

No. 832,269.

PATENTED OCT. 2, 1906.

H. A. MYERS.
FIRE EXTINGUISHER.
APPLICATION FILED AUG. 24, 1904.

Fig. 1.

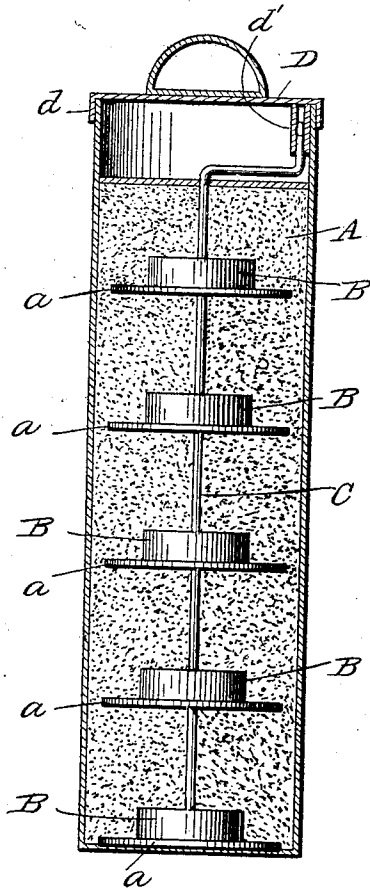


Fig. 2.

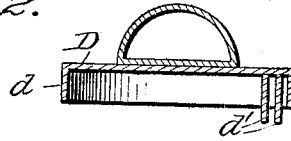
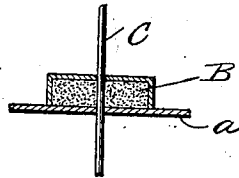


Fig. 3.



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UNITED STATES PATENT OFFICE.

HUBERT A. MYERS, OF GOSHEN, INDIANA.

FIRE-EXTINGUISHER.

No. 832,269.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed August 24, 1904. Serial No. 222,007.

To all whom it may concern:

Be it known that I, HUBERT A. MYERS, a citizen of the United States of America, and a resident of Goshen, Elkhart county, Indiana, have invented a certain new and useful Improvement in Fire-Extinguishers, of which the following is a specification.

My invention contemplates a fire-extinguisher provided with means for blowing or shooting a dry extinguishing-powder in a loose or unconfined condition in any desired direction and the extinguisher in its entirety and mode of operation resembling the ordinary Roman candle and being also provided with means for automatically igniting the gunpowder or other explosive used for shooting the dry extinguishing-powder out of the end of the tube, said means consisting, preferably, of a cap normally sealing the end of the tube, but adapted to ignite a fuse when removed therefrom.

The nature and advantages of my invention will, however, hereinafter more fully appear.

In the accompanying drawings, Figure 1 is a vertical or longitudinal section through a fire-extinguisher embodying the principles of my invention. Fig. 2 is a view similar to Fig. 1, but showing the end cover removed and the fuse ignited. Fig. 3 is a detail section of one of the charges of gunpowder with which the fuse is provided at different points throughout its length.

As thus illustrated my invention comprises a tube A of any suitable material and provided with diaphragms or partitions *a*, which latter are loosely mounted therein. These diaphragms or partitions divide the bore of the tube into compartments, each compartment being filled with a suitable fire-extinguishing powder—that is to say, a loose dry extinguishing-powder of any suitable known or approved character. At the bottom of each compartment there is a charge of gunpowder or other suitable explosive, inclosed, if desired, in a small paper casing B. A fuse C extends centrally along the inside of the tube and connects the different charges of gunpowder. It will be seen that these charges of gunpowder are located at the bottom of each compartment, so that they rest on the partition *a*. At its upper end the said fuse can be provided with a match-head, so that it can be ignited by friction. The closure or cover D normally seals the open end of the tube and is provided with a flange or

rim *d* and also with a friction device *d'*. Normally the flange *d* hits over the end of the tube, thus effectually sealing the latter. Also the friction device *d'* normally engages the match-head of the fuse. Consequently when the cover D is removed the end of the fuse is automatically ignited as a result of the friction or rubbing to which the match-head of the fuse is momentarily subjected. The fuse when thus ignited sets off the charges of gunpowder one after the other. As the dry extinguishing-powder is loosely contained in the tube, the igniting of the first charge of gunpowder serves to blow out the contents of the first compartment in the tube. In other words, the gunpowder not being tightly confined does not explode violently, but simply generates enough pressure to blow the extinguishing-powder out from the end of the tube. This of course is repeated as fast as the different charges of gunpowder are ignited.

In a way the extinguishing-powder is shot out of the tube in a loose or unconfined condition; but, as stated, the action partakes somewhat of the nature of simply blowing the loose dry extinguishing-powder out of the end of the tube. Such being the case, a cloud or "spray," so to speak, of loose dry extinguishing-powder is ejected from the end of the tube each time a charge of gunpowder or other explosive is ignited. Should the fire occur at a time when no one is around, the heat will ignite the match-head and release the cover automatically. In other words, the fire-extinguisher can be hung on the wall, and the cover will fly off as soon as the fuse is ignited and the first charge of powder is burned. In this way my improved fire-extinguisher may be put in operation by hand or automatically by the heat of the fire.

As the partitions are not large enough to fill the bore of the tube, the compartments are all connected, and each partition simply serves as a backing for a charge of gunpowder.

I claim, broadly, the novel and advantageous feature of discharging a fire-extinguishing powder in a loose or unconfined condition from the mouth or discharge-opening of a tube or other suitable receptacle.

What I claim as my invention is—

1. A fire-extinguisher comprising a suitable tube containing a loose dry extinguishing-powder, and a suitable explosive also contained in said tube, together with means for igniting the explosive and thus blowing the loose extinguishing-powder out of the tube,

the fire-extinguishing powder being adapted to be discharged in a loose or uninclosed condition, and said tube having walls adapted to resist the internal pressure incident to a discharge of the fire-extinguishing material, whereby said material is discharged from the mouth of said tube.

2. A fire-extinguisher comprising a tube filled with a loose dry extinguishing-powder, the interior of the tube being separated into compartments by transverse partitions, a charge of suitable explosive situated at the bottom of each compartment and resting on the adjacent partition, together with means for successively igniting the different charges of explosive and thereby successively blowing out the contents of the different compartments, the fire-extinguishing powder being adapted to be discharged in a loose or uninclosed condition, and said tube having walls adapted to resist the internal pressure incident to a discharge of the fire-extinguishing material, whereby all of said material is discharged from the mouth of said tube.

3. A fire-extinguisher comprising a tube containing a loose dry extinguishing-powder, and containing means for blowing said powder out of the tube, the fire-extinguishing powder being adapted to be discharged in a loose or uninclosed condition, and said tube having walls adapted to resist the internal pressure incident to a discharge of the fire-extinguishing material, whereby all of said material is discharged from the mouth of said tube.

4. A fire-extinguisher comprising a tube containing a loose dry extinguishing-powder, and containing also a suitable explosive for blowing the extinguishing-powder out of the tube, together with a cover normally sealing the end of the tube, and suitable means whereby said explosive is ignited automatically by the manual removal of said cover, the fire-extinguishing powder being adapted to be discharged in a loose or uninclosed condition, and said tube having walls adapted to resist the internal pressure incident to a discharge of the fire-extinguishing material, whereby all of said material is discharged from the mouth of said tube.

5. A fire-extinguisher comprising a receptacle containing fire-extinguishing material and means for discharging the same, and having a cover normally held in place, together with a fuse provided with heat-igniting material engaging a portion of the cover, whereby the receptacle can be opened either by hand or by the application of heat to said heat-igniting material, the fire-extinguishing powder being adapted to be discharged in a loose or uninclosed condition, and said receptacle having walls adapted to resist the internal pressure incident to a discharge of the fire-extinguishing material, whereby said material is discharged from the mouth of said receptacle.

6. A fire-extinguisher charged with a plurality of propelling and projectile units, the projectile units containing loose dry fire-extinguishing medium, and a single igniting-fuse arranged successively in operative proximity to the propelling units.

7. A fire-extinguisher comprising containing and directing means, a plurality of propelling and projectile units and successively arranged therein, the projectile units containing loose dry fire-extinguishing medium, and a single igniting-fuse penetrating the successive propelling units in substantially central position.

Signed by me at Goshen, Elkhart county, Indiana, this 3d day of August, 1904.

HUBERT A. MYERS.

Witnesses:

L. J. BROOKS,
WM. LEWIS.