

June 26, 1928.

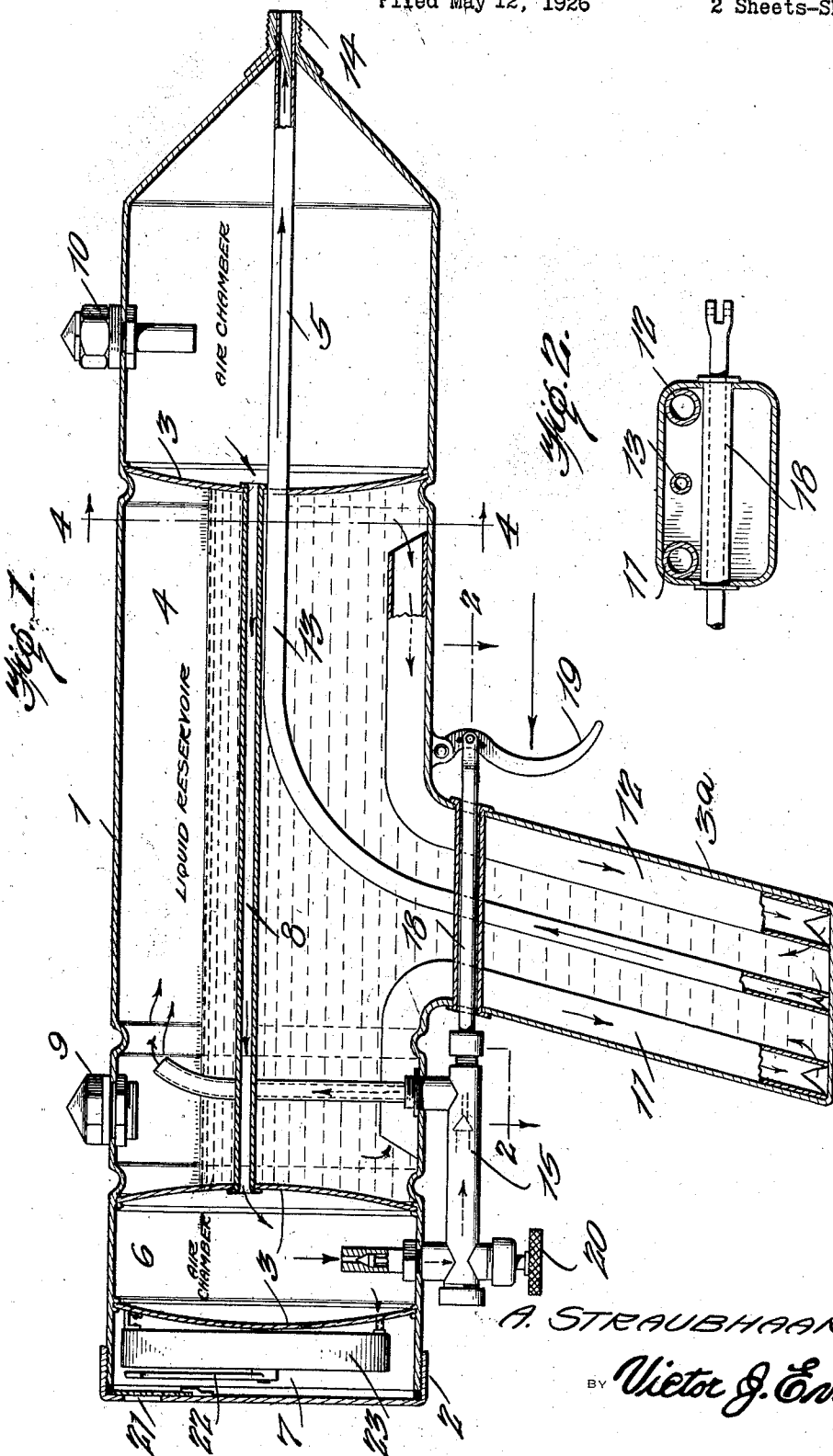
1,675,232

A. STRAUBHAAR

FIRE EXTINGUISHER

Filed May 12, 1926

2 Sheets-Sheet 1



A. STRAUBHAAR, INVENTOR

BY Victor J. Evans

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Fig. 3.

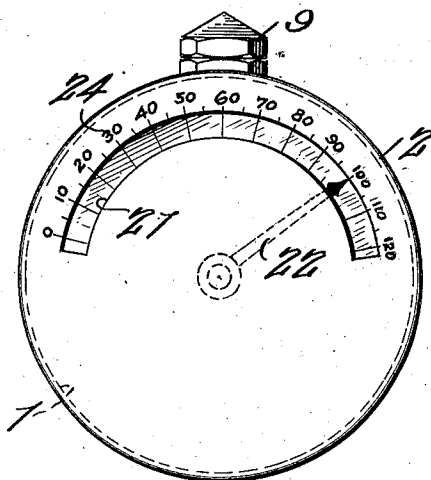


Fig. 4.

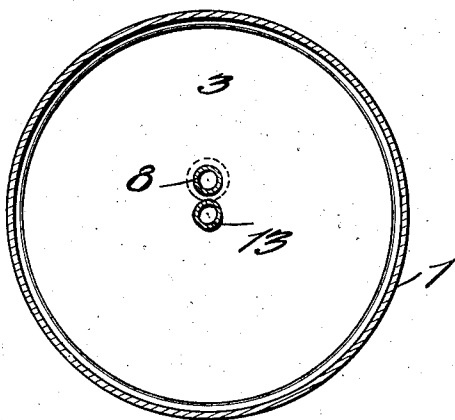
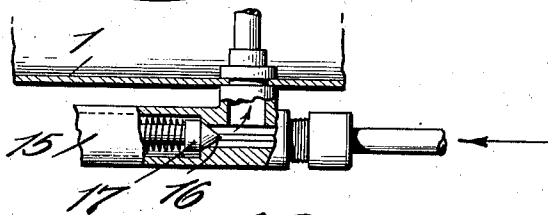


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALBERT STRAUBHAAR, OF DUNSMUIR, CALIFORNIA.

FIRE EXTINGUISHER.

Application filed May 12, 1926. Serial No. 108,656.

This invention relates to a fire extinguisher, the general object of the invention being to make the extinguisher somewhat in the form of a pistol so that it can be easily handled to direct the extinguishing liquid against the flames, the controlling valve being operated by a trigger which is manipulated by the same hand which grasps the handle.

Another object of the invention is to provide the device with siphons for leading the liquid from the reservoir to the discharge pipe.

A further object of the invention is to provide means for introducing compressed air into a chamber in the device which, when the valve is opened, will act on the liquid to force the same from the device, the compressed air being introduced into the device by means of an air pump or the like.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claims.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a longitudinal sectional view through the device.

Figure 2 is a section on line 2—2 of Figure 1.

Figure 3 is a view of the rear end of the device.

Figure 4 is a section on line 4—4 of Figure 1.

Figure 5 is a sectional view through the valve of the device.

In these views, 1 indicates the casing which forms the body of the device, this casing being preferably of cylindrical shape with a pointed front end and an open rear end, this rear end being closed by a screw cap 2. A pistol-like handle 3 is formed on the casing and depends from the under side thereof. Partitions 3 divide the casing into a liquid chamber or reservoir 4, a front air chamber 5, a rear air chamber 6 and a gauge chamber 7. A tube 8 connects the two air chambers together, said tube passing through the reservoir 4. A filling opening, closed by a plug 9, is arranged in the top of the casing for

permitting liquid to be placed in the chamber 4, and an air valve 10 is arranged on the top of the casing and communicates with the front air chamber 5 so that air can be forced into the air chambers. This valve is made to fit an ordinary air supply system or pump.

A rear siphon tube 11 leads from the rear part of the liquid reservoir to the lower part of the handle and a front siphon tube 12 leads from the front part of the reservoir 4 into the lower part of the handle, these tubes having their horizontal parts resting upon the bottom of the reservoir. A discharge tube 13 extends from the bottom of the handle through the reservoir and the front air chamber, with its outer end extending into the nozzle 14. Tubes 15 connect the air chamber 6 with the top of the reservoir 4, one of these tubes being arranged exterior of the casing and having a valve seat 16 therein which is engaged by a spring pressed valve 17, the stem of which passes through a tube 18 in the upper part of the handle and is connected with the trigger 19 pivoted to the lower part of the casing adjacent the handle. When this trigger is pressed upon, the valve 17 will be forced off its seat so that air can flow from the air chambers into the top of the reservoir, thus placing the liquid in the reservoir under pressure. This liquid will flow through the siphon tubes and be discharged through the tube 13 with great force. By having two siphon tubes, the liquid will pass through the tube 11 when the device is pointed upwardly and through the tube 12 when the device is pointed downwardly.

A hand operated valve 20 is arranged in one of the tubes 15 to close the communication from the air chambers to the liquid reservoir to prevent leakage of air. The cap 2 is provided with an arc-shaped window 21 so that the finger 22 of the air gauge 23 can be observed. This cap also carries a scale 24 for the finger.

Thus it will be seen that I have provided a simple form of fire extinguisher which is mainly designed for use in automobiles and the like, which works like a pistol. When a fire occurs, the valve 20 is opened and the handle 3 grasped by the hand, with one finger on the trigger 19. The device is then pointed at the flames and the trigger pressed upon to open the valve 17 so that air will pass from the air chambers into the liquid reservoir. Thus the liquid will be forced

from the reservoir, through the discharge tube 13 and it will pass from the nozzle 14 with considerable force. The siphon tube 11 will insure emptying of the reservoir 5 when the device is pointed upwardly and the siphon tube 12 will insure emptying of the reservoir when the device is pointed downwardly.

It is thought from the foregoing description 10 tion that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several 15 parts, provided that such changes fall within the scope of the appended claims.

What I claim is:—

1. A fire extinguisher comprising a cylindrical casing having front and rear end 20 walls, a pair of partitions in the casing dividing the same into a central reservoir and end air chambers, a hollow handle depending from and in communication with said central reservoir, a tube passing through 25 the partitions for connecting the two end chambers together, normally closed liquid inlet means opening into said reservoir, normally closed air inlet means opening into one of said air chambers serially joined, 30 tubes connecting the rear air chamber to the top of the reservoir, some of the tubes being arranged exteriorly of the casing and under the same, a valve in one of the exterior tubes, a trigger pivoted to the casing and arranged

adjacent the handle, means for connecting 35 the trigger with the valve, a discharge tube passing through the front end wall of the casing and extending through the reservoir and terminating in the bottom of the handle where it is in communication with the inte- 40 rior of the handle.

2. A fire extinguisher comprising a closed casing having a nozzle at its front end, partitions in the casing dividing the same into 45 a reservoir and an air chamber, a hollow handle depending from the central part of said reservoir and spaced a substantial distance from each end thereof, said handle being in communication with said reservoir, normally closed liquid inlet means opening 50 into said reservoir, normally closed air inlet means opening into said air chamber, serially joined pipes connecting the air chamber with the reservoir, one of the pipes being arranged exterior of the casing, valve means 55 in the exterior pipe, a trigger pivoted to the bottom of the casing adjacent the handle, a valve stem connected with the valve means and pivoted to the trigger, a discharge pipe in communication with the reservoir and 60 having its outer end engaging the nozzle, said discharge pipe extending into the bottom of the handle and front and rear siphon tubes having portions in the bottom of the reservoir and other portions extending to 65 the bottom of the handle.

In testimony whereof I affix my signature.

ALBERT STRAUBHAAR.