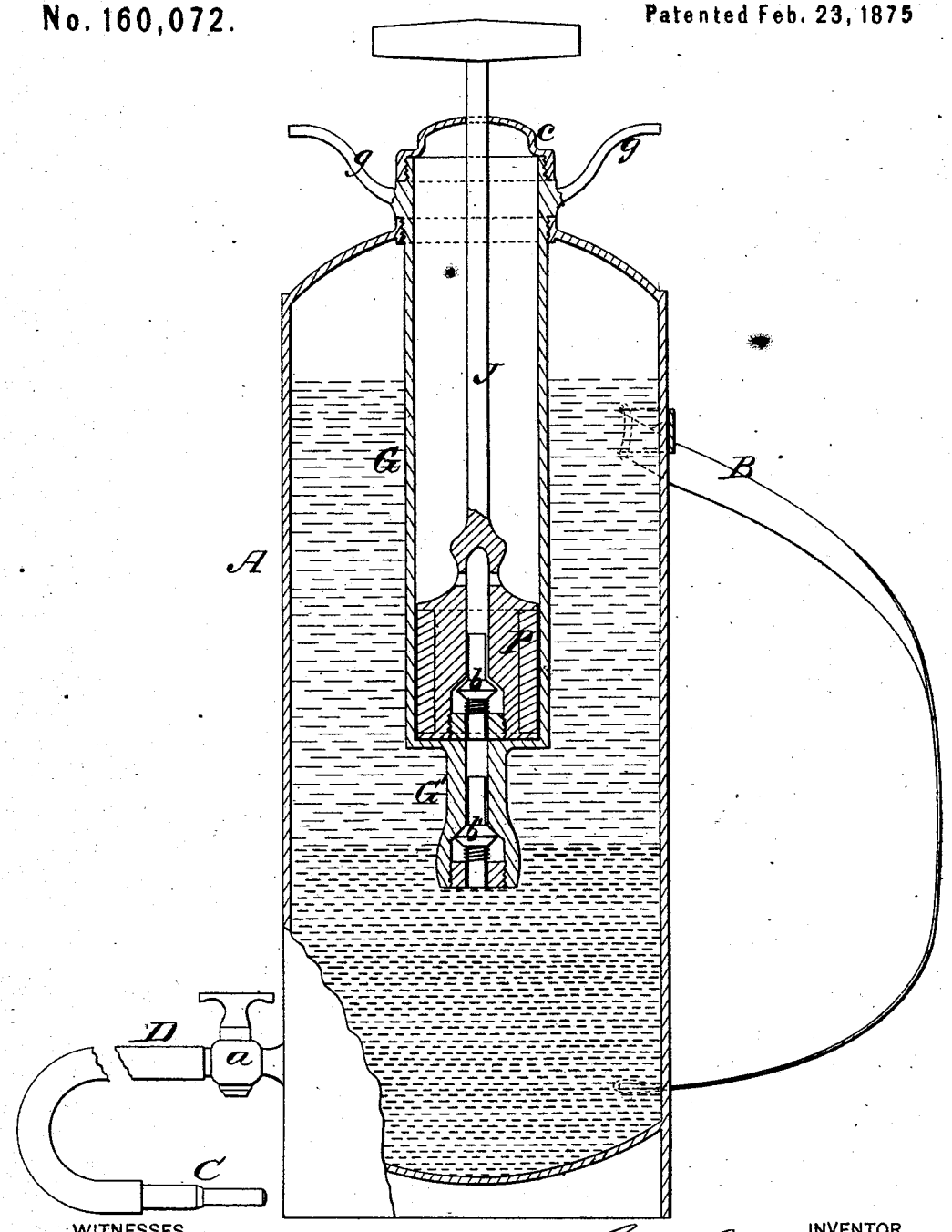
G. E. BARKER.

Fire-Extinguishers.

No. 160,072. Patented Feb. 23, 1875



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE E. BARKER, OF WAVERLY, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO LESTER D. STONE, OF SAME PLACE.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **160,072**, dated February 23, 1875; application filed January 31, 1874.

To all whom it may concern:

Be it known that I, GEORGE E. BARKER, of Waverly, in the county of Tioga and State of New York, have invented a new and valuable Improvement in Fire-Extinguishers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a sectional view of my fire-extinguisher.

This invention has relation to portable apparatuses for extinguishing fires, wherein it is desired to throw upon the fire a watery mixture of bicarbonate of soda, the silicate of soda, or some other like substance which will form a coating about the object on which it is injected.

The nature of my invention consists in a process of agitating and stirring up the solid particles of soda or other substance contained in the reservoir of the annihilator with water, by placing within said reservoir an air-forcing pump and forcibly injecting the air into the mixture, which air will, at the same time, eject the mixture from the reservoir, as will be hereinafter explained.

The following is a description of my process, together with the means for carrying the same into effect:

In the annexed drawings, A designates a reservoir of any suitable shape and capacity, which is provided with straps B for attaching it to the body of a person. C is an ejecting-nozzle, which is flexibly connected to a cock, *a*, by means of a hose, D, which cock is located near the bottom of the reservoir. G represents the barrel of a pump having an extension, G′, formed on its lower end, which reaches down into the solid precipitated particles of the chemical substance used, and which has a valve, *b′*, applied into its lower end, which valve opens downward into the reservoir. This pump-barrel G is centrally applied into the head of the reservoir A by means of a screw-coupling, which should be packed air-tight, above which coupling two horns, *g g*, are secured to said barrel, by means of which it can be readily secured to the reservoir or removed therefrom. P designates the piston of the air-pump, in which a valve, *b*, is applied that opens downward when the piston is raised, and allows air to pass through the piston for injection into the reservoir at the next stroke of the piston. The piston-rod J extends up through a screw-cap, *c*, on the upper end of the pump-barrel G, and is provided with a T handle for working the pump.

For sea-going vessels I shall plate the reservoir, and other surfaces which are liable to rust, with some non-corrodible substance.

The reservoir is charged for use by removing the air-pump and introducing into it, (the reservoir) say, the supercarbonate of soda and two-thirds, more or less, of water. The pump is then screwed hermetically into its place, and the apparatus is ready for use.

In case of fire, the annihilator is strapped to a person by the suspenders B, and after opening the cock *a* and properly directing the nozzle C, the pump is rapidly worked, which will forcibly inject currents of air down into the chemical substance on the bottom of the reservoir and agitate the same; at the same time the pump will charge the reservoir with air under considerable pressure, which will throw a stream of water mixed with the floating chemical particles, and form on the burning object an uninflammable coating by the fusing of said particles.

What I claim as new, and desire to secure by Letters Patent, is—

The fire-extinguishing apparatus, consisting of the reservoir A, hose and nozzle and the air-pump terminating in a jet, G′, within said reservoir, above and near the bottom thereof on which the salt lies, thereby serving actively to form the solution and to discharge the same, substantially as specified.

In testimony that I claim the above, I have hereunto subscribed my name in the presence of two witnesses.

GEORGE E. BARKER.

Witnesses:

GEORGE E. UPHAM,

PHIL C. HASI.