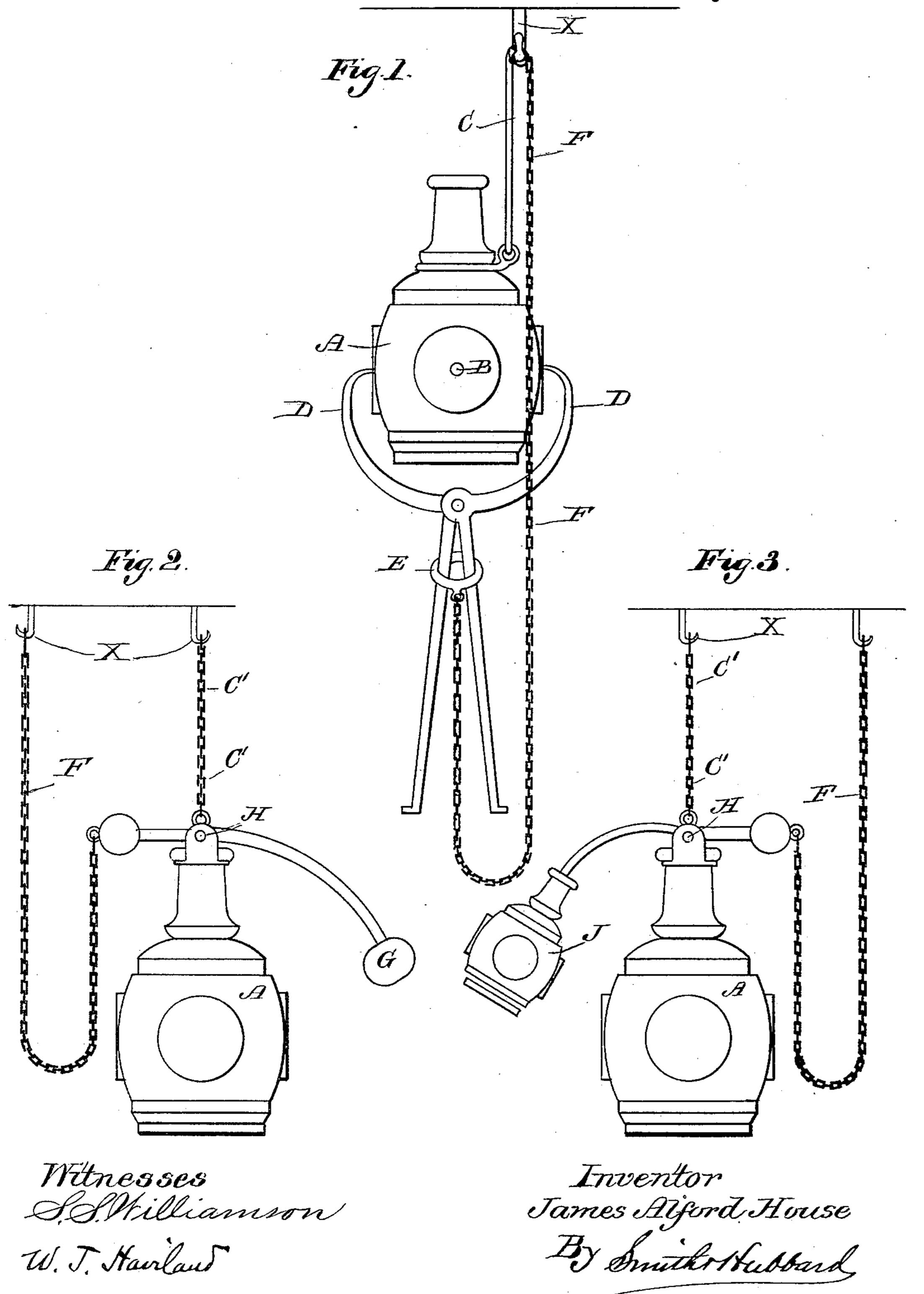
## J. A. HOUSE.

## AUTOMATIC FIRE EXTINGUISHER.

No. 318,743.

Patented May 26, 1885.



N. PETERS, Photo-Lithographer, Washington, D. C.

## United States Patent Office.

JAMES ALFORD HOUSE, OF BRIDGEPORT, CONNECTICUT.

## AUTOMATIC FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 318,743, dated May 26, 1885.

Application filed July 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, JAMES ALFORD HOUSE, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and 5 State of Connecticut, have invented certain new and useful Improvements in Devices for Suspending Fire-Grenades; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will 10 enable others skilled in the art to which it ap-

pertains to make and use the same.

My invention relates to certain novel and useful improvements in devices for suspending fire-grenades, and has for its object to provide 15 such a device as shall furnish under ordinary circumstances a convenient support for the grenade, and which will in case of fire automatically break the grenade and cause its contents to be scattered; and with these ends in 20 view my invention consists in the details of construction and combination of elements hereinafter fully and in detail explained, and then specifically designated by the claims.

In order that those skilled in the art to which 25 my invention appertains may more fully understand its construction and operation, I will proceed to describe the same in detail, referring by letter to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improvement having suspended thereby a fire-grenade of the kind ordinarily in use; Fig. 2, a modification of the device illustrated by Fig. 1, and Fig. 3 a still further modification.

Similar letters denote like parts in the sev-

eral figures of the drawings.

A is any hand-grenade, of glass or other fragile material—such as is used for fire-extinguishing purposes — and provided upon 40 either side thereof with depressions B, opposite to one another.

C is a link, made from some metal fusible at a low temperature, by means of which the grenade is suspended from a hook, X, or other

45 convenient support, as seen at Fig. 1.

D are grapples pivoted together after the manner of tongs, and whose claws are adapted to rest within the depressions B in the sides of the grenade. Encircling the handle por-5° tions of the grapples is a link, E, adapted to

slide upon said handles and when moved toward their free ends to draw the claws together.

F is a chain, one end of which is attached to link E and the other to hook X, or other point of attachment at a proper height above the 55 floor.

The operation of my improvement is as follows: When hung as shown at Fig. 1, and any rise of temperature sufficient to fuse the suspending-link occurs, the grenade falls until 60 the end of the chain is reached, when the link E, to which said chain is attached, slides along the handle portions of the grapples toward their free ends and draws the claws together, breaking the grenade between their points and 65 scattering its contents upon the floor beneath the point of suspension.

In Fig. 2 I have shown a modification of my improvement, in which the grenade is suspended by a chain, C', composed of fusible 70 links, and in which a hammer, G, pivoted at the top portion of the grenade, as seen at H, and having the chain F, attached to its shank end, takes the place of the grapples just described as a breaking mechanism. By the fus- 75 ing of the chain C'the grenade is caused to fall, and its weight coming upon the shank end of the hammer turns the latter upon its pivot and dashes its head against the side of the grenade, in this way accomplishing its 80 fracture.

Fig. 3 represents a still further modification, which differs from Fig. 2 simply in that the hammer-head is dispensed with and a second grenade, J, of less capacity than the first sub- 85 stituted in its place.

In this my invention I do not wish to be confined to the exact construction of breaking mechanism shown and described, as the breakage may with equal facility be accomplished 90 in various ways.

The gist of my invention rests in the broad idea of suspending a fire-extinguisher of the character described by means of a fusible connection which will part upon any rise of tem- 95 perature higher than its fusing-point.

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

1. In a device of the character described, a roo

receptacle containing a fire-extinguishing fluid and suspended by a fusible connection, in combination with a breaker, substantially as described, attached to said receptacle, whereby 5 upon the fusing of the connection the receptacle is caused to fall and be crushed, substantially as set forth.

2. An automatic fire-extinguisher, the same consisting of a receptacle containing a fire-ex-10 tinguishing fluid, a connection of metal fusible at a low temperature for suspending the same, and a breaker, substantially as described, attached to said receptacle, whereby upon the fusing of the connection the breaking of the 15 receptacle may be accomplished, substantially as set forth.

3. In a fire-extinguisher, the receptacle containing the fluid suspended by a fusible connection, in combination with a breaker, substantially as described, connected to the recep- 20 tacle, and also connected independently with the support for the receptacle, whereby when the fusible connection is destroyed the receptacle falls and operates the breaker to destroy the same.

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

JAMES ALFORD HOUSE.

Witnesses:

318,743

J. S. HANNER,