically and instantly operable upon contact with fire and at the same time simple and inexpensive in construction and adapted to be used with the ordinary electric lamp socket attached to a wall bracket.

Having the above objects and uses in mind, my invention, therefore, consists in the new and novel features of construction and operation hereinafter described in connection with the accompanying drawings forming a part thereof, in which—

Figure 1 is a vertical cross section through my circuit closing device showing it in connection with a battery provided with an electric lamp and an electric bell operably connected with the circuit. Fig. 2 is a cross section on line 2—2, Fig. 1. Fig. 3 is a cross section on line 3—3, Fig. 1.

1— is a hollow cylinder, screw-threaded at one end as 2— and adapted to fit over the threaded upright socket 3—. A second hollow cylinder 4— surrounds the cylinder 1— and is spaced therefrom by circular washers 5—. The cylinder 4— is externally threaded upon one end and is adapted to receive an internally threaded cap 6— provided with a central opening 7—. A celluloid disk 8— rests upon the cap 6— and has attached thereto in any suitable manner, as by the enlargement shown, the wire 9— having suspended from its other end a metal ball 10— slidable in the cylinder 1—.

An ordinary electric circuit is shown having as a source of energy a battery 11—, a wire 12— passing therefrom and in direct connection with the wall of socket 3—.

A second wire 13— connects the other pole of the battery with the tongue 14— which is insulated from the socket 3— by a strip 15— of any suitable material as porcelain to which the socket and tongue are connected by screws 16—. Operably connected in the circuit are an electric bell 17— and an electric lamp 18—. Upon contact with fire, the celluloid disk 8— is rapidly consumed, the wire 9— is released, the ball 10— falls and contacts with the tongue 14— and the wall of the socket 3— and closes the electric circuit whereby the lamp is lighted and the bell is rung.

It is readily apparent that although the disk 8— is described as preferably of celluloid, it may be any form of highly fusible material which is rapidly consumed upon contact with fire.

The use of two cylinders 2— and 4—, one telescoping within the other, provides means for readily lengthening the device to provide a necessary margin of safety between the ball 10— and the contact tongue 14— as by drawing up the outer cylinder relative to the inner one, the ball 10— is lifted away from the tongue 14—.

What I claim is:

1. An automatic fire alarm system comprising an electric circuit normally broken, a socket connected in said circuit, a contact point in said socket for closing said circuit, an upright cylinder attached to said socket, a cap of highly fusible material on said cylinder and a circuit closing member suspended from said cap.

2. An automatic fire alarm system comprising an electric circuit normally broken, a socket in said circuit, a contact point in connection with the socket for closing the circuit, an upright cylinder attached to said socket, an outer cylinder attached to the socket and spaced therefrom, a cap for said cylinder, an opening through said cap, a highly fusible disk upon said cap, and a metal ball within the inner cylinder and suspended from the fusible disk.

In witness whereof I have hereunto set my hand on this 15th day of June, 1912.

FRANK KOUF.

Witnesses:

EUGENE A. THOMPSON,
HOWARD P. DENISON.