

A. LA BRECHE.
 AUTOMATIC FIRE EXTINGUISHER.
 APPLICATION FILED JAN. 3, 1913.

1,080,068.

Patented Dec. 2, 1913.

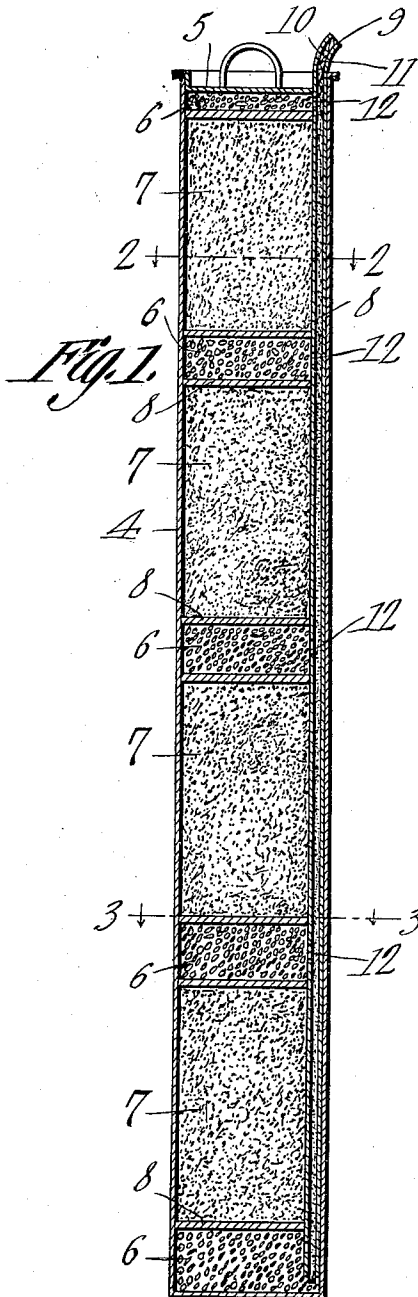


Fig. 2.

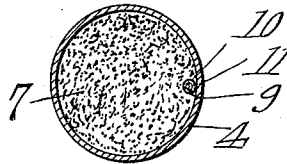
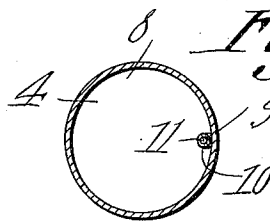


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

ALPHONSE LA BRECHE, OF JEFFERSON, SOUTH DAKOTA.

AUTOMATIC FIRE-EXTINGUISHER.

1,080,068.

Specification of Letters Patent.

Patented Dec. 2, 1913.

Application filed January 3, 1913. Serial No. 740,058.

To all whom it may concern:

Be it known that I, ALPHONSE LA BRECHE, a citizen of the United States, residing at Jefferson, in the county of Union and State of South Dakota, have invented a new and useful Automatic Fire-Extinguisher, of which the following is a specification.

The present invention appertains to fire extinguishers, and aims to provide an automatic device of the character indicated, and one which has a repeated or intermittent action.

It is the object of the present invention to provide a fire extinguisher embodying a series of charges of a powdered fire extinguishing chemical or agent, and means for expelling or ejecting the successive charges so as to produce a repeated or intermittent action, as is desirable.

It is also the object of the present invention to combine with a suitable receptacle and cover therefor, alternate layers or stratas of an explosive and of a powdered fire extinguishing agent disposed in the receptacle, in connection with a fuse connecting the layers of the explosive, so that when the fuse is ignited, the same will successively ignite the layers or charges of the explosive, thereby first liberating or throwing off the cover, and then successively ejecting the various layers or charges of the fire extinguishing agent.

It is also the object of the present invention to provide a device of the character indicated, which shall be comparatively simple, compact, and inexpensive in construction, which shall be efficient, serviceable and convenient in its use, and which may be temporarily supported on a wall, or the like, or which may be manipulated by the hand so as to direct the ejected charges of the fire extinguishing agent.

With the foregoing general objects outlined, and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

The invention has been illustrated in its preferred embodiment in the accompanying drawings wherein similar reference charac-

ters have been employed to denote corresponding parts, and wherein:—

Figure 1 is a central longitudinal section of the device. Figs. 2 and 3 are sectional views taken on the line 2—2 and 3—3 of Fig. 1.

Referring specifically to the drawings, the present invention embodies a receptacle, container or barrel 4, which may be of any suitable dimensions and which is illustrated as being tubular in form. This barrel or receptacle 4 has one end closed, and its other end is open, a cover or plug 5 fitting in the open end of the barrel. The cover may be of any suitable construction, the same being shown as having its central portion struck inwardly so as to fit within the end of the barrel and so as to provide a flange seatable against the end of the barrel. The cover is also provided with a suitable handle or hand hold.

Within the barrel 4 is loosely disposed the alternate layers or stratas 6 and 7 respectively of an explosive and of a powdered fire extinguishing chemical or agent of any suitable character. The explosive may be such as black gunpowder, or the like, which possesses a sufficient expansive power, and the fire extinguishing agent or chemical may be of any particular character, suitable for the purpose. The upper or outer charge of powder or explosive is disposed adjacent the cover, whereas the inner or lower charge is disposed against the closed end of the barrel. The proportions of the charges of explosive and fire extinguishing agent are regulated according to the circumstances, the charges of the explosive being graduated or increased in quantity from the upper charge or layer to the lower charge or layer so as to eject the succeeding charges of the extinguishing agent with increased velocity and so as to properly distribute or spread the same, and the charges of the fire extinguishing agent are such as to effectively extinguish or reduce the conflagration with which it conflicts.

The various layers, stratas, or charges of the explosive and fire extinguishing agent are preferably separated by the wads or disks 8, so as to retain the same in separated positions, and in order that the barrel may be properly packed. The wads also assist in the proper expulsion or ejection of the fire extinguishing agent as will be apparent.

The various layers or charges of the ex-

plosive are connected by a fuse 9, this fuse
 extending longitudinally within the barrel 4
 alongside and passing through an opening
 provided in the cover 5. This fuse may be
 5 of any suitable or ordinary construction, the
 same being illustrated as embodying a sheath
 or casing 10 containing the fuse powder or
 burning agent 11. The sheath or casing 10
 of the fuse is preferably provided with an
 10 aperture or opening 12 within each layer of
 the explosive, so as to assure of the ignition
 of the explosive charges. The outer or free
 end of the fuse is also preferably provided
 with means whereby the fuse may be readily
 15 ignited by adjoining conflagration or by ex-
 cessive heat. The wads or disks 8 are pro-
 vided with notches in their edges receiving
 the fuse 9, the wads fitting snugly within the
 barrel 4 so as not to leave any passage
 20 through which the explosive might blow out
 when ignited.

In use, it will be evident that when the
 heat rises to an abnormal or excessive degree,
 or when the fire reaches the fire extinguisher,
 25 the outer end of the fuse will be ignited.
 The fuse will then burn to the first charge
 of explosive directly behind the cover 5, and
 as a result, this charge will be set off so as
 to throw off or eject the cover, thereby open-
 30 ing the barrel. The fuse will continue to
 burn to the second or next succeeding charge,
 which in being ignited will cause the first or
 outer charge of the fire extinguishing agent
 to be ejected or forcibly thrown off. The
 35 fire extinguishing agent or chemical will be
 thus discharged and distributed or spread so
 as to cover a considerable area, and will also
 be propelled or thrown for a considerable
 distance, so as to most effectively extinguish
 40 the conflagration with which it comes into
 contact. The fuse continues to burn, setting
 off the successive charges of the explosive, so
 that respective charges of the fire extinguish-
 ing agent will be intermittently ejected. In

this manner, an intermittent or repeated fire 45
 extinguishing action is accomplished, so as
 to most effectively check or arrest the con-
 flagration.

The barrel 4 may be secured to a wall or
 other support in any convenient manner, so 50
 as to direct the open end thereof as desired,
 or if desired, the barrel may be only tem-
 porarily supported, so that it can be taken
 down by the proper person or attendant,
 who may then manipulate the same to most 55
 effectively direct the ejected charges of the
 fire extinguishing agent.

The barrel 4 and its cover 5 are construct-
 ed of any suitable material, preferably such
 as will be impregnable to water, moisture, and 60
 other injurious elements, and if desired, the
 outer end of the fuse may be temporarily
 covered by paraffin, or the like, so as to pre-
 vent the same from being exposed to mois-
 ture and the like. 65

What is claimed is:—

A fire extinguisher embodying a barrel,
 having its upper end open, alternate layers
 of an explosive and of a powdered fire exting- 70
 uishing agent packed in the barrel, wads
 separating the various layers, and fitting
 snugly within the barrel, a cover fitting in
 the upper end of the barrel, and a fuse extend-
 ing longitudinally within the barrel along 75
 one side thereof, the wads being notched to
 receive the fuse and the fuse passing through
 the cover, one layer of the explosive being
 arranged adjoining the cover and the layers
 of the explosive being increased in quantity 80
 from the upper to the lower one.

In testimony that I claim the foregoing as
 my own, I have hereto affixed my signature
 in the presence of two witnesses.

ALPHONSE LA BRECHE.

Witnesses:

VICTOR CAUTIN,
G. C. ALLARD.