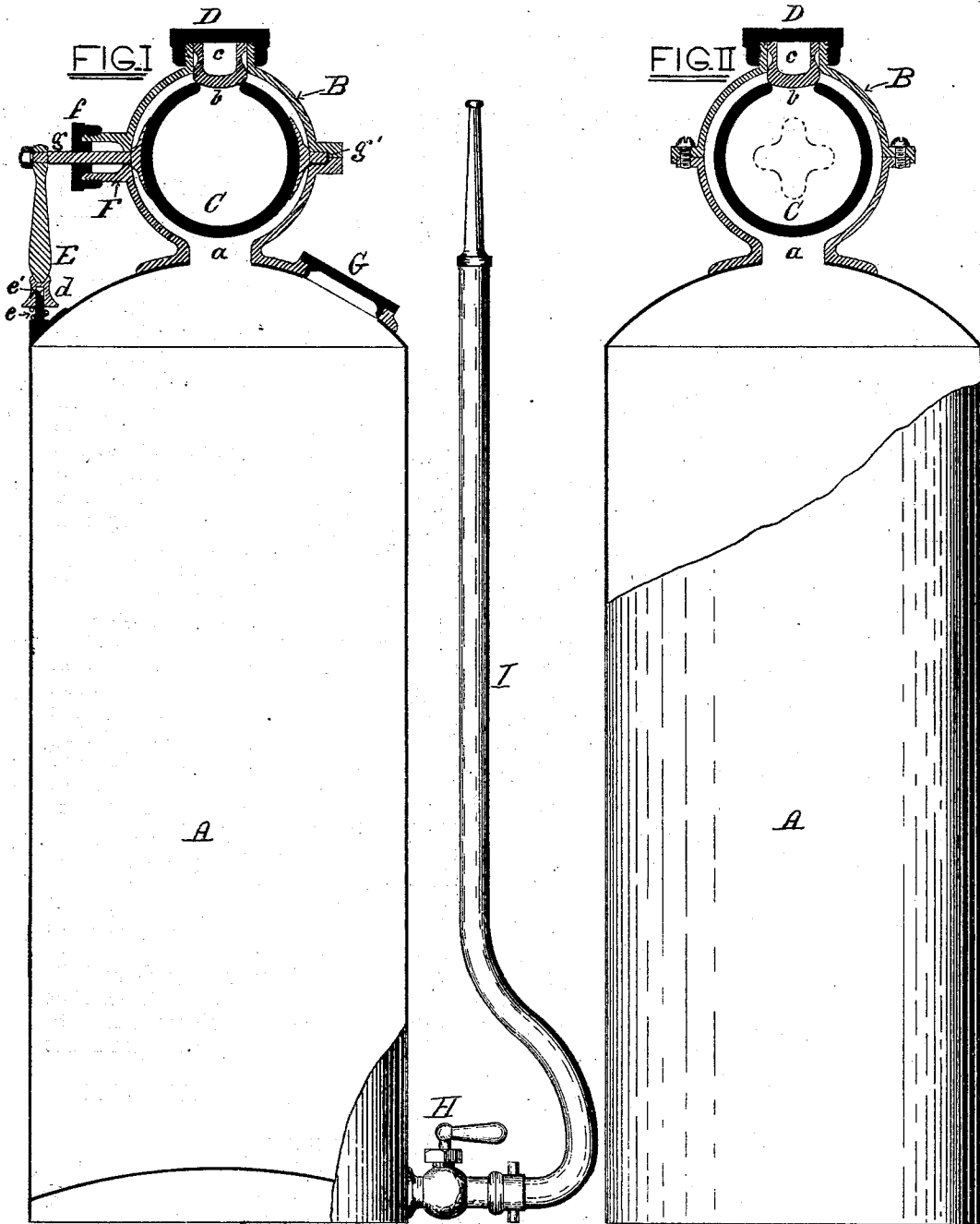


CHARLES T. HOLLOWAY.

Improvement in Fire-Extinguishers.

No. 127,770.

Patented June 11, 1872.



— WITNESSES —

Joseph Bragg
George P. Bragg

— INVENTOR —

Charles T. Holloway
G. H. + W. J. Norris, atty.

UNITED STATES PATENT OFFICE.

CHARLES T. HOLLOWAY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. 127,770, dated June 11, 1872.

To all whom it may concern:

Be it known that I, CHARLES T. HOLLOWAY, engineer, of the city of Baltimore and State of Maryland, have invented certain Improvements in Fire-Extinguishing Apparatus, of which the following is a specification; and I do hereby declare that the same is a full, clear, and exact description of my said invention, reference being had to the accompanying drawing and to the letters of reference marked thereon.

My invention relates to that class of fire-extinguishers in which water strongly impregnated with carbonic-acid gas is the extinguishing agent, and the expansive force of the gas the motor to eject the gas-impregnated water from the machine when it is desired to do so; and consists in the improvements hereinafter set forth and fully described.

In the accompanying drawing, forming a part of this specification, Figure 1 is a sectional elevation of an extinguisher having my improvements thereupon as elemental features. Fig. 2 is a part sectional and part non-sectional elevation of the same, as viewed from a different point.

Similar letters of reference indicate similar parts of the invention in both figures.

A is a cylindrical vessel, designed to hold the solution of soda in water. B is an outer globe, the interior of which is connected with the vessel A by the opening *a*. C is an inner globe, adapted to hold the acid, having the opening *b* closed by means of the stopper *c*, which is grooved to increase its elasticity, and held down by the cap D. The pivots or journals upon which the globe C moves are represented by *g* and *g'*. E is the handle controlling the movement of the globe C, the end of handle being secured by the socket *d* resting on the spiral spring *e*, and sliding on the pin *e'*. F is the packing-box with the gland *f*. G is a

cap closing an opening in the top of the vessel A; and H, a cock regulating the flow of the gas-impregnated water from the vessel through the hose I.

The operation of my extinguisher is as follows: Supposing that the machine is to be charged and made ready for use, the handle E is secured in the position shown, the caps D and G are removed, and the stopper *c* withdrawn. Water is then poured into the vessel A until it is nearly filled, when the soda is added. The acid is then introduced into the globe C, the stopper placed into position, and the caps replaced. The apparatus is then in condition to remain unused for any length of time, no part thereof being subjected to any pressure. In the emergency of fire occurring and the extinguisher is to be brought into requisition, the handle E is turned up, the position of the globe C is inverted and the acid emptied into the vessel A, where it is at once neutralized upon mixing with the soda contained in the water. Carbonic-acid gas is thus generated or produced, and, not being able to escape, forces the entire contents of the vessel A through the cock H when opened.

The advantages I claim are cheapness, simplicity, and strength of construction, and ready and efficient adaptation to the purpose for which the apparatus is designed.

Having thus described my invention, what I claim as new, and wish to secure by Letters Patent, is—

The combination of the globes B and C, stopper *c*, cap D, and handle E with the socket *d* as attached to the cylindrical vessel A, substantially as and for the purposes herein set forth.

CHARLES T. HOLLOWAY.

Witnesses:

W. S. WILKINSON,
GEO. H. HOWARD.