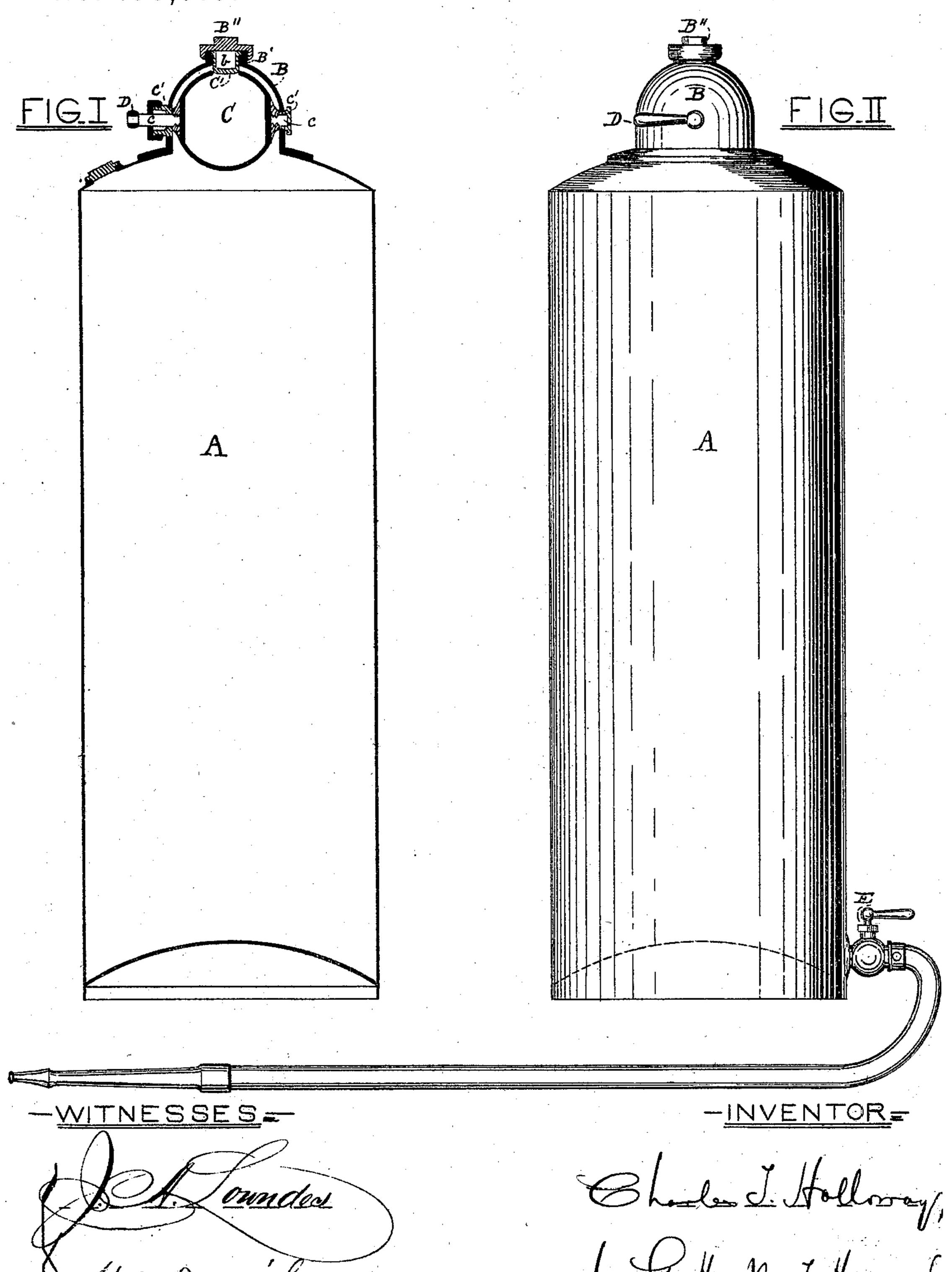
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Improvement in Fire-Extinguishing Apparatus.

No. 130,716.

Patented Aug. 20, 1872.

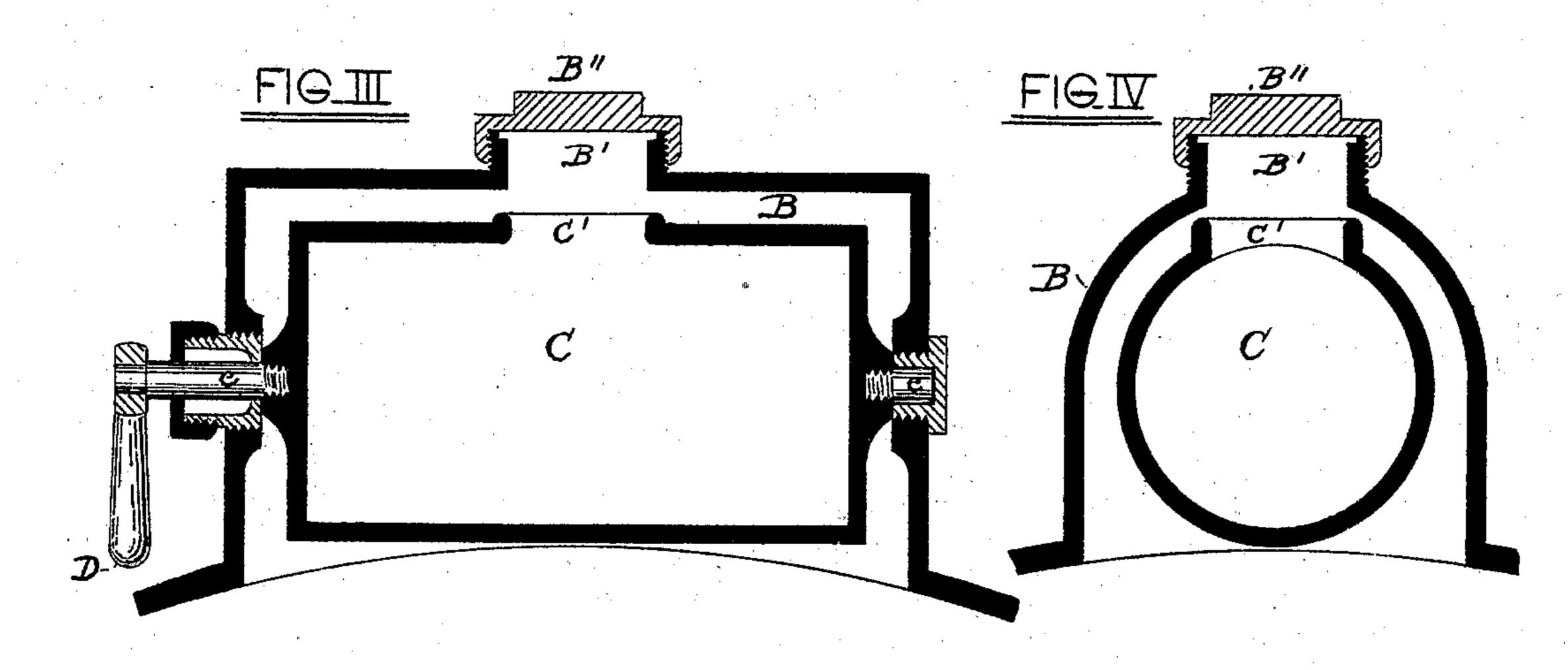


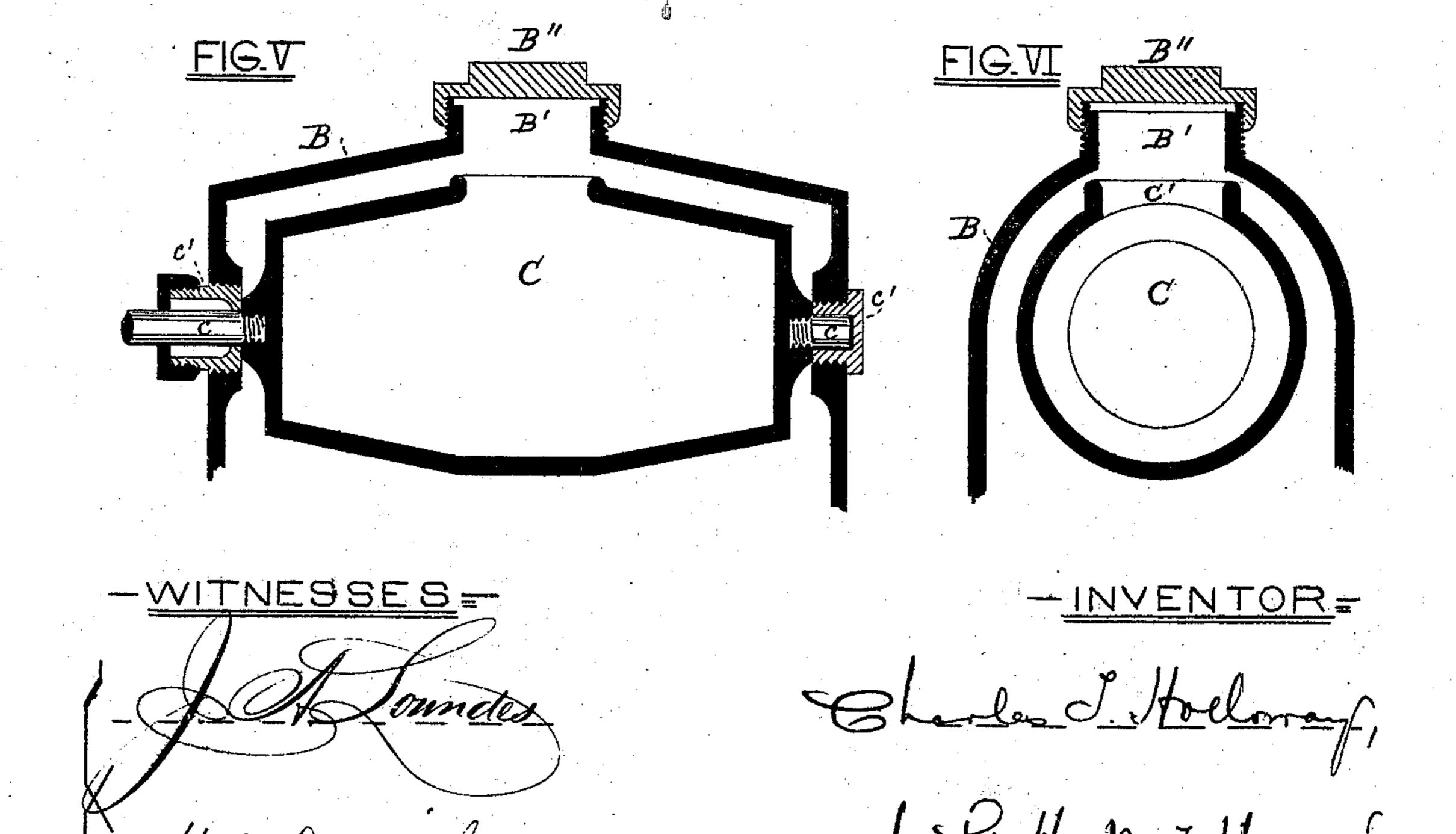
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United States Patent Office.

CHARLES T. HOLLOWAY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN FIRE-EXTINGUISHING APPARATUS.

Specification forming part of Letters Patent No. 130,716, dated August 20, 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 impregnated with carbonic-acid gas is the extinguishing agent, and the expansive force of the gas used in ejecting the liquid from the apparatus; and consists in certain improvements upon the invention for which Letters Patent No. 127,770, dated June 11, 1872, were granted to me.

These special improvements are designed to produce a cheaper and more direct mode of precipitating the acid into the solution of soda in water than is set forth in the said Letters Patent issued to me.

In the accompanying drawing, forming a part of this specification, and in which similar letters of reference indicate similar parts of my invention in all the views, Figure 1 is a vertical section of an extinguisher having my improvements thereupon. Fig. 2 is an exterior elevation of the same. Figs. 3 and 5 are longitudinal sections, showing certain modifications of my invention; and Figs. 4 and 6 transverse sections of the same.

A is the gas-generating chamber or cylinder containing the mixed chemicals or extinguishing agents. B is an open-bottomed chamber, secured to the upper head of the cylinder. C is an acid carboy, formed of some substance fit to be exposed to the action of the acid, and adapted to turn upon pivots, or be inverted within the chamber B. The pivots c rest within suitable bearings c' inserted and fitting tightly within respective sides of the chamber B. The acid carboy is provided with an opening, C', which, when the apparatus is at rest and not in use, occupies the position wherein it is shown in the respective figures. A neck and opening in the chamber B, are shown by B'.

Within the neck B' is a rubber stopper, b, which projects below so as to press into the opening C', and effectually close it. The elasticity of the stopper permits the carboy to pass when it is to be inverted. The neck B' and stopper b are covered by a suitable screwcap, B". D is a handle, by means of which the acid carboy C is thrown over to its inverted position.

In Figs. 3, 4, 5, and 6 the chamber B and carboy C are shown in modified shapes; but in principle and operation they are identical with the corresponding parts exhibited in Figs. 1 and 2. Various modifications in shape and construction might be illustrated without making any deviation in substance from the form

herein preferably shown.

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 water by the inverting of the carboy C. Carbonic-acid gas is generated as the result of the mixture, and the apparatus is fitted for use. The cock E having been opened, the extinguishing agents are forced through the hose by the expansive force of the gas.

I am aware that in my Letters Patent No. 127,770 I am protected in the use of a chamber or "globe" answering in its object to the chamber B, in combination with an acid-chamber similar to the carboy C. I have found, however, since the issue of my said Letters Patent, that a cheaper, lighter, and much more simple mode of constructing the chamber B is found in the manner in which it is herein

shown.

I claim as my invention—

As improvements upon similar devices set forth and claimed in my Letters Patent No. 127,770, the construction and combination of the chamber B and carboy C, substantially as and for the purpose herein specified.

CHARLES T. HOLLOWAY.

Witnesses:

GEO. H. HOWARD, G. A. SCHWARZMAN.