

C. T. HOLLOWAY.
FIRE-EXTINGUISHERS.

No. 195,370.

Patented Sept. 18, 1877.

Fig. 1.

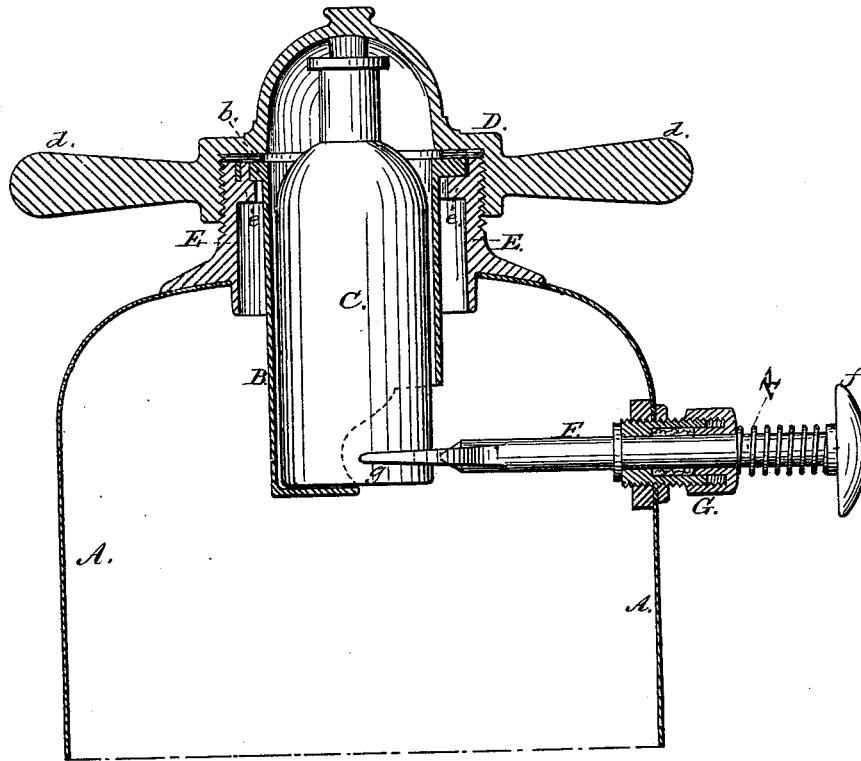


Fig. 2.



Witnesses:

Dan. Super
W. S. Dickinson

Inventor:

Chas. T. Holloway

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Fig. 3.

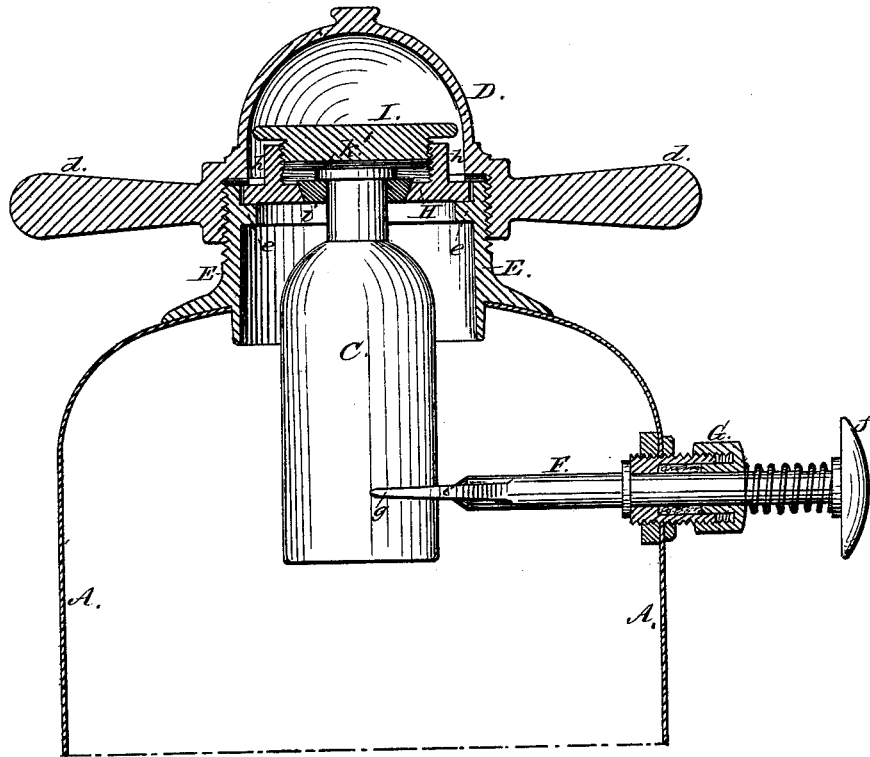


Fig. 4.

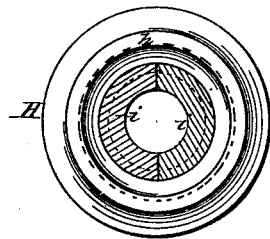
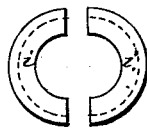


Fig. 5.



Witnesses:

David Surper
W. S. Wilkinson

Inventor:

Chas. J. Holloway

UNITED STATES PATENT OFFICE.

CHARLES T. HOLLOWAY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **195,370**, dated September 18, 1877; application filed June 13, 1877.

To all whom it may concern:

Be it known that I, CHARLES T. HOLLOWAY, of Baltimore city, in the county of Baltimore and State of Maryland, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of fire-extinguishers in which water impregnated or mixed with carbonic-acid gas is the extinguishing agent, and the expansive force of the gas is used in ejecting the liquid from the apparatus; and it consists in an improved device by which the bottle containing the acid is broken more readily, and the acid thus precipitated into the solution of soda in the water, all of which will be more definitely described hereinafter.

In the accompanying drawing, forming a part of this specification, and in which similar letters of reference indicate similar parts in my invention in the different views, Figure 1 is a vertical section of an extinguisher having my improvements attached. Fig. 2 is a detached view of the pronged stem for breaking the bottle. Figs. 3, 4, and 5 are modifications of the bottle-holder.

In the drawing, A is the gas-generating chamber or vessel containing the mixed chemicals or extinguishing agents. In the upper part or neck of said chamber is inserted a cylindrical or other shaped chamber or receptacle, B, having one side at the bottom and side partly cut away, so as to expose the bottle or carboy C, which is inserted through the top. Over the mouth of the chamber B is screwed a cap, D, having suitable handles *d* *d* on each side, by which it is operated.

The chamber B is supported by the shoulders *e e* of the mouth-piece E, upon which the collar *b* of the chamber rests.

In the side of the gas-generating chamber A is arranged a rod, F, having a suitable handle, *f*, and passing through a stuffing-box, G, with suitable packing. A spring, K, on

the rod F draws it back to its normal position. The inner end of the rod F is provided with a central point, *f'*, and two arms or prongs, *g g*, which partly encircle the bottle or carboy C, and prevent the point of the rod F from slipping sidewise when it is driven in. This can be done by hand, screw, or lever, in any suitable manner.

As a modification of the chamber B for holding the bottle to be broken, a recessed flanged ring, H, may be substituted, which rests upon the shoulders *e*. This ring has an upward-projecting flange, *h*, into which a cap, I, is screwed. In the center of the ring H a beveled ring, *i*, (shown in detail in Figs. 4 and 5,) is inserted, and this ring *i* is cut in two, so that when the acid-bottle C is inserted it may encircle the neck of said bottle. A leather, rubber, or other suitable washer, *k*, is placed over the mouth of the bottle C, and the cap I is then screwed down, and firmly holds the bottle as the beveled ring is forced down into the beveled recess of the ring H, into which it fits. This makes a very simple holding device for the bottle, and at the same time it holds it very firmly. The cap D is then, as in the first place, screwed down over the whole device.

The mode of operation of the extinguisher is readily seen, and requires no detailed description. When it is desired to use the extinguisher the acid is precipitated into the solution of soda in the water by suddenly striking the handle of the rod F and forcing it inward, thus breaking the carboy. Carbonic-acid gas is generated as the result of the mixture, and the apparatus is ready for use.

The usual cock and hose are attached to the chamber A, and the extinguishing agents are forced through the hose by the expansive force of the gas upon the desired place.

I am aware that devices for breaking carboys in fire-extinguishers, and also to upset, have been used, and therefore do not broadly claim such; but,

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In fire-extinguishers, the combination of the chamber B in the gas-generating chamber A with the carboy C and rod F, constructed

and arranged substantially as shown, and for the purpose specified.

2. A fire-extinguisher consisting of the gas-generating chamber A, chamber B, carboy C, cap D, and rod F, having point *f'* and prongs *g g*, and passing through the stuffing-box G, arranged in the side of the chamber A, when all constructed substantially as shown, and for the purpose set forth.

In testimony that I claim the foregoing as my own I hereby affix my signature in presence of two witnesses.

CHAS. T. HOLLOWAY.

Witnesses:

DANL. SUPER,

W. S. WILKINSON.