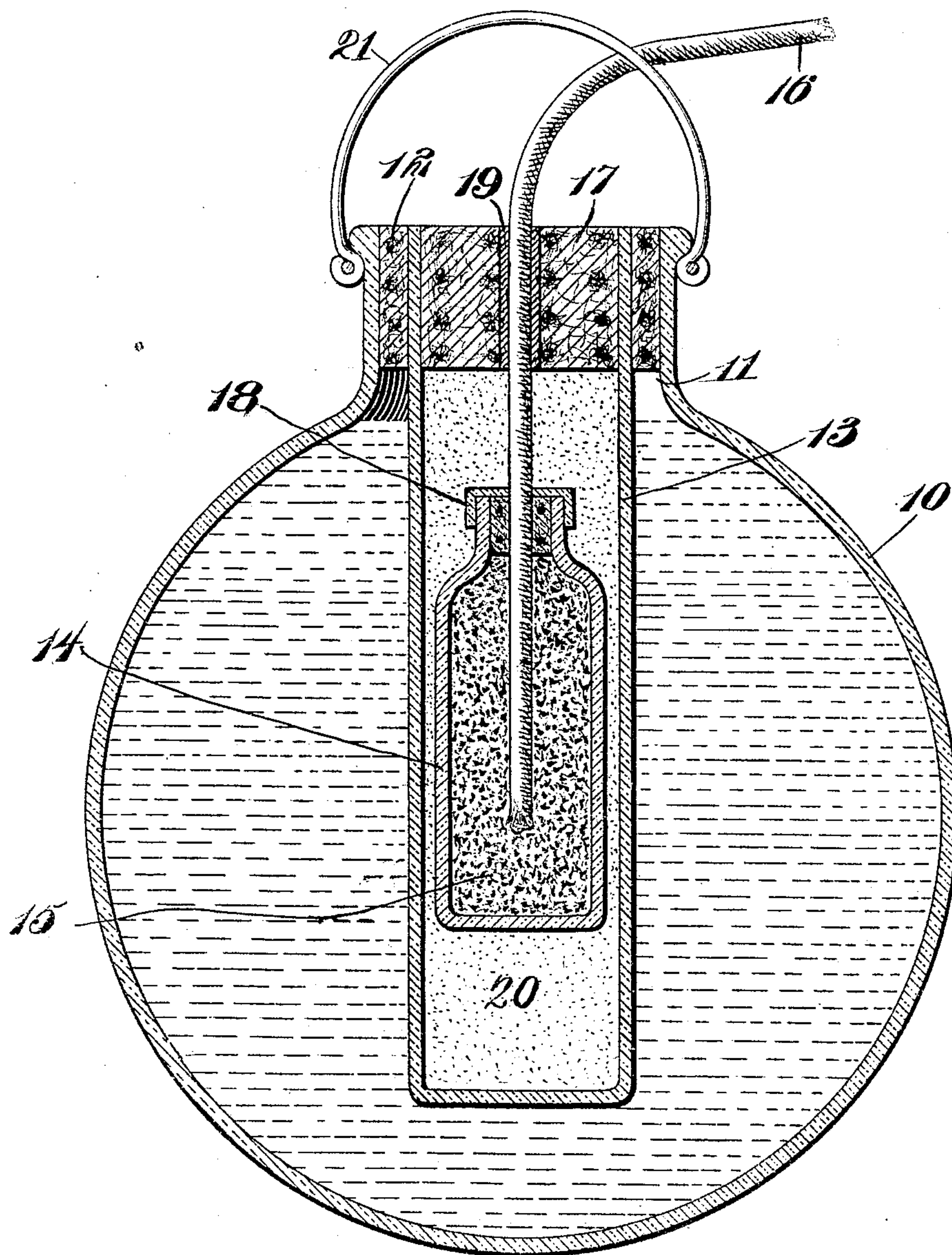


No. 764,763.

PATENTED JULY 12, 1904.

W. R. PIERCE.
FIRE EXTINGUISHER.
APPLICATION FILED DEC. 7, 1903.

NO MODEL.



Witnesses
E. J. Stewart
C. N. Woodward

William R. Pierce
Inventor
by *C. A. Snow & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM R. PIERCE, OF HORTON, KANSAS.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 764,763, dated July 12, 1904.

Application filed December 7, 1903. Serial No. 184,145. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. PIERCE, a citizen of the United States, residing at Horton, in the county of Brown and State of Kansas, have invented a new and useful Fire-Extinguisher, of which the following is a specification.

This invention relates generally to fire-extinguishers, and particularly to that class embodying a holder containing an extinguishing compound and a cartridge contained within the holder and adapted to be exploded through the medium of a fuse in case of fire.

The object of the invention is in a ready, practical, inexpensive, and a positive manner to shield the contents of the cartridge against the deteriorating effects of moisture and to improve the construction and increase the efficiency of such devices.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists, generally stated, in a fire-extinguisher embodying a frangible holder containing an extinguishing compound, a frangible cartridge, and a frangible cartridge-shield containing a moisture-proof substance which entirely envelops the cartridge.

The invention consists, further, in the novel construction and combination of parts of a fire-extinguisher, as will be hereinafter described and claimed.

In the accompanying drawing, forming a part of this specification, and in which like characters of reference indicate corresponding parts, there is illustrated one form of embodiment of the invention capable of carrying the same into practical operation, it being understood that the elements therein exhibited may be varied or changed as to shape, proportion, and exact manner of assemblage without departing from the spirit thereof.

In the drawing the figure is a view in vertical longitudinal section of a fire-extinguisher constructed in accordance with the present invention.

Referring to the drawing, 10 designates the holder, which is preferably globular in form and made of any suitable frangible material, usually of glass, and furnished with a

neck 11, constituting an inlet. Arranged within the inlet is an annulus 12, preferably of cork, which bears against the inner walls of the neck and serves to hold suspended within the holder a cartridge-shield 13, of frangible material. The shield is preferably cylindrical, has its lower end closed, and is somewhat less in length than the diameter of the holder. Disposed within the shield is the cartridge, which comprises a frangible shell 14 and an explosive 15, of gunpowder or the like, communicating with which is one end of a fuse 16, the other end of which extends outward through a closure 17, of cork or any other suitable material, which serves to close the upper end of the shield 13, the cartridge being provided with a cap 18, through which the fuse passes. The closure 17 is by preference provided with a fuse-protecting sleeve 19 of any suitable material. The shield contains a waterproof compound 20, which may be of any substance suited for the purpose—such as tallow, soap, or the like—and entirely envelops the cartridge, it being seen that the latter is of less diameter than that of the bore of the shield. The waterproof material subserves the double function of protecting the explosive from being affected by dampness and also from the effects of extreme cold, such as would be sufficient to cause congelation of the extinguishing compound contained within the holder 10. This latter function is secured from the fact that if the shield 13 be fractured the tenacity of the waterproof filling will hold the parts of the shield against separating, and as the compound will be impervious to the passage of liquid even if the cartridge 14 be fractured the said compound will positively prevent the entrance of any moisture to the explosive which would render it inoperative. These two functions secured by the waterproof material are of the highest importance and will render the device operative under conditions that would destroy or render positively inoperative devices of the ordinary character.

To facilitate handling and suspending of the extinguisher, the latter is provided with a bail 21, secured in any suitable manner to the holder.

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

1. A fire-extinguisher comprising an outer
5 frangible holder containing an extinguishing agent, a frangible cartridge arranged within the holder and a cartridge-shield containing a waterproof substance entirely enveloping the cartridge.
- 10 2. A fire-extinguisher comprising an outer frangible holder containing an extinguishing agent, a frangible cartridge disposed within the holder, a cartridge-shield in which the cartridge is housed and having one end per-
15 manently closed, a waterproof substance contained by the shield and entirely enveloping the cartridge, and means for holding the shield suspended within the holder.
- 20 3. A fire-extinguisher comprising a holder provided with a neck and containing an extinguishing agent, an annulus disposed within the neck, a frangible cartridge disposed within the holder, a cartridge-shield having its lower end closed and its upper end seated in the an-
25 nulus, a waterproof substance within the shield and entirely enveloping the cartridge,

a fuse connecting at one end with the explosive of the cartridge and projecting at its other end beyond the holder, and a closure for sealing the open end of the shield and
30 having an orifice through which the fuse projects.

4. A fire-extinguisher comprising a frangi-
ble holder containing an extinguishing agent and provided with a neck, a frangible cylin- 35
drical cartridge-shield suspended from the neck and containing a body of tallow, soap or the like, a frangible cartridge of less diameter than the shield and embedded within the waterproof material of the shield, the fuse 40
connecting with the explosive of the cartridge and extending without the holder, a closure for the upper end of the shield, and a fuse-protecting sleeve carried by the closure.

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

WILLIAM R. PIERCE.

Witnesses:

SCOTT HOPKINS,

I. M. ANDERSON,

R. H. MONTGOMERY.