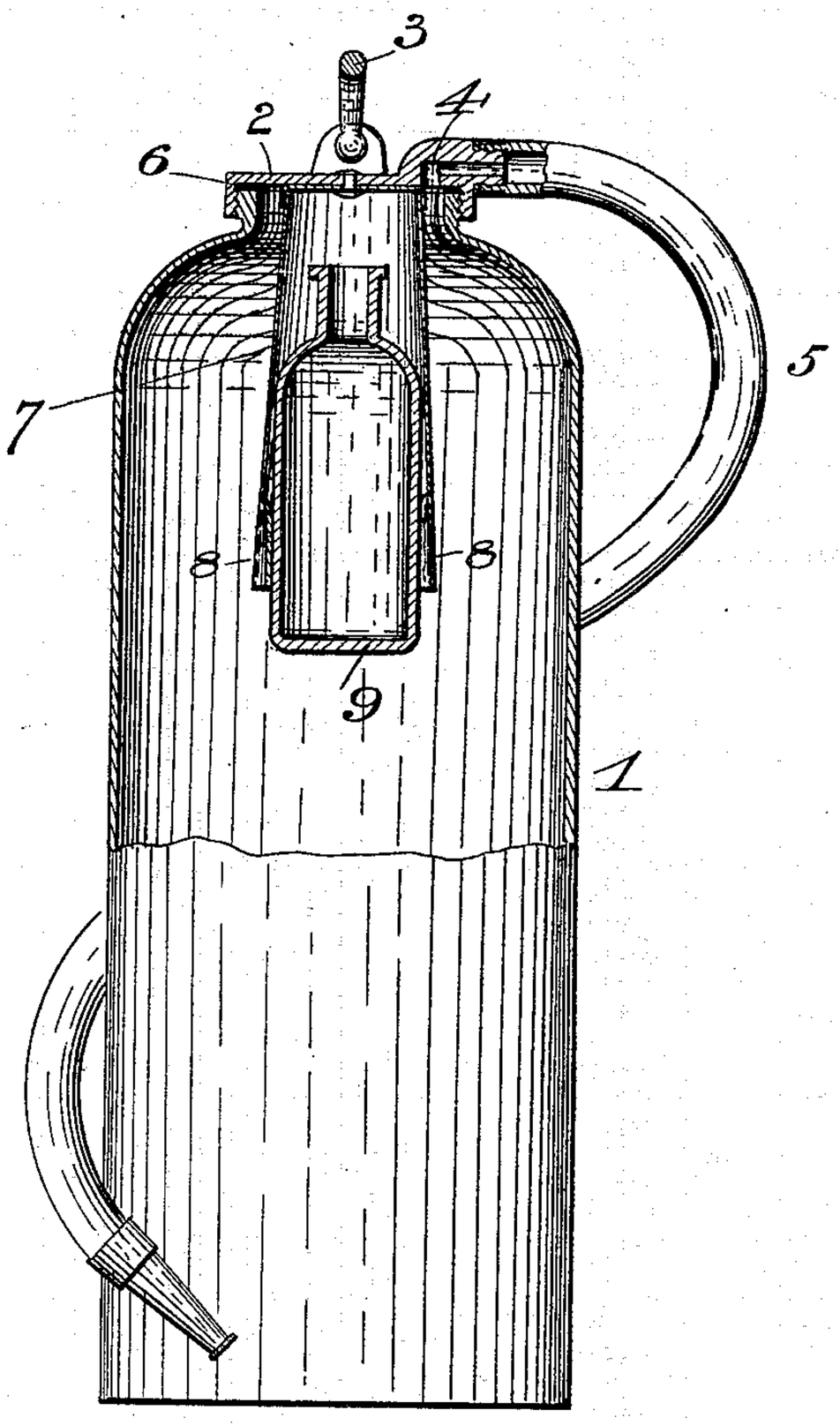
No. 612,094. Patented Oct. 11, 1898.

L. S. FLATAU.

CHEMICAL FIRE EXTINGUISHER.

(Application filed Dec. 11, 1897.)

(No Model.)



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UNITED STATES PATENT OFFICE.

LOUIS S. FLATAU, OF DALLAS, TEXAS, ASSIGNOR OF ONE-HALF TO WILLIAM M. ROBINSON, OF SAME PLACE.

CHEMICAL FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 612,094, dated October 11, 1898.

Application filed December 11, 1897. Serial No. 661,537. (No model.)

To all whom it may concern:

Be it known that I, LOUIS S. FLATAU, a citizen of the United States, and a resident of Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Chemical Fire-Extinguishers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification.

My invention relates to portable chemical fire-extinguishers of that class or description which comprise a receptacle for containing an alkaline solution and an acid-receptacle so constructed and arranged that when the contents of said receptacle are brought in contact a reaction will take place, releasing a gas which presses upon the surface of the fluid and ejects it at the nozzle.

The object of the present invention is to provide an improved acid-receptacle and holder so constructed and arranged that when the extinguisher is in an upright position or even tilted the acid will not escape from the acid-receptacle and mix with the alkaline solution; but when the extinguisher or device is to be used it is turned upside down, and the acid will escape from its receptacle and come in contact with the alkaline solution.

The invention consists in the novel construction and combination of parts hereinafter fully described and claimed.

In the accompanying drawing the figure represents a longitudinal sectional elevation of a fire-extinguisher constructed in accordance with my invention.

In the said drawing the reference-numeral 1 designates a tank or receptacle for containing an alkaline solution of any suitable salt which when brought into contact with an acid will evolve carbonic-acid gas.

Connected with a screw-threaded boss in the top of the receptacle is a cap 2, provided with a handle 3. This cap is provided with a passage 4, with which is connected a hose 5, and is also provided with a rubber or other elastic packing ring or gasket 6 to make a tight joint. Secured to this cap is a downwardly-extending cylinder or holder 7, the lower end of which is fluted, as shown at 8, forming a number of passages, and inserted in the holder is an acid-receptacle 9, which may consist of an ordinary glass bottle. I have shown in the present instance a cylinder-holder to receive a round bottle; but it may be made square or of any other angular shape to receive a correspondingly-shaped bottle without departure from the invention so long as the acid-receptacle is held in place by frictional contact and there is a space or spaces between it and the inner side of the holder.

When the cap is applied to the acid-receptacle, the bottle or acid-receptacle is filled with acid and held in the holder by frictional contact. So long as the extinguisher is in an upright position, or even when tilted, the acid cannot escape from the acid-receptacle; but when required for use the device is turned upside down, when the acid and alkaline solution will commingle and by their reaction will evolve carbonic-acid gas, causing the contents of the extinguisher charged with such gas to be expelled through the hose.

Having thus fully described my invention, what I claim is—

1. In a portable chemical fire-extinguisher, the combination with the tank or receptacle for containing the alkaline solution, of the cap, the downwardly-extending holder fluted at the inner end forming passages, and the acid-bottle inserted in said holder, substantially as described.

2. In a portable fire-extinguisher, the combination with the tank or receptacle, of the screw-cap provided with a handle and formed with an escape-passage, and the hose connected therewith, of the downwardly-extending holder fluted at the inner end forming passages and the acid-bottle inserted in said holder, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

LOUIS S. FLATAU.

Witnesses:
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