

P. M. HALLER.
FIRE EXTINGUISHER.
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1,208,549.

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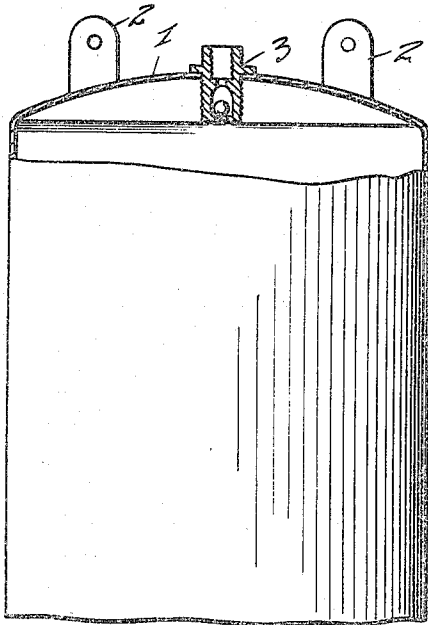


Fig. 1.

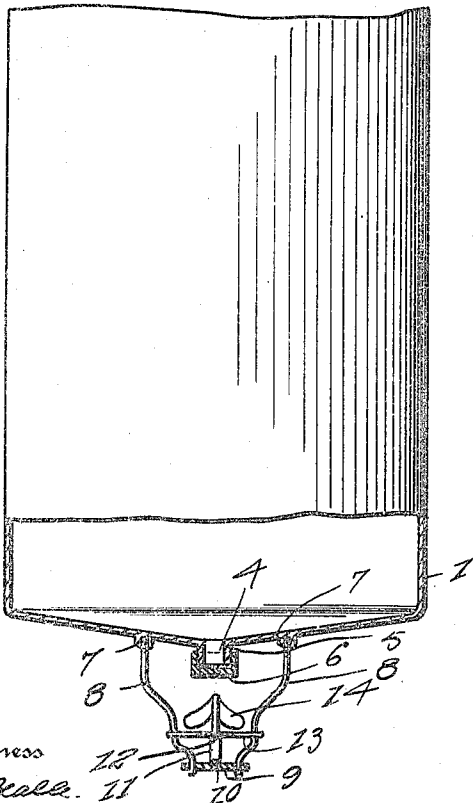
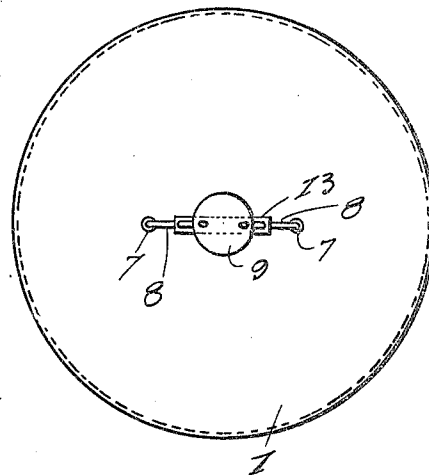


Fig. 2.



Witness
O'Malley 11
H. P. H. 12
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UNITED STATES PATENT OFFICE.

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FIRE-EXTINGUISHER.

1,208,549.

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To all whom it may concern:

Be it known that I, PEARL M. HALLER, a citizen of the United States, residing at Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in fire extinguishers and the principal object of the invention is to provide an extinguisher which will effectively spread and deflect the extinguishing liquid over the burning area so as to readily extinguish the flame.

Another object of the invention is to provide an extinguisher which is automatic in its operation so that when the same becomes heated up to or beyond a predetermined point it will automatically be set in operation.

A further object of the invention is to provide an extinguisher which may be hung from a suitable point within a room or building and suspended in such a manner that the outpouring liquid will be directed against a revolving deflector plate which will effectively separate and scatter the liquid over a wide area.

With these and other objects in view, the invention consists in the novel combination and arrangement of parts which will be fully set forth in the following specification and accompanying drawing, in which:—

Figure 1 is a side view partly in section of a fire extinguisher constructed in accordance with this invention, and Fig. 2 is a bottom plan view of Fig. 1.

Referring to the drawing the numeral 1 designates the tank or container for the extinguishing liquid which is provided with a closure at each end and the upper end closure is provided with a pair of spaced ears 2 for the reception of hooks or hangers by means of which the device is suspended. A filling valve 3 is provided centrally of the upper end closure and provides a means for admitting the extinguishing liquid. A suitable outlet opening 4 is formed in the lower end closure of the tank 1 and is surrounded by a neck 5 to which the cap 6 is attached. This cap 6 is formed of celluloid or any suitable highly inflammable mate-

rial which will open the passage through the neck when it becomes extensively heated or when the flames reach the same. It will thus be seen that the extinguisher tank will automatically be opened to permit the contents to flow out through the neck.

Secured to the under side of the bottom end closure of the container are suitable bosses 7 in which are threaded the depending arms 8 which coöperate with the plate 9 in forming a supporting frame for the deflector. This plate 9 is formed with a central depression 10 forming a bearing for the shaft 11 the upper end of which projects through an opening 12 in the bearing plate 13 which is supported intermediate the upper and lower ends of the arms 8 and is provided to hold the shaft in a vertical position as illustrated in the drawings. Secured to the upper reduced portion of the shaft 11 is the deflector designated by the numeral 14 which consists of a plurality of deflector blades which are constructed around a hub in the manner similar to the ordinary construction of screw propellers.

In use it will be seen that upon the burning through or melting of the cap 6 the contents of the tank or container 1 will flow through the neck 5 and out through the opening in the lower end thereof and be forcibly directed against the deflector 14 thereby causing the same to revolve and scatter the outflowing liquid over a wide area. It will be understood that the force of the outflowing liquid is obtained by the use of air pressure as the tank is first filled to a predetermined height with the extinguishing liquid and then air forced into the same and it will thus be seen that the extreme pressure of the outflowing liquid against the deflector 14 will cause the same to rapidly revolve and give a much more effective operation than would otherwise be obtained.

While in the foregoing there has been shown and described the preferred embodiment of this invention, it is to be understood that such changes may be made in the combination and arrangement of parts as will fall within the spirit and scope of the appended claim.

What is claimed is:—

A fire extinguisher comprising a tank adapted to hold liquid under pressure, a pair of supporting ears at the upper end of the tank, the lower end of the tank being

provided with an outlet opening, a neck
surrounding said outlet opening, a cap of
highly inflammable material for closing the
lower end of the neck, hollow internally
5 threaded bosses formed on the bottom of
the tank, arms threaded into the bosses, a
plate connecting the lower ends of the arms,
a cooperating plate mounted intermediate
the ends of the arms, a shaft journaled be-
10 tween the plates, a rotary deflector mounted
on the upper end of the shaft and adapted

to be automatically rotated by the outflow-
ing contents of the tank and an inlet valve
in the upper end of the tank through which
the liquid is passed when the same is being 15
filled.

In testimony whereof I affix my signa-
ture in presence of two witnesses.

PEARL M. HALLER.

Witnesses:

MARGARET H. KING,
FRANCES M. KING.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."