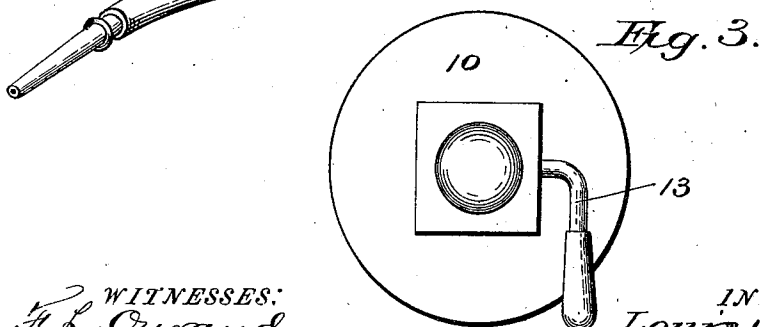
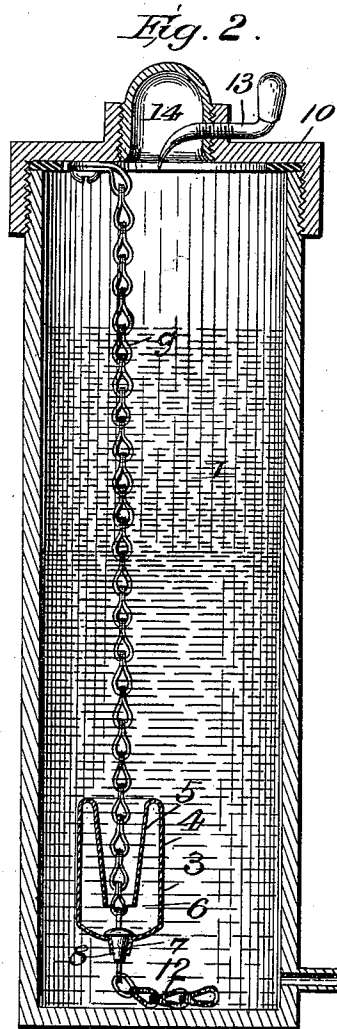
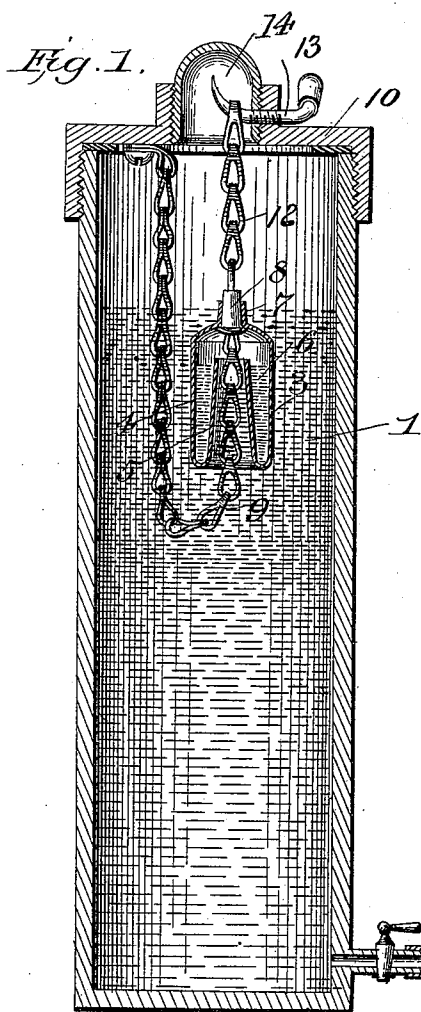


(No Model.)

L. S. FLATAU.
CHEMICAL FIRE EXTINGUISHER.

No. 552,428.

Patented Dec. 31, 1895.



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UNITED STATES PATENT OFFICE.

LOUIS SPENCER FLATAU, OF PITTSBURG, ASSIGNOR OF ONE-HALF TO
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CHEMICAL FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 552,428, dated December 31, 1895.

Application filed February 20, 1895. Serial No. 539,035. (No model.)

To all whom it may concern:

Be it known that I, LOUIS SPENCER FLATAU, a citizen of the United States, and a resident of Pittsburg, in the county of Camp 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 drawings, which form a part of this specification.

My invention relates to improvements in chemical fire-extinguishers of that class or description for which I made application for Letters Patent December 15, 1894, Serial No. 531,877, in which the acid-bottle consists of two concentric cylinders, the inner one of which is open at top and bottom, and which, when the bottle is placed in the cylinder containing the water and soda, potash, or other material, a compressed-air seal will be formed, preventing the acid and water from commingling; but when the bottle is inverted the seal will be broken, and the water and acid coming together will generate the gas.

The object of the present invention is to provide means whereby the acid-bottle can be held in an upright position near the upper end of the water-cylinder, and a compressed-air seal be formed, a tripping mechanism also being provided for releasing and inverting the bottle.

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

In the accompanying drawings, Figure 1 is a central longitudinal section of a fire-extinguisher constructed in accordance with my invention, the acid-bottle being shown suspended within the water-cylinder. Fig. 2 is a similar view, the acid-bottle being released and inverted. Fig. 3 is a detail view.

In the said drawings, the reference-numeral 1 designates the cylinder for containing water and a carbonate or other material.

2 is the hose.

The numeral 3 designates the acid-bottle, consisting of two concentric cylinders 4 and 5, of any suitable material not affected by acid, the inner cylinder not extending quite to the upper end of the outer cylinder, and open at top and bottom, forming an acid-chamber 6. The upper end of the outer cylinder is formed with a filling-opening 7, provided with an acid-proof stopper 8. Connected with the inner end of this stopper is a long chain 9, which is secured to a cap 10 which screws into the dome of cylinder 1. At its outer end the stopper is provided with a short chain 12, the free end of which is adapted to engage with the hooked end of a rotatable trip-rod 13 located in a recess 14 in the said cap.

The operation is as follows: The cylinder 1 is filled with water and a suitable carbonate or other material. The acid-bottle is then partly filled with acid, and the short chain is connected with the trip-lever and the long chain with the cap, as seen in Fig. 1, a compressed-air seal being formed in the bottle. When it is desired to use the extinguisher, the trip-rod is rotated, releasing the short chain, when the bottle will descend by gravity until the limit of the long chain is reached, when the bottle will be inverted, the seal broken, and the acid and water caused to mingle with each other.

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

1. The combination with the water cylinder and cap, of the acid bottle consisting of the long cylinder, the annular flange at the lower end thereof, the open ended short cylinder secured to said flange, the long chain connected with the water cylinder and acid bottle, and the short chain connected with the acid bottle and adapted to be connected with a tripping mechanism, the construction being such that when the acid bottle is inserted in the water cylinder, the water will enter the lower end thereof and compress the air therein and form a water seal, substantially as described.

2. The combination with the cylinder, the cap, and the rotatable hooked rod, of the acid

bottle consisting of the long cylinder, the
stopper, the annular flange, the short cylinder
connected with the flange and open at the
upper end, the long chain connected with the
5 stopper and cap and the short chain connected
with the outer end of said stopper and engag-
ing with said rod, 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 SPENCER FLATAU.

Witnesses:

E. B. GIVANS,
HOMAN STARKE.