Feb. 3, 1931. D. McERLANE 1,790,995

FIRE EXTINGUISHER

Filed Dec. 26, 1928

Fig. 1.

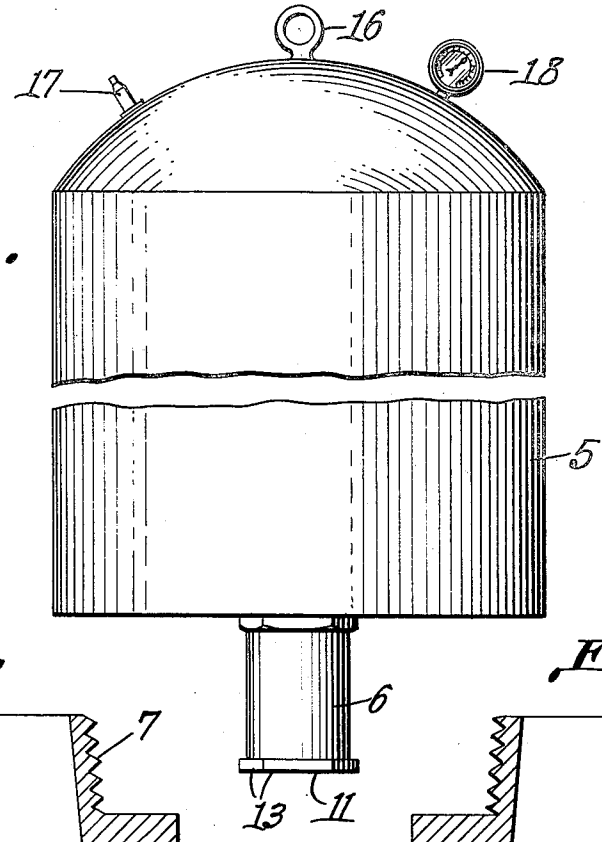


Fig. 2.

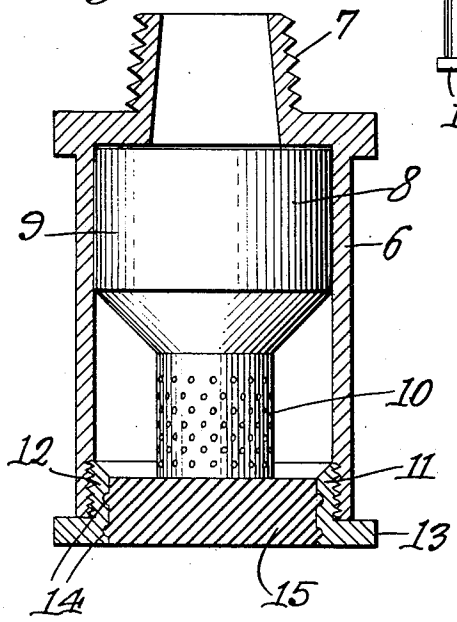
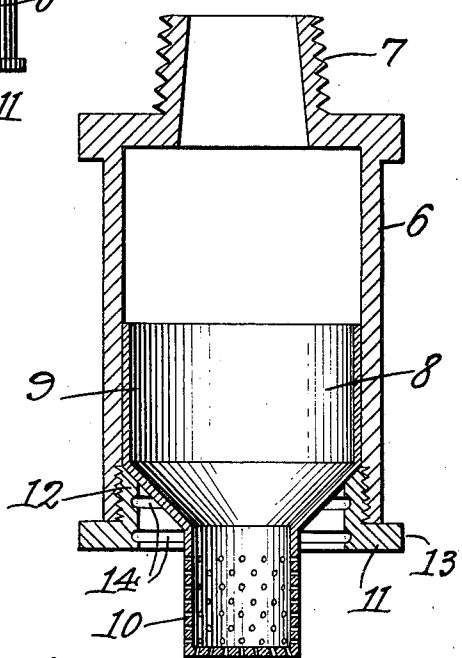


Fig. 3.



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UNITED STATES PATENT OFFICE

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FIRE EXTINGUISHER

Application filed December 26, 1928. Serial No. 328,604.

This invention relates to fire extinguishers of the portable type, the primary object of the invention being to provide a fire extinguisher which will be automatic in its operation.

Another important object of the invention is to provide a fire extinguisher including a tank for containing a fire extinguishing liquid normally under pressure so that when the liquid is released, it will be forced from the tank in all directions to accomplish its purpose.

A still further object of the invention is the provision of a nozzle normally held in its inactive position by means of a fusible material which when burned releases the nozzle which is forced to its active position by the water pressure in the tank.

With the foregoing 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 the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a side elevational view of a fire extinguisher constructed in accordance with the invention.

Figure 2 is a vertical sectional view through the nozzle tube, showing the nozzle in its inactive position.

Figure 3 is a longitudinal sectional view through the nozzle and nozzle tube, showing the nozzle in its active or spraying position.

Referring to the drawing in detail, the reference character 5 designates the tank or liquid container which forms the body portion of the fire extinguisher, the same being provided with a threaded opening disposed substantially centrally of the bottom of the tank 5.

The reference character 6 designates a cylinder which is formed with a threaded extension 7 to be positioned in the threaded opening in the bottom of the tank 5, to secure the cylinder 6 in position, as shown by Figure 1 of the drawing.

This cylinder 6 provides a housing for the nozzle 8 which is of a length less than the length of the cylinder 6, so that it will be completely housed by the cylinder 6, when the nozzle is in its inactive position. As shown, the nozzle includes an upper funnel-like body portion 9 and an extension 10 formed with a plurality of openings in its side and bottom walls so that liquid may pass from the nozzle in the form of a spray.

This nozzle is held within the cylinder 6, by means of the plug 11 which includes an outer ring member 12 formed with threads to be fitted in the threaded end of the cylinder 6, the ring 11 being provided with flattened surfaces 13 to receive a wrench or similar tool so that the plug may be secured within the cylinder. Grooves 14 are formed in the ring member and provide recesses for the reception of portions of the fusible material shown at 15, to lock the fusible material in position and hold it securely against the action of the pressure of the water and air in the tank 5.

Secured to the upper end of the body portion or tank 5, is an eye bolt 16 which is designed to be fitted over a hook or similar supporting device so that it may be hung in a suitable location within a building to be protected by the fire extinguisher. A valve 17 is also provided so that air may be forced into the tank to put the fire extinguishing liquid contained therein, under pressure with the result that when the fusible material has been melted, the pressure in the tank 5 will force the nozzle downwardly exposing the perforated end thereof to allow the liquid to be sprayed.

A gauge 18 is also provided on the tank so that the air pressure in the tank may be regulated.

I claim:

1. A portable fire extinguisher including a tank for containing liquid, a nozzle housing mounted on the tank and in communication with the tank, a nozzle movable in the nozzle housing, said nozzle being of a diameter to closely engage the wall of the nozzle housing, said nozzle having a perforated spraying ex-

tension, a fusible plug for normally holding the nozzle in its inactive position, said fusible plug adapted to normally close the nozzle housing and said nozzle adapted to move to its active position by the action of the pressure of the liquid in the tank when the plug is fused.

2. A portable fire extinguisher including a tank for containing liquid under pressure, a nozzle housing to be secured to the tank, a nozzle fitted in the nozzle housing, said nozzle having an apertured extension, the length of the nozzle being slightly less than the length of the nozzle housing, to closely fit within the nozlze housing, a fusible plug fitted in one end of the nozzle housing for normally holding the nozzle in its inactive position arranged and positioned to close the nozzle housing, and said nozzle adapted to move to its active position under the pressure of the liquid in the tank, when the fusible plug is fused.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

DANIEL McERLANE.