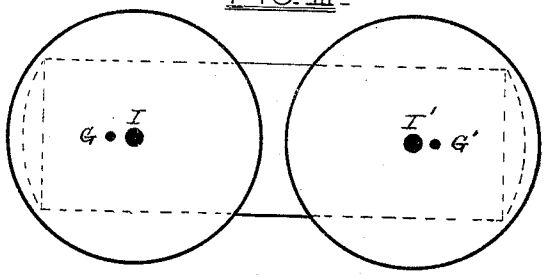
W. F. BEASLEY.

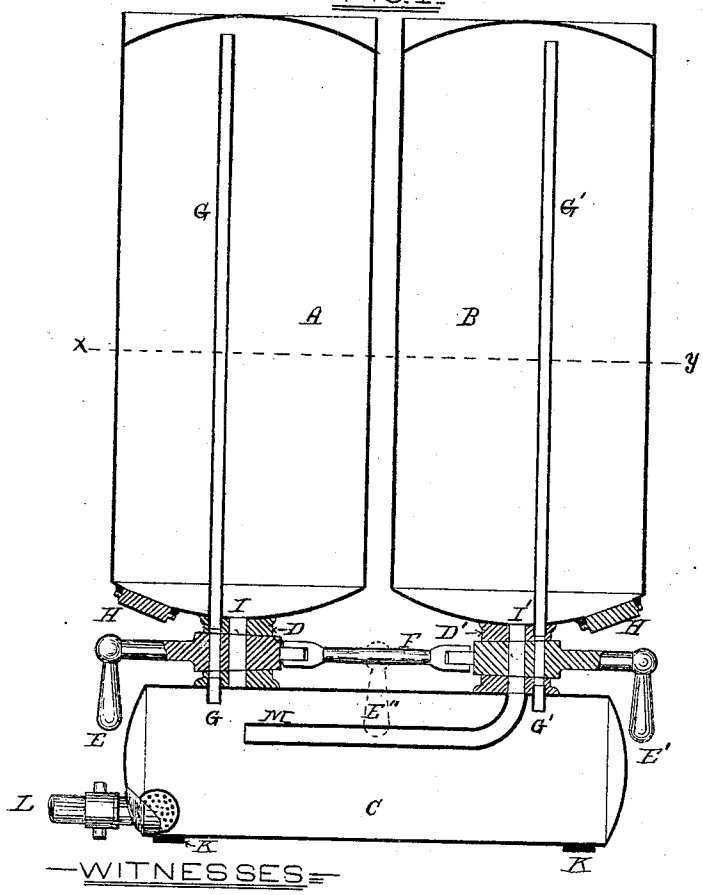
Improvement in Fire-Extinguishers.

No. 129,519. Patented July 16, 1872.

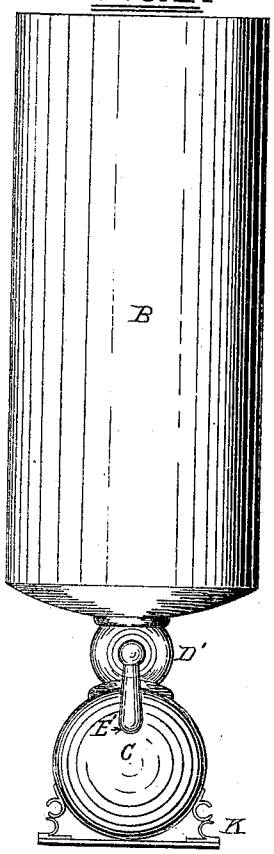
— FIG. III —



— FIG. I —



— FIG. II —



— WITNESSES —

Joseph Cragg

Geo. R. Cragg

— INVENTOR —

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AM. PHOTO-LITHOGRAPHIC CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

WILLIAM F. BEASLEY, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. 129,519, dated July 16, 1872.

To all whom it may concern:

Be it known that I, WILLIAM F. BEASLEY, of the city of Louisville and State of Kentucky, 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 the letters of reference marked thereon.

My invention relates to certain improvements upon the several patents granted to Joseph Gardner in the years 1871 and 1872; and consists in the devices hereinafter described, effecting results also hereinafter set forth.

In the accompanying drawing forming part of this specification, Figure 1 is a vertical section of an extinguisher of the description before alluded to. Fig. 2 is an elevation of the same from another point of view. Fig. 3 is a sectional plan of the same on the line *x y*.

Similar letters of reference indicate similar parts of my invention in all the views.

In the drawing the machine is represented in position for use.

A is the acid-chamber. B is the soda-chamber. C is the mixing-chamber. D and D′ are the stop-cocks connecting the chambers A and B with chamber C. E and E′ are handles for opening and closing the cocks connected by the rod F, so that either handle may be used to operate both. A single handle, shown in dotted lines and marked E″, may be used instead of E and E′, connected to or forming part of the rod F. G and G′ are equalizing-pipes screwed into the cocks D and D′, connecting the upper parts of chambers A and B with mixing-chamber C. The communication is closed in like manner as that through the openings I and I′, and simultaneously with them. A plain aperture can be used instead of the portion of the pipes entering the mixing-chamber C. M is a pipe in the mixing-chamber C extending from the opening I′ nearly to the opening I to promote the rapid and perfect neutralization of the acid, and prevent any particles of soda from passing up and obstructing the pipe G′. H and H′ are stoppers capable of being removed in charging the machine. K are stands upon which the apparatus rests when in position for use. L is the hose through which the mixture is forced when the stop-cocks are opened.

The operations of the different parts of the extinguisher are as follows: The chambers A and B having been charged, and the cocks D and D′ opened, the acidified water and soda solution flow into the mixing-chamber C, and the gas is generated, which forces the mixture through the hose L. A portion of the gas passes up the equalizing-pipes G and G′, occupying the space left by the receding liquids, and establishing an equilibrium of pressure. When it is desired to stop the flow through the hose L the cocks D and D′ are closed, which also closes the pipes G and G′, and prevents the escape of the gas accumulated in the chambers A and B. In this position the generation of gas is stopped. When the cocks are again opened the force of gas above the liquids causes them to flow with rapidity into the chamber C, and the generation continues as before.

The advantages I claim for my invention are the saving of the gas collected in the upper parts of chambers A and B by the closing of pipes G and G′, when the flow of the mixture from the machine is stopped, and the causing of the almost instantaneous flow of the liquids when the cocks D and D′ are opened.

My invention is equally applicable to extinguishers carried by the persons using them, and those mounted on wheels and commonly known as village engines.

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

The equalizing pipes G and G′, in combination with cocks D and D′, capable of being opened and closed at the same time and by the same operation as the openings I and I′, substantially as and for the purpose herein specified.

WILLIAM F. BEASLEY.

Witnesses:

WILLIAM T. HOWARD,

G. A. SCHUARZMAN.