A. MATHIS.

FIRE EXTINGUISHER.

APPLICATION FILED AUG. 22, 1917.

1,293,850. Patented Feb. 11, 1919.

Fig. 1.

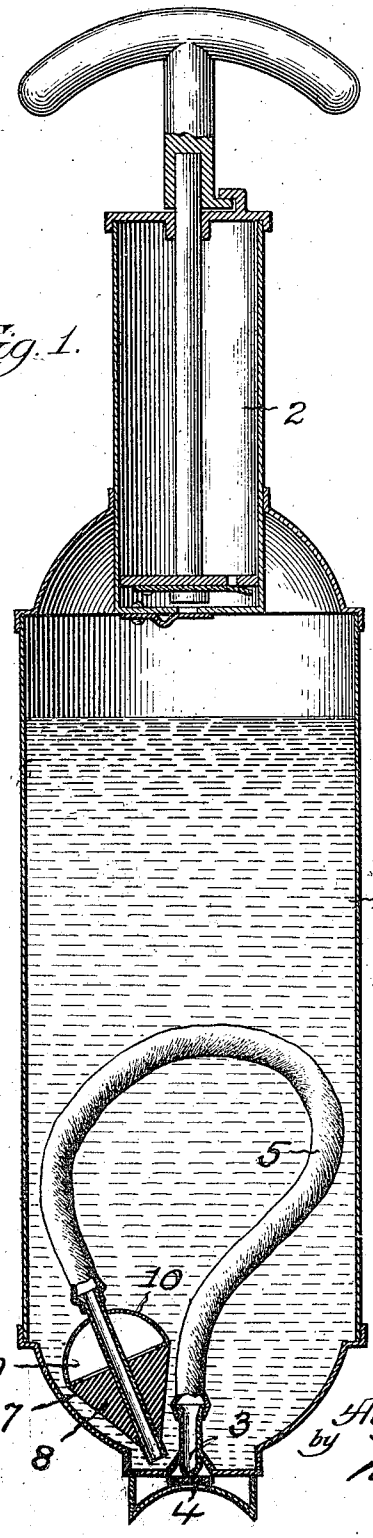



Fig. 2.

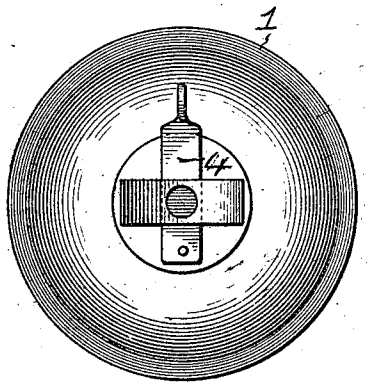
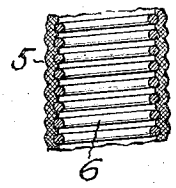



Fig. 3.




Witness:
John Enders.

Inventor:
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# UNITED STATES PATENT OFFICE.

AUGUST MATHIS, OF CHICAGO, ILLINOIS.

## FIRE-EXTINGUISHER.

1,293,850. Specification of Letters Patent. Patented Feb. 11, 1919.

Application filed August 22, 1917. Serial No. 187,524.

*To all whom it may concern:*

Be it known that I, AUGUST MATHIS, a citizen of the United States of America, and a resident of Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Fire-Extinguishers, of which the following is a specification.

This invention relates to that type of portable fire-extinguishers in which the extinguishing solution of carbon-tetra-chlorid or the like is forcibly ejected from a tank or reservoir by a pressure of air produced in said reservoir by an attached pump, and the present improvement has for its object:—

To provide a structural formation and association of parts whereby the eduction nozzle or passage from the reservoir is kept in constant communication with the fluid regardless of the position of the reservoir, and without the necessity of valved mechanisms, as the reservoir is manipulated in actual use to reach an incipient conflagration.

In the accompanying drawing:—

Figure 1, is a central sectional elevation of a portable fire extinguisher to which the present invention is applied.

Fig. 2, is a bottom view of the same.

Fig. 3, is an enlarged detail section of the flexible tube.

The same reference numerals indicate like parts in the several views.

Referring to the drawing, 1 designates a closed tank or reservoir of any usual and suitable form, and adapted to contain a fire-extinguishing solution of carbon-tetra-chlorid or the like.

2 designates the usual air pump arranged as a fixture at one end of the reservoir 1 and adapted for manual actuation to create a pressure of air within said reservoir, as usual in the present type of apparatus.

3 designates the outlet or eduction orifice or nozzle of the apparatus closed by a stop valve 4 of any suitable form, preferably of the sliding type shown.

5 designates a flexible tube or conductor communicating at one end with the outlet nozzle 3 aforesaid, and at its free end provided with a mobile sinker 7 hereinafter described in detail and by which the free end of the tube 5 is maintained in a submerged condition in the liquid. The tube or conductor 5 is preferably formed by an outer tubular member of closely woven fabric and an inner coiled spring or like re-inforce 6, adapted to prevent collapse of the tube or conductor under pressure, said fabric being treated with a coating or filling formed of celluloid, castor oil and a solvent of acetone, or other like flexible composition which is insoluble in the carbon-tetra-chlorid or like chemical with which the contained fluid is impregnated. Said treatment of the fabric is adapted in addition to render the walls of the tube or conductor 5 air tight without affecting the required flexibility of said tube or conductor.

7 designates the sinker above referred to, and which is attached to and encircles the free end of the tube or conductor 5 aforesaid. In the present improvement said sinker comprises a weighted portion 8 arranged at or near the free end of the tube or conductor 5, and a lighter portion 9 arranged remote from said tube end, as shown in Fig. 1. The aforesaid buoyant portion is preferably formed by an air filled semi-globular shell 10 of celluloid or the like.

The described arrangement of the sinker 7 is such that the free end of the tube or conductor 5 will be maintained at or near the lowest part of the fluid contents of the reservoir 1 regardless of the position in which the apparatus may be held by the user in actual use.

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

1. In a fire extinguisher, the combination of a reservoir having an outlet orifice, a flexible tube communicating at one end with said orifice and arranged within said reservoir, and a mobile sinker attached to the free end of said flexible tube and comprising a conical weighted portion located at or near the free end of the flexible tube and a lighter portion located remote from said tube end, the sinker being adapted to maintain said free end of the tube in an

immersed condition regardless of the position in which the reservoir is held, substantially as set forth.

2. In a fire extinguisher, the combination of a reservoir having an outlet orifice, a flexible tube communicating at one end with said orifice and arranged within said reservoir, and a mobile sinker attached to the free end of said flexible ture and comprising a weighted portion located at or near the free end of the flexible tube and a buoyant portion located remote from said tube end, substantially as set forth.

Signed at Chicago, Illinois, this 15th day of August, 1917.

AUGUST MATHIS.