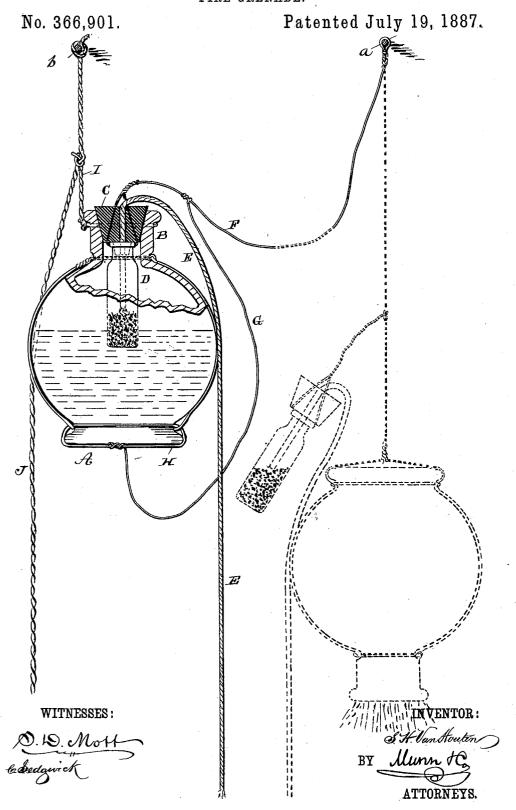
## S. H. VAN HOUTEN.

FIRE GRENADE.



## UNITED STATES PATENT OFFICE.

SILAS H. VAN HOUTEN, OF PATRIOT, INDIANA.

## FIRE-GRENADE.

SPECIFICATION forming part of Letters Patent No. 366,901, dated July 19, 1887.

Application filed February 23, 1887. Serial No. 228,546. (No model.)

To all whom it may concern:

Be it known that I, SILAS H. VAN HOUTEN, of Patriot, in the county of Switzerland and State of Indiana, have invented a new and Improved Fire Grenade, of which the following is a specification, reference being had to the accompanying drawing, which is a side elevation, partly in section, of a fire grenade constructed according to my improvement, show-10 ing the grenade in two positions, one of the positions being represented in dotted lines.

The object of my invention is to provide a simple and effective device for extinguishing fires by means of a grenade containing a fire-

15 extinguishing liquid.

My invention consists in the construction and arrangement of parts, as will be hereinaf-

ter fully described and claimed.

The bottle  $\Lambda$  is provided with a beaded neck, 20 B, to which is fitted a stopper, C. From the stopper C is suspended a small bottle, D, containing gunpowder or other exposive. The stopper C is centrally apertured to receive a fuse, E, which extends through the cork into 25 the bottle D and into the body of the powder contained by the bottle.

To the stopper C is attached one end of a wire, F, the opposite end of which is secured to a nail, a, driven into a fixed support. A

- 30 wire, G, is connected at one end with the wire F, the opposite end being connected with a wire, H, attached to the flanged bottom of the bottle A and woven around the bottle. combustible cord, I, is fastened around the
- 35 neck B, and is secured to a nail, b, driven into a fixed support. To the cord I is secured a stronger cord, J, which serves to break the cord I when it is desirable to release the grenade by hand.

When a fire occurs in the room in which the grenade is suspended, the cord I is burned as soon as it is reached by the fire, thus releasing the bottle A, allowing it to fall into the position shown in dotted lines. As the bottle falls

45 it renders the wire F taut, and the shock produced in falling causes the wire F to withdraw the stopper C from the bottle, when the bottle is free to continue falling until the wire G is rendered taut; when the bottle will invert itself, and its contents will be discharged into 50 the room.

Should the stopper C stick in the neck of the bottle, so that the wire F will not remove it, the fuse E, which is lighted by the fire, will quickly communicate the fire to the powder in 55 the bottle D. The powder will explode and burst the said bottle D, and also the bottle A, liberating and scattering the contents of the said bottle A.

Having thus fully described my invention, I cc claim as new and desire to secure by Letters

Patent-

1. In a fire-grenade, the combination, with a bottle, A, having a stopper, of a combustible suspender, I, and a wire connected to the 65 bottle stopper and to a fixed support, whereby when the combustible suspender is severed the bottle will fall and its stopper be withdrawn, substantially as set forth.

2. In a fire-grenade, the combination, with 70 the bottle A, containing fire - extinguishing liquid, of the combustible suspender I, the stopper C, fitted to the neck of the bottle, the wire F, of greater length than said suspender, connected with the stopper C and with a fixed 75 support, and the wire G, connected with the bottom of the bottle A, and with the wire F, whereby when suspender I is severed the bottle will fall, the cork be pulled out, and the

bottle suspended by wires F G in a position 80 to discharge its contents, substantially as described.

3. In a fire-grenade, the combination, with the bottle A, provided with the stopper C, of the combustible suspender I, the bottle D, sus- 85 pended from the stopper C and containing an explosive, the fuse E, passing through the stopper C and into the explosive contained by the bottle D, the wire F, attached to the stopper C and to a fixed support, and the wire G, con- 90 nected with the bottom of the bottle A, and with the wire F, substantially as described.

SILAS H. VAN HOUTEN.

Witnesses:

BEN ALBRO, SILAS MCHURON.