

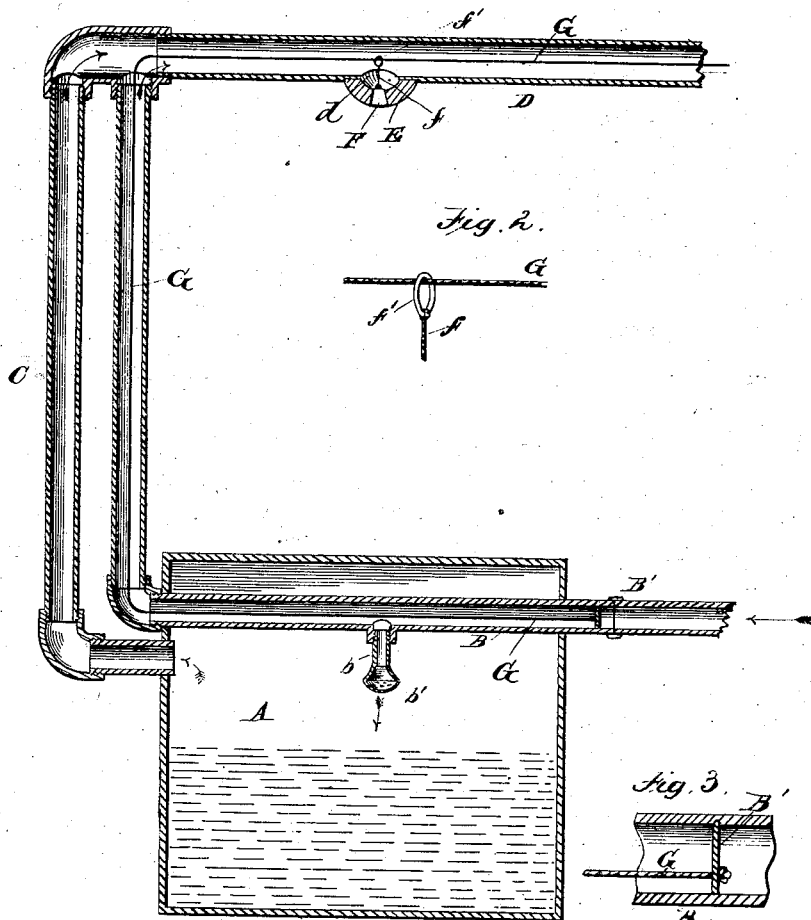
(No Model.)

I. KITSEE.
FIRE ANNIHILATOR.

No. 260,878.

Patented July 11, 1882.

Fig. 1.



Attest.
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UNITED STATES PATENT OFFICE.

ISIDOR KITSEE, OF CINCINNATI, OHIO.

FIRE-ANNIHILATOR.

SPECIFICATION forming part of Letters Patent No. 260,878, dated July 11, 1882.

Application filed December 31, 1881. (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-Annihilators, of which the following is a specification.

My invention relates to that class of fire-annihilators that are operated by melting of fusible connections.

The nature and object of my invention are to automatically discharge into a building where there is a fire water impregnated with gas or vapor.

To the accomplishment of this end my invention consists of a stationary fire-annihilating generating tank or reservoir located in any part of a building, from which branch distributing-pipes are extended in any required direction, provided with fusibly-sealed openings arranged so as to be severally opened by the rise of temperature to a given degree and to thereupon discharge chemically-impregnated water wherever a fire exists in said building.

It further consists in leading water from a main or other supply into a tank or reservoir supplied with chemicals, which chemicals will generate fire-annihilating gas when the water is discharged thereon; and it further consists in leading water direct from the main or other source of supply through an independent pipe to the distributing-pipe within the several rooms of a building, and in another independent pipe for carrying the fire-annihilating gas generated in the tank, which gas commingles with and impregnates the water within the common distributing-pipes, the whole brought into operation and actuated by melting of fusible seals normally closing the eduction-openings in said distributing-pipes, all as herein-after described and claimed.

Referring to the accompanying drawings, illustrating my invention, Figure 1 represents a fire-annihilating device embodying my invention. Fig. 2 is a detail view representing a piece of the valve-controlling cord and a piece of the weight-holding cord with its attached sliding ring. Fig. 3 is a detail view of the preferred form of the interior valve and the attached end of its actuating-cord.

Similar letters of reference indicate like parts on each figure.

A is the receiving and generating reservoir, which in practice is supplied with given chemical material.

Leading into the reservoir is a pipe, B, connected to a main water-feed, the flow of water being controlled by a valve of any suitable construction. From this pipe B extends a small branch pipe, *b*, having preferably a nozzle, *b'*.

The water-supply pipe B is shown in the drawings as reaching across the reservoir; but this form of construction is not essential. It may be entirely outside, providing a branch pipe, *b*, is led from it into the reservoir, so that when in operation the required quantity of water can be discharged on the chemical ingredients in the reservoir.

The pipe B is led in a direction so that its contents, when intermingled with gas, as hereinafter described, will be discharged through openings in the several rooms of a building.

C is another pipe for transmitting gas, which opens into the reservoir.

The pipes B and C extend from the reservoir independent of each other, but at a given point are coupled, and thenceforth form a single conduit-pipe, D, which is continued through the rooms of a building in any required direction.

The pipe D has openings *d*, which are closed with fusible caps E, which fusible caps retain in position a weight, F, which weight has an eye or staple to receive one end of a short cord, *f*, the other end of which cord is connected to a sliding ring, *f'*, placed on a cord, G. This cord G extends the whole length of the pipe D, and after reaching the coupling-joint passes within the pipe B, where it is finally fastened to the valve B'. When by the rise of temperature the fusible substance E melts the weight F falls by gravity and draws a portion of the cord G outwardly through the opening *d*, thus opening the valve B', and water immediately commences to flow through the pipe B. A stream passes into the branch pipe and is discharged through the nozzle *b'* on the chemical substance in the reservoir. The rest of the stream from the water-feed passes through the main pipe B. As soon as the water from the

nozzle *b'* falls on the chemical substance a gas is generated, which, as quickly as formed, passes out of the reservoir through the pipe C. As soon as the gas in the pipe C reaches the coupling-joint it meets the water flowing in the pipe B, and the gas and water intermingle, forming, in combination, water impregnated with gas, which impregnated water flows through the pipe D and is discharged through any of the apertures *d* that have been opened by the melting of their fusible caps E.

The operation of the cord G, short cord *f*, weight F, and fusible caps E is the same as shown and described in another application for Letters Patent for a similar device of even date hereof, wherein a tilting shelf is upset by similar connections, the only difference being that the device herein opens a valve and the other application is for upsetting a pivoted shelf.

It is not necessary for me to describe any special character of chemical ingredient for deposit in the reservoir, as there are many chemicals that, when acted on by water, evolve a fire-extinguishing gas that will commingle with water and form a desirable fire-extinguishing vaporized fluid.

I do not claim broadly the intermingling of gas-extinguishing vapor with streams of water as a fire-annihilator, as such has been used before; but

What I claim is—

1. In a fire-annihilator operated by melting of fusible connections, a generating-reservoir

supplied with chemical gas-producing agent, and provided with water-inlet pipe and an independent gas-eduction pipe separate from the water-conduit pipe, having independent eduction-openings within a common distributing-pipe, substantially as described.

2. In a fire-annihilating device operated by melting of fusible connections, the combination of a gas-generating reservoir provided with independent water-induction pipe and gas-eduction pipe, coupled together outside of said reservoir, arranged as described, and adapted to intermingle their gaseous and aqueous contents within a common distributing-pipe, substantially as described.

3. In a fire-annihilating device, the combination of a gas-generating reservoir having a water-induction pipe provided with a regulating-valve actuated by a cord fastened to said valve, and controlled by a weight fastened by fusible connections, substantially as described.

4. In a fire-annihilating device, the combination of a generating-reservoir provided with water-induction and gas-eduction pipes, and supplied with gas-generating chemicals, with the conduit-pipe D, having cord G and apertures *d*, closed with fusible caps E, said caps adapted, when melted, to release weight F, as and for the purpose intended, substantially as described.

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Witnesses:

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