(No Model.)

I. KITSEE.

FIRE EXTINGUISHER.

No. 265,676. Patented Oct. 10, 1882.

Fig. 1.

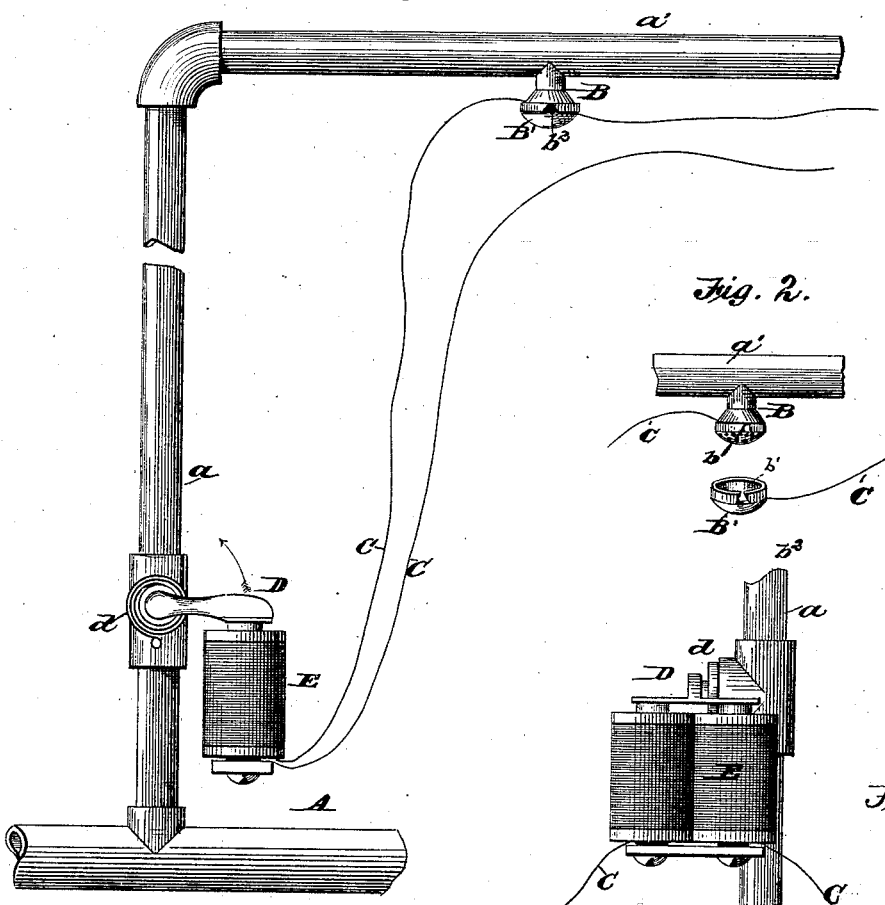
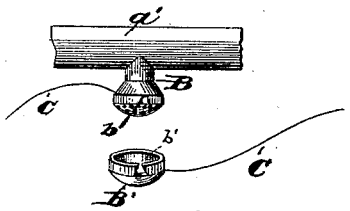


Fig. 2.



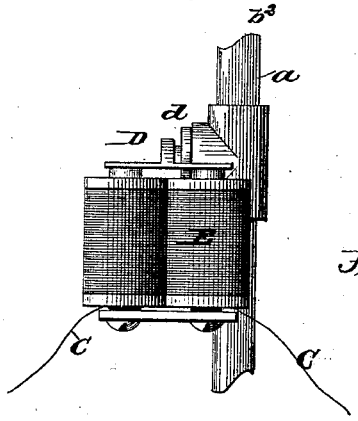


Fig. 3.

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ISIDOR KITSEE, OF CINCINNATI, OHIO.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 265,676, dated October 10, 1882.

Application filed April 22, 1882. (No model.)

To all whom it may concern:

Be it known that I, ISIDOR KITSEE, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Fire-Extinguishers, of which the following is a specification.

My invention relates to that class of fire extinguishers that are brought into action by the rupture of fusible connections; and the nature and object of my invention are to adjust a fusible joint or connection to the operative part of fire-extinguishers in such a manner that when melted it will break an electric circuit, which will cause a valve that controls the flow of water from the main feed to open.

To the accomplishment of this purpose my invention consists in covering up the eduction or discharge end of the distributing-pipe with a metallic cap and fastening it thereto with a plug or joint that will melt or fuse at a given degree of temperature, and connecting to said cap one of the wires of an electric circuit, the opposite wire being in electric connection with a metallic part of the nozzle proper, both of these wires being led from said nozzle and said cap to a magnet which holds down a spring-controlled handle which forms an armature of a feed-valve, which, when the electric current is broken, is released from connection with the magnet, all as hereinafter described and claimed.

Referring to the accompanying drawings, in which similar letters of reference indicate like parts. Figure 1 represents a stand-pipe and a distributing-pipe with my improvements attached. Figs. 2 and 3 represent modifications thereof.

A represents a portion of the water-main, from which extends a stand-pipe, *a*, having branches *a'*, intended to be led through the various rooms of a building.

B is a branch eduction end having perforations *b*.

B' is a metallic cover or cap for the perforated end of B. It has a piece, *b'*, cut out of its rim coincident with a recess in the eduction end B, in order to receive a plug, b^2, of substance fusible at a given degree of temperature. When the cap B' is placed over the eduction end B this fusible plug serves to lock them both together, although they may be connected by means of flanges or any suitable mechanical means that will enable them to be held in position by fusible substance, and released when such substance is melted.

C C are wires of a closed electric circuit. One of said wires is led to the cap B' and the opposite one to the eduction end B, thus closing the circuit by metallic contact.

D is the handle of a valve.

d is a coiled spring that is under tension when the valve is closed, and the armature-handle D is attracted by the electro-magnet, the armature of which magnet is attached to the handle D, as shown in Figs. 1 and 3. When the electric circuit is broken said armature-handle will be released, and will turn, as indicated by the arrow, Fig. 1, and throw the feed-supply valve open, causing the water to flow through the pipes *a a'*, and be finally discharged through the eduction-pipe ends.

The operation of my invention is manifest.

One of the wires C of an electric circuit is connected to the stem or any convenient part of the eduction end B. The opposite wire is connected to the cap B'. The cap is then placed over the perforations of the eduction end, and the two parts are connected together by means of the fusible plug b^2. The wires are led from the eduction end and cap to the electro-magnet E, thus completing the circuit and attracting the armature-handle D. When by the rise of temperature the fusible plug b^2 is melted the cap B' will fall off, as shown in detail, Fig. 2, and the circuit will be broken, the tension of the spring *d* will be withdrawn, the controlled valve will open, and water will flow through the pipes, as will be readily understood.

Having now fully described my invention, what I claim is—

1. In an automatic fire-extinguisher, a metallic discharging-nozzle provided with a metallic cap having a locking device readily fusible by heat, said cap and said nozzle being each respectively connected to one of the current-wires of an electro-magnet, substantially as described.

2. In an automatic fire-extinguisher, the combination of a spring-pressed feed-valve having an armature-handle, an electro-magnet, the wires of an electric circuit, and a metallic educ-

tion-opening having a metallic cap connected thereto by substance easily fusible by heat, substantially as described.

3. In an automatic fire-extinguisher, the supply-pipe A, the stand-pipe *a*, having spring-pressed valve, the armature-handle D, electro-magnet E, and distributing-pipe *a'*, having eduction-opening B, provided with covering-cap B', sealed with substance b^2, easily fusible by heat, in combination with the electric-circuit wires C C, all arranged as described, adapted, when the fusible substance b^2 is melted, to break an electric circuit, and thereby open the supply-valve, as and for the purpose intended, substantially as described.

ISIDOR KITSEE.

Witnesses:
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