Dec. 4, 1956 S. C. BEAUDET 2,772,744

FIRE EXTINGUISHER

Filed May 3, 1954

FIG. 1

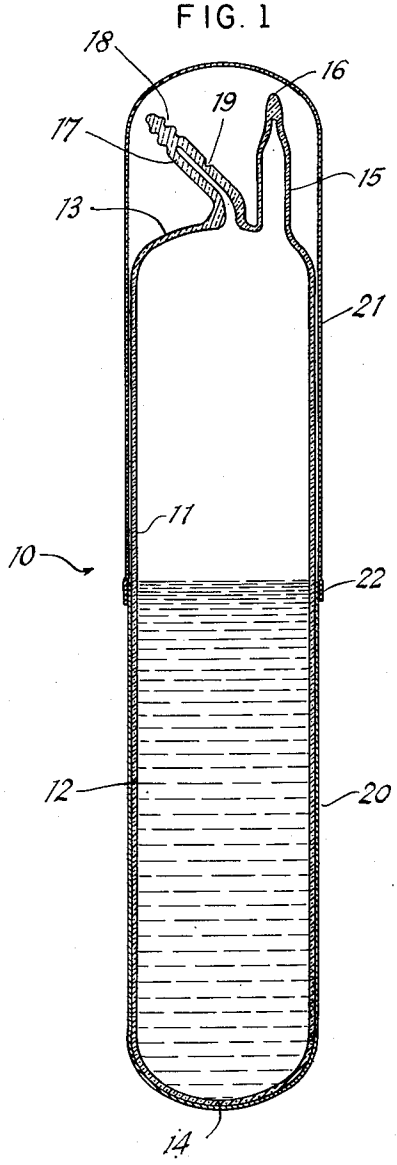
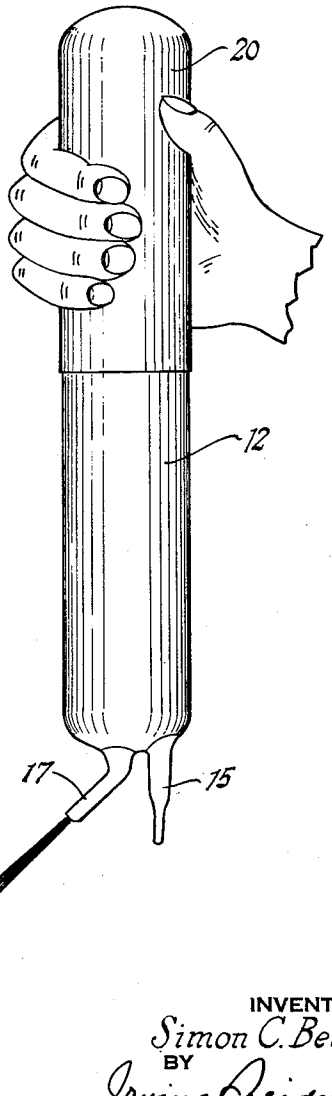


FIG. 2



INVENTOR
Simon C. Beaudet
BY
Irving Reidman
ATTORNEY

United States Patent Office 2,772,744 Patented Dec. 4, 1956

2,772,744

FIRE EXTINGUISHER

Simon C. Beaudet, New York, N. Y.

Application May 3, 1954, Serial No. 427,076

2 Claims. (Cl. 169—31)

This invention relates to fire extinguishing devices of the ampule type. More specifically, the invention concerns devices comprising glass ampules for containing fire extinguishing liquids under gaseous pressure or fire extinguishing gases under pressure.

My type of fire extinguisher provides a perfect protection since the sealed liquid within the ampule is always ready for use in the event of a fire. The liquid cannot evaporate and will stay indefinitely in the same condition thus providing a full security fire extinguisher. Furthermore, my fire extinguisher will not deteriorate or lose its liquid or its pressure because of its inherent construction.

It has been proposed to provide fire extinguishers of the glass ampule type which may be manually manipulated in the event of fire and are compact in size so as to facilitate storage and use thereof. However, since the ampule is made of a frangible material, there is danger in using the same particularly when holding the ampule and snapping or otherwise breaking the dispensing seal thereon.

Accordingly, an object of this invention is to provide an improved extinguisher of the ampule type wherein the ampule is encased in a thin protective sheath with a portion of the sheath being removable to expose the dispensing portion of the ampule.

Another object of this invention is to provide in a device of the character described, a pair of thin protective sheaths for enclosing the ampule, one of the sheaths being removable to expose the dispensing end of the ampule while the other sheath provides means for holding the ampule in its operative position and preventing harm to the holder in the event of breakage of the ampule.

Still another object of this invention is to provide a glass ampule type fire extinguisher having at one end thereof an integral tubular projection by which the ampule is filled with a fire extinguishing medium under gaseous pressure, the ampule also having an integral capillary projection adjacent said filler projection, the capillary projection having a weakening groove adjacent the end thereof to allow the end to be snapped off when the ampule contents are to be dispensed, the entire ampule being encased in a thin protective sheath adapted to resist undue gas pressures developing internally of the capsule and thereby avoid accidental breakage of the ampule, a portion of the sheath being removable to expose the projections on the ampule.

In the drawing, Fig. 1 is a front elevational view of a fire extinguishing device embodying the invention, in section, and

Fig. 2 is a front elevational view of the device in operative position.

Referring in detail to the drawing, 10 designates a device embodying the invention. The same comprises an ampule 11 of frangible material such as thin walled glass or the like, the ampule being in tubular form with side walls 12 and rounded end walls 13, 14.

At end wall 13 there is formed a tubular projection 15 which is integral with the end wall and serves as a means for introducing into the ampule a fire extinguishing liquid under gaseous pressure. Such liquids are well-known in the art, being of various chemical compositions having the property of providing a barrier to the access of air to the fire to which the same is applied. Alternatively other fire extinguishing media in gaseous form may be introduced into the ampule. Upon filling the ampule with the selected extinguishing agent, the tubular projection 15 is sealed off at the tip 16.

There is also provided at end wall 13, an integral capillary tubulation 17, adjacent projection 15, such tubulation being sealed at its outer end as at 18 and being formed with a weakening groove as at 19. It will be apparent that the end of tubulation 17 may be readily snapped off by pressing the end portion thereof, the glass giving away at groove 19, thereby allowing the contents of the ampule to be dispensed in a fine stream under gaseous pressure. The tubulation 17 may be inclined relative to the longitudinal axis of the ampule to direct the stream when the ampule is held in a vertical, inverted position.

Means is provided for encasing the frangible ampule 11 and protecting the same against accidental breakage. To this end there is provided a sheath 20 of thin protective material such as metal or plastic which lies in contact with the outer surfaces of end wall 14 and the side wall 12 of the ampule, extending to a point approximately midway between the end walls thereof. The sheath 20 is tightly attached to the outer surface of side wall 12 of the ampule as by means of adhesive or the like. A second sheath 21 of thin protective material, similar to that of sheath 20, is removably mounted over the end wall 13 and adjacent side wall portions 12 of the ampule. The sheath 21 is of a length to extend from the outer ends of tubulation 17 and projection 15 which are enclosed by the end wall of said sheath, to a point slightly overlapping the inner end of sheath 20, as at 22. The sheath 21 closely hugs the side wall 12 of the ampule but may be removed with a sliding motion, to expose said tubulation 17.

It will be apparent that with the ampule 11 fully enclosed in thin sheaths 20, 21, the frangible material of the ampule is reinforced against the internal pressure of the contents thereof, thereby avoiding possible breakage of the ampule in storage. Furthermore, the sensitive, projections 15, 17 are protected against accidental contact which might break the same.

When the device is to be used to extinguish a fire, sheath 21 is readily stripped off, the tip 18 is snapped off from tubulation 17 at groove 19, allowing the contents of the ampule to be directed towards the fire, as shown in Fig. 2. It is also apparent that in such position of the ampule 11, sheath 20 provides means for safely holding the ampule and for protecting the hand of the holder against accidental breakage of the ampule.

I claim:

1. A fire extinguishing device comprising a frangible thin walled glass container for fire extinguishing liquid under pressure, said container having at the upper end thereof liquid entry means and liquid dispensing means,

protective means for said container comprising a thin light weight sheath like member enclosing the lower portion of said container and tightly attached to the outer surface of said container portion, and a thin light weight sheathlike member enclosing the upper portion of said container, adjacent portions of said members being in overlapping relation and the second mentioned member closely hugging the opposed portion of said container and being slidably removable from said container to expose said dispensing means while said first mentioned member provides holding means for said device in the operative position thereof.

2. A device as in claim 1 wherein said container is glass with said entry and dispensing means being integral tubular projections thereon.

References Cited in the file of this patent

UNITED STATES PATENTS

582,322	Storm	May 11, 1897
1,361,752	Cross	Dec. 7, 1920
1,813,910	Bronander	July 14, 1931
1,919,848	Levinson	July 25, 1933